

SELF STUDY REPORT FOR UNIVERSITY ACCREDITATION



2021

**UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE
GKVK, BENGALURU - 560065**

SELF STUDY REPORT FOR UNIVERSITY ACCREDITATION

Submitted to



**National Agricultural Education Accreditation Board
ICAR, New Delhi**



**UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE
GKVK, BENGALURU - 560065**

**LIST OF COLLEGES AND PROGRAMMES OF UAS BANGALORE SUBMITTING SSR
FOR ICAR ACCREDITATION (IEA – ITEM NO. 9)**

Sl. No.	College	Under Graduate Courses	UG/PG/Ph.D.
1	CoA, Bengaluru	B.Sc. (Hons) Agriculture	UG
2	CoA, Bengaluru	B.Sc. (Hons) Agribusiness	UG
3	CoA, Mandya	B.Sc. (Hons) Agriculture	UG
4	CoS, Chintamani	B.Sc. (Hons) Agriculture	UG
5	CoS, Chintamani	B.Sc. Sericulture	UG
6	CoA, Hassan	B.Sc. (Hons) Agriculture	UG
7	CoA, Hassan	B.Tech. (Food Technology)	UG
8	CoA, Hassan	B.Tech Biotechnology	UG
9	CoA, Bengaluru	M.Sc. Entomology	PG
10	CoA, Bengaluru	M.Sc. Agricultural Extension	PG
11	CoA, Bengaluru	M.Sc. Microbiology	PG
12	CoA, Bengaluru	M.Sc. Plant Pathology	PG
13	CoA, Bengaluru	M.Sc. Soil Science	PG
14	CoA, Bengaluru	M.Sc. Agricultural Economics	PG
15	CoA, Bengaluru	M.Sc. Agronomy	PG
16	CoA, Bengaluru	M.Sc. (Ag.) Genetics & Plant Breeding	PG
17	CoA, Bengaluru	M.Sc. Plant Physiology	PG
18	CoA, Bengaluru	M.Sc. Foods and Nutrition	PG
19	CoA, Bengaluru	M.Sc. Statistics / Agricultural Statistics	PG
20	CoA, Bengaluru	M.Sc. Biochemistry	PG
21	CoA, Bengaluru	M.Sc. Seed Science and Technology	PG
22	CoA, Bengaluru	M.Sc./M.Tech Soil and Water Engineering	PG
23	CoA, Bengaluru	M.Sc./M.Tech Processing and Food Engineering	PG
24	CoA, Bengaluru	M.Sc. Agri-Business Management	PG
25	CoA, Bengaluru	M.Sc. Plant Molecular Biology and Biotechnology	PG
26	CoA, Bengaluru	M.Sc. forestry	PG
27	CoA, Bengaluru	M.Sc. Bioinformatics	PG
28	CoA, Bengaluru	Ph.D. Microbiology	Ph.D.
29	CoA, Bengaluru	Ph.D. Soil Science	Ph.D.
30	CoA, Bengaluru	Ph.D. Entomology	Ph.D.
31	CoA, Bengaluru	Ph.D. Plant Pathology	Ph.D.
32	CoA, Bengaluru	Ph.D. Agricultural Economics	Ph.D.
33	CoA, Bengaluru	Ph.D. Agricultural Extension	Ph.D.
34	CoA, Bengaluru	Ph.D. Agronomy	Ph.D.
35	CoA, Bengaluru	Ph.D. Genetics & Plant Breeding	Ph.D.
36	CoA, Bengaluru	Ph.D. Plant Physiology	Ph.D.
37	CoA, Bengaluru	Ph.D. Seed Science & Technology	Ph.D.
38	CoA, Bengaluru	Ph.D. Foods and Nutrition	Ph.D.
39	CoA, Bengaluru	Ph.D. Plant Molecular Biology and Biotechnology	Ph.D.
40	CoA, Bengaluru	Ph.D. Forestry	Ph.D.
41	CoA, Bengaluru	Ph.D. Agri-Business Management	Ph.D.
42	CoA, Mandya	M.Sc. Genetics & Plant Breeding	PG
43	CoA, Mandya	M.Sc. Plant Physiology	PG
44	CoA, Mandya	M.Sc. Entomology	PG
45	CoA, Mandya	M.Sc. Soil Science	PG
46	CoA, Mandya	M.Sc. Agronomy	PG
47	CoA, Bengaluru	B.Tech. (Agriculture Engineering)	UG

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ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಬೆಂಗಳೂರು

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE

ಡಾ. ಜಿ.ಎನ್. ಧನಪಾಲ್
ಕುಲಸಚಿವರು

Dr. G.N. Dhanapal
REGISTRAR

ಕುಲಸಚಿವರ ಕಛೇರಿ, ನಾಯಕ್ ಭವನ
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Office of the Registrar, Naik Bhavan
GKVK Campus, Bengaluru - 560065.

No: UASB/Accre/Others/2020-21

Date: 27-03-2021

To :

Dr. K. P. Tripathi

Coordinator (Accreditation)

Indian Council of Agricultural Research

National Agricultural Education Accreditation Board Secretariat,

Room no. 332, (Agricultural Education Division)

Krishi Anusandhan Bhavan-II, PUSA,

New Delhi-110012

Sir,

Sub: Request for Consideration of the following subject groups under Accreditation – reg.

The following PG and Ph.D programmes offered by UAS Bangalore are not listed in the drop down menu given in the Sec.09 of IEA, College-wise Degree Programmes (UG/PG/Ph D) format for Colleges the same was communicated over telephonic interaction & mail sent on **Wednesday**, February 3, 2021 6:11:28 PM to support team.

The following degree programmes PG & Ph.D.

M.Sc. degree	Ph.D degree
1) M. Sc Agri. in Horticulture	1) Ph.D in Sericulture
2) M. Sc Agri. in Environmental Science	2) Ph.D in Horticulture
3) M. Sc Agri. in Apiculture	
4) M. Sc in Sericulture	
5) M. Sc in Agricultural Marketing and Cooperation	

Kindly consider the above subject groups for Accreditation under BSMA.

Thanking you,

Yours faithfully,

REGISTRAR 27.3.21

Cc for kind information to:

Dr. C. K. Narayana, Regional Coordinator (S), NAEAB & Principal Scientist, IIHR, Bengaluru.

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UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE

Dr. S. RAJENDRA PRASAD
Vice-Chancellor

Gandhi Krishi Vignana Kendra
Bengaluru-560 065

Preface



The University of Agricultural Sciences, Bangalore, is country's second farm University, modelled after the United States' Land-Grant Universities. The University was established in 1964 by an act of the then-Mysore State legislature. The University became known as 'Hebbal College' less than a decade after its founding. The first agricultural University of the state, which provided the requisite skilled manpower and technology, ushered in the "green revolution." This demonstrated its active role in reviving the state's farming sector and improving location-specific crop production technologies.

The University has given outstanding service to the state's agricultural sector over the last five years by providing education and developing crop varieties and technologies to support farmers. Due to indiscriminate use of natural resources and the migratory behaviour of rural communities, there has been an increase of interest in developing sustainable agricultural practises. The University intends to resolve these concerns through technical advancements and increased dissemination. The University has established a centre for advanced agricultural research for technology development, an innovation centre for promoting entrepreneurship, and a training centre to develop well-trained agricultural workers using an ICT framework.

In the face of changing agricultural scenarios, the University has been widening its academic programmes to meet human capital needs. A slew of new technology-focused graduate and postgraduate programmes have recently been launched. UASB has a broad geographic spread of its education and research campus in different parts of the state – B.Sc. (Hons.) Agriculture is offered at Bangalore, Mandya, Hassan, Chintamani and Chamarajanagara campuses. B.Sc. (Hons.) Agri-Business Management at Bangalore, B.Sc. (Hons.) Sericulture at Chintamani, B.Tech. (Biotechnology) and B.Tech. (Food Technology) at Hassan. So far, in five years, a total of 3,178 graduates, 1,375 post-graduate-masters and 345 doctoral degrees and 232 diplomas have been awarded by the University including over 110 international students. The number of students enrolling in Bachelor's, Master's, and Doctoral degree programmes is steadily rising to meet the needs of the agrarian society. The number of ICAR Junior research fellowships awarded to UAS graduates has consistently been the highest. The University has ranked first position consecutively for last four years in the ICAR-JRF awards, while second position during 2016-17. During the period, 95 students have secured ICAR-JRF, 24 secured SRF, while 69 qualified in NET and 15 qualified in ARS examination and 63 in others (GATE, UGC-CSIR, RJNF). During the reporting year, 16 students are recruited in ICAR, six are recruited

by CAU/SAUs, 30 in Central Govt., 98 in State govt.; six are pursuing higher studies and 51 are chosen by Private sectors/ other agencies for an appointment. Graduates have also performed well in competitive examinations such as the CSIR, UGC, as well as civil service exams. Twenty-six research scholars of the University have bagged the prestigious Jawaharlal Nehru Award for doctoral research instituted by ICAR. It represents the University's educational excellence and the merits of its students, who contribute significantly to the agricultural sector's professional human capital. To comply with the National analytic system, students are taught information skills and educated in agriculture science and technology and contemporary emerging areas such as digital sciences, entrepreneurship, etc., to meet the standards.

The University faculty members excel at passing on knowledge and skills, participating in and organizing national and international seminars / symposia / conferences and publishing monographs / books and research papers published in high-NAAS-rated journals. In recent years, the University has obtained patents and developed new agricultural technologies. The University has established a College of Agriculture in Chamarajanagara and a College of Agricultural Engineering at GKVK, Bengaluru, during the academic year 2018-19.

The University has been accredited by the Indian Council of Agricultural Research, ICAR, New Delhi, after a peer review process (PRT) on a regular basis. Additionally, by funding, it establishes guidelines and standards for agricultural education, science, and extension. The University has been following the ICAR norms as they become accessible and adopted the fifth Deans' committee report in toto from 2016-17.

This UASB Self study Report for the years 2016-17 to 2020-21 is an honour to present to the ICAR for accreditation. Several University stalwarts worked diligently for months to assemble this set. I'd like to express my sincere gratitude to all Officers, Heads, Faculty, Supporting Staff and all those who have involved in compilation of SSRs.



Date:27.03.2021

Dr.S.RAJENDRA PRASAD
Vice-Chancellor

Acknowledgement

The University of Agricultural Science, Bangalore (UASB) has made commendable attainment in the overall development of agricultural sciences in almost six decades of its meaningful existence. The stakeholders of the University such as students, faculty / scientists / extension functionaries and supporting staff and farm workers have contributed for excellence in agricultural higher education, research and performing outreach activities in the domain of agriculture and allied areas.

The compilation of SSRs for the purpose of accreditation by the National Agricultural Education Accreditation Board (NAEAB) of ICAR is to be considered in view of the landmarks and remarkable achievements by UASB. In this regard, various committees were constituted at University and College levels for compilation of information on teaching, research, extension, infrastructure, human resources, financial position, library and accomplishments of the University from 2016-17 to 2020-21.

It is our pleasure to extend heartfelt thanks to Dr.S.Rajendra Prasad, Hon'ble Vice-Chancellor, UAS, Bangalore and Chairman of the Steering Committee on Accreditation for providing valuable guidance and support for preparation, review and finalization of Self study Reports for accreditation of Programmes, Colleges and the University.

We take this opportunity to thank Officers of the University and member of the Steering Committee on Accreditation such as Dr. G. N. Dhanapal, Registrar; Dr. Y. G. Shadakshari, Director of Research; Dr. M. Byre Gowda, Director of Extension; Dr. N. Srinivasa, Dean (PGS); Dr. D.L. Savithamma, Dean (Agri.), College of Agriculture, GKVK; Dr. N. Devakumar, Dean (Agri.), College of Agriculture, Hassan; Dr. Venkatesh, Dean (Agri.), College of Agriculture, Mandya; Dr. P. Venkataravana, Dean (Seri.), College of Sericulture, Chintamani; Dr. B. C. Ravikumar, Special Officer, COEA, GKVK; Dr. Rajanna, M. P., Special Officer, College of Agriculture, Chamarajanagar; Dr. T. Narendrappa, Dean of Student Welfare, UAS, Bangalore; Dr. V. Srinivasa, Former University Librarian, Dr.R.N.Bhaskar, University Librarian, Dr. S.V. Suresha, Comptroller; Dr. G. Gopinath, Administrative Officer and Mr. D.Krishna Murthy, Estate Officer for their constant encouragement and support in preparation of SSRs.

It is our privilege to extend our sincere and profuse thanks to the members of the 'Core Committee for Preparation of SSRs of Programmes, Colleges and the University' for their enduring involvement in pooling, cross-checking and finalization of SSRs in coordination with University and College level committees.

Our heartfelt gratitude to faculty and non-teaching staff of the University for their all-possible support rendered for compilation of information pertaining to the reporting period.

March 27, 2021

Bangalore



Dr.K.C.NARAYANASWAMY

Controller of Examinations, UASB &
Member-Coordinator, Steering Committee for Accreditation



Dr. SIDDAYYA

Nodal Officers, NODAECC-ICAR & Coordinator, PPMC, UASB
& Member, Steering Committee for Accreditation

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Executive Summary

The University of Agricultural Sciences, Bangalore (UASB), the first State Agricultural University (SAU) in Karnataka was established in 1963 through an Act of the Legislature of the then Mysore State on the pattern of the US Land Grant System and inaugurated by Dr. Zakir Hussain, Vice-President of India on August 21, 1964. The Governor of the Karnataka State is the Chancellor of the university, and the Board of Management (BoM) of the University is the policy-making body for the functioning of the University.

The UASB with the administrative headquarters at the Gandhi Krishi Vigyan Kendra (GKVK), Bengaluru coordinates teaching activities in six constituent Colleges with 19 Departments. The UASB has one Main Research Station (MRS), two Zonal Agricultural Research Stations (ZARS), nine Agricultural Research Stations (ARS), seven Krishi Vigyan Kendras (KVKs) and two Extension Education Units (EEU) for the effective implementation of its mandate of teaching, research and extension.

With the vision of becoming a world-class Farm University, the UASB built a sound knowledge base through its fundamental programs in human resource development and unique programmes in basic, strategic and translational research and agriculture extension. The mission of the university is to generate high-quality human resources in the area of agriculture and allied disciplines, evolve cutting-edge Agri-technologies and knowledge disseminating mechanism to serve the farming community and society.

Teaching – “Education is not the filling of a pot but the lighting of a fire” –W.B. Yeats

The University of Agricultural Sciences, Bangalore and its constitute Colleges were accredited by the ICAR, New Delhi due to its well planned and organized academic activities. Currently, the university is offering undergraduate and postgraduate degrees in different fields of agricultural sciences. Over the years, UASB planned, developed, implemented and evaluated intentional and purposeful programs/services which benefited students, faculty, academic collaborators, farmers, industrialist and other stakeholders. Since teaching is one of the major mandates, the University has a well managed academic support system. The Academic Council is the highest decision-making body for academic activities and 10 Academic Council meetings were conducted during the last five years to advise the BoM and the Vice-Chancellor on various issues related to academics and library management. The University considered the major recommendations for the benefit of undergraduate and postgraduate degree programs.

Since 2016-17, the University has adopted several educational innovations to further the interest of students, institution and also to increase teaching quality. Because of these measures, UASB is attracting meritorious students through the Karnataka Common Entrance Test and ICAR-All India level examinations for both the UG and PG programs. Innovative approaches and best practices enhanced quality and added value to academic activities. The University Library, one of the largest University libraries in the field of Agricultural Sciences in Karnataka, is the knowledge hub for students and faculty. The library has a huge database of books, journals and other resources with well-connected networking systems with regional college libraries. The Library is providing continuous access to e-resources of the world's leading online journal databases and is a member of the Online Computer Library Centre (OCLC). The *Wi-Fi* facility is made available in the different sections of the library which is provided by the National Knowledge Network, Govt. of India and managed by the Agricultural Knowledge Management Unit (AKMU). The facilities are upgraded regularly and the library has *state-of-the-art* software and an efficient library management system. The University Library has adopted recent developments using information communication technology (ICT) software such as RFID Technology. Institutional Repository D Space, Vidwan faculty profile database, Krishikosh, Krishi

Chitralaya, EZproxy CeRA, e-books and OPAC (Online Public Access Catalogue) were implemented for better utilization of e-resources. These developments were possible due to regular Library Sub-Committee meetings conducted under the Chairmanship of Dean (Post Graduate Studies) which addresses need-based issues.

The University is striving hard to make agricultural education responsive and qualitative to the growing and changing needs of society and the farming community. The University has highly qualified faculty with international and multi-institutional experiences and recognitions. Some of the faculty members have active collaborative activities with European, Australian, Canadian and American universities which are helping the faculty to enrich their knowledge required for effective teaching. The University also nominated many eminent scientists from abroad as Adjunct Faculty. The academic atmosphere such as well-equipped library facilities to access peer-reviewed information, smart classrooms and laboratories and field facilities for effective knowledge transfer have given rich dividends in the form of finding suitable jobs and placement of graduates in both academic and industry sectors. Agri-Innovation Centre (AIC) established at GKVK is nurturing and strengthening the innovation and entrepreneurship in various fields of agriculture. The AIC facilitating academic-industry interaction benefiting the students. The above mentioned innovative activities of the University are yielding fruitful results in the form of generating highly competent human resources needed to address the challenges in the newly emerging areas of agricultural research, extension and industry.

During the reporting period of 2016-17 to 2020-21, a total of 3178, 1375, and 345 bachelor's master's and doctoral degrees, respectively have been awarded. Over 110 international students obtained their degree and 232 diplomas have been awarded by the University. The University bagged the first rank in ICAR-JRFs among SAUs in the country during the last four years, while it was in the second position during 2016-17. Because of the friendly academic environment, UASB students represented extracurricular events, including sports and arts and brought laurels to the university.

Research – "Research is creating new knowledge"- Neil Armstrong

Agriculture is a regional subject and we need to focus on the local problems using the home-grown knowledge and also the data generated at different parts of the globe. From this context, the research focus of UASB has been to generate cutting edge farm technologies to address the agrarian challenges of ten southern districts of Karnataka State. The University has reoriented its research mandates through practising strategic, basic and applied research. Concerted perpetual efforts are being made to evolve sustainable technologies to address location-specific problems in agriculture and its allied fields. The research at UASB has led to the development of production technologies in the array of crops grown in its operational jurisdiction. These technologies have revolutionised farm production and incited overall growth in the farming community.

Currently, UASB is catering to the research needs of 10 districts of Southern Karnataka comprising the Eastern dry zone (Zone 5), Southern dry zone (Zone 6) and parts of the Central dry zone (Zone 4) and Southern transition zones (Zone 7). The Director of Research is responsible for the due performance of the research stations as well as planning, coordinating and monitoring research in the University. A multi-tiered arrangement involving zonal stations, extension specialists and teaching departments within the University, linkages with other research institutions in the zone, line departments, progressive farmers and agri-entrepreneurs provides an operational framework for formulating relevant research agenda. To meet the demands of farmers, the University released 296 high yielding crop varieties/hybrids and also six animal breeds since its inception. The varieties released in finger millet are viewed as a landmark achievement in imparting food and economic security to dryland farmers of southern India. The committed research in the field of crop improvement resulted in first-ever hybrids in cotton, rice and sunflower. The University also developed many adoptive technologies that have revolutionised the production of cereals, pulses, oilseeds and commercial crops. Presently, the research

focus is on targeted crop improvement and tailoring agro-techniques suitable to the changed climatic scenario and market-driven secondary agriculture. Such an achievement is attributed to the constant support and guidance from the Research Council, which is the apex body for research activities in the University. The Council consists of all the Directors/Deans of the University, Heads of the Departments, State level officers from Agriculture and allied developmental departments with the Vice-Chancellor as the Chairperson and the Director of Research as Member Secretary. Over six Research Council meetings were held during the last five years and the University considered the major recommendations of the Council.

From 2016-17 to 2020-21, UASB has developed several locally relevant production technologies and crop varieties. In the last five years, UASB has released 26 varieties in different crops which are tailored to diverse agro-ecological conditions. A basket of 96 sustainable farming technologies developed by the University transformed the landscape of the rainfed agriculture in Southern India by ensuring the livelihood of the farming community. Production technologies developed for dryland agriculture have helped in stabilizing farm productivity even in sparse rainfall years. UASB developed several low costs, eco-friendly technologies for managing pests and diseases, which helped the farmers to control serious pests of rice, ragi, and maize. The adoption of new crop varieties/hybrids and technologies by farmers has increased the production and productivity of cereals, pulses, oilseeds and sugarcane.

The research output of the University is well appreciated. The University published research findings in peer-reviewed journals with a cumulative NAAS impact score of over 1182 and a steady increase in the research paper indicates quality scientific activities in the University. This also reflected in the breakthrough research such as whole-genome sequencing of local crop finger millet, Dolichos bean, *Indica* rice genome HR-12, rice pathogen, yellow mite, to name a few. The University also contributed to *Land Resource Inventory* (LRI) and *Atlas* generation. The LRI data generated contains comprehensive information on soil maps, fertility maps, land capability maps, proposed crop plans, micro-watershed with summary for advisory services at Raitha Samparka Kendras (RSKs) level. The University also contributed to redefining the drought declaration criteria. *Biofuel Park* and *Bioenergy Research Information and Demonstration Centre* have been established by the University to demonstrate the relevance of alternative energy, which are attracting farmers and policymakers. Recently, the University established a *Central Instrumentation Facility* with advanced equipment and a freshwater pearl culture unit which is providing hands-on training on freshwater pearl culture. Innovative technologies have been developed in *Reduced Runoff Farming* systems, and a novel *Solid-State Cooling* module for raw milk cooling has been developed.

Apart from the Academics, University is also associated with firms, individual farmers and government organisations by providing various services such as bio-efficacy studies, biofertilizer analysis, consultancy services, equipment evaluation, fertility analysis, field inspection, performance analysis, soil & water analysis and plant sample analysis.

The University also developed several websites to publicize the research findings and adopted ICT tools such as Seed inventory management software, Agricultural Pest Prediction and Advisory, etc. A *Beej Aadhar* mobile App and webpage has been developed to create a common platform for the seed producers, consumers and seed stakeholders. Fertilizers (NPK) calculator based on recommendation or soil testing developed by the University can reduce input costs, and avoid excessive use of fertilizers and degradation of soil health. UASB has IP cell, Intellectual Property Management Cell (IPMC) and Technology Commercialisation Committee which is helping the faculty to file patents on their innovation. Four and ten patents have been granted and filed respectively, during this reporting period, and 13 crop varieties have been registered/application submitted with PPV&FRA. The management cell of the University is facilitating global support and collaboration, and 20 international MoUs/Agreements have been signed between UASB and various institutions.

Extension - "One of India's major blessings is the rich store of experience and knowledge available in the rural and tribal areas"- M. S. Swaminathan

Extension activities are crucial for disseminating information on-farm technologies, and to support rural youth learning and assist farmers in developing their technical and managerial skills. UASB has a well-established Directorate of Extension for such activities. The UASB extension programmes are helping to increase farm productivity, farm revenue, and improve socio-economic status. Extension Education Council the advisory body in the University, meets once a year. The Directorate is headed by the Director, who coordinates the activities of different extension units. The Staff Training Unit (STU) of the Directorate has the responsibility of building professional competence for the staff of various organisations. During the last five years, the STU conducted over 65 training programs and field visits. The Farmers' Training Institute which was established in the year 1967, during the last five years, conducted over 150 sponsored training programs for the benefit of more than 4500 farmers. Farm Information Unit (FIU), which undertakes various activities to develop and communicate farm information organized 18 press conferences, 31 agricultural fairs, and coordinated 664 TV/radio programs, in addition to developing and releasing several e-information modules such as documentary films, YouTube, WhatsApp, Facebook accounts, packages in the form of PDF, *etc.* The Directorate has an Agricultural Technology Information Centre (ATIC), which rendered 20682 and 9510, face-to-face and telephone consultancy services, respectively, during the last five years. The unit provided the solution to 2929 queries on plant protection. The Bakery Training unit which was established in 1968, organised 13 fourteen-week certificate courses on Bakery technology and conducted over 15000 method demonstrations. The University has a Distance Education Unit (DEU), which is offering correspondence courses in Kannada for the benefit of the local population. The University has a State Agriculture Management and Extension Training Institute (SAMETI) at the Directorate of Extension, and also a *state-of-the-art* museum devoted to agricultural sciences at the GKVK campus. The National Agriculture Extension Project (NAEP) initiated in 1984 is being implemented in Bangalore and Mandya districts. The University has seven Krishi Vigyan Kendras (KVKs) in the districts of Bengaluru Rural, Chamarajanagara, Chikkaballapura, Hassan, Mandya, Ramanagera and Tumakuru, which are assisting in transferring knowledge from lab to land. The Farmer Science Congress was organized for the first time in the history of the Indian Science Congress on 6th January 2020 at GKVK Campus which demonstrates innovative extension activities of the Directorate. The Directorate of Extension is conducting Krishemla at different campuses every year and playing a crucial role in agriculture technology transfer. The faculty/scientists/extension personnel have participated in 207 International and 1345 National symposia/seminars/conferences from 2016-17 to 2020-21 for sharing research ideas, gaining knowledge, upgrading skills and networking with professionals.

Management and Coordination of Activities

The University has a well-planned channel to combine education, technology, management and social service. This is achieved through the decentralization of administrative and management functioning powers, which is reviewed from time to time. The administrators and staff are being recruited as per the set guidelines of ICAR and the State Government. The staff members are encouraged to participate in Symposia and workshops to enrich the knowledge in their respective fields. The University has set procedure to honour or reward the teachers/scientists and supporting staff, some of which are ICAR-Best teacher award, Best Research Award, Best Extension worker award, *etc.*, which has resulted in quality improvement. Over 300 faculty received national and international recognition in different disciplines during the last five years.

For the benefit of students and staff, the University is maintaining supporting units such as Maintenance Cell, SC/ST cell, Health Care Centre, University Examination Centre, Communication Centre, Study Centre, Grievance Redressal Cells, Student Welfare Cell-other States, Differently abled student welfare Committee, Internal Complaint Committee, Intellectual Property Rights & Commercialization Unit, Agriculture knowledge Management Unit, Agri. Innovation Centre, Cafeteria, Guest House, International Centre, Foreign Students Advisory Cell, Foreign Students Centre, Bank, Post Office, Skill Development Centre. Most of the sub-campuses are also equipped with sub-centres of these supporting units. All these facilities are making University life very attractive and comfortable for students and staff.

The University has allocated Rs.13100.57, 13954.65, 14539.05, 11161.80 and 17758.26 lakhs towards salaries, contingency and ICAR development grants, respectively, to the constituent Colleges and the University headquarters during the last five years. A sum of Rs.21745.65 lakh was generated as internal

receipts during the reporting period. The University has raised Rs. 200.00 lakhs through corporate funding during 2020-21 for establishment of UASB-HAL Advanced Centre for Bio-Energy Research at GKVK Campus.

The University and its constitute Colleges were accredited by the ICAR, New Delhi twice i.e., from 25.08.2004 to 24.08.2009 (27-2/98-Acdn. / Edn. dtd. August 25, 2004) and from 28.03.2016 to 27.03.2021 (F.No. ed. 27/2/98-EQR dtd. 05 May 2016). The UASB has adopted all the observations/recommendations made by the ICAR, NAEAB, New Delhi since 2016-17. Most of the observations/recommendations were satisfactorily undertaken on action mode. In addition to PRT observations, other issues also systematically implemented by the University viz., digitalization of examination, the establishment of COVID-19 testing centres, disposal of hazardous waste, open gyms, etc.

The Alumni Association of UASB was established on 1st September 1989, which has over 10,500 registered members comprising of graduates in agriculture, horticulture, veterinary, dairy science, fisheries, agricultural marketing and cooperation, forestry, agri-biotech, food science, agricultural engineering and sericulture. Over 125 graduates are currently serving as officers/administrators in the care of IAS, IFS, IPS Karnataka Administrative Service Officers, etc., and the majority of the graduates scientists in ICAR and other research organizations, professors, and extension specialist in the Universities and agri-related institutions. A great majority of the undergraduates are serving in the State Developmental Departments, Banks, NGOs and other private organizations. Many are successful entrepreneurs, practising farming and influential policy makers, a few of them are serving in key positions in different countries.

During the last five years, the University has contributed significantly in areas of teaching, research and extension. The university has the required faculty for effective and high-quality teaching, and research in chosen areas. The resources and facilities are sufficient to fulfil the overall goal of the university and act to emerging challenges.

6.6 Self Study Report of the University of Agricultural Sciences, Bangalore

Genesis and Evolution of University of Agricultural Sciences, Bangalore

The University of Agricultural Sciences, Bangalore (UASB) was the first State Agricultural University (SAU) in Karnataka established in 1963 through an act of the Legislature of the then Mysore State on the pattern of the U.S. Land Grant System and inaugurated by Dr. Zakir Hussain, Vice-President of India on August 21, 1964. Originally, an experimental farm of 30 acres was established at Hebbal in 1899 which was upgraded to an Agricultural School in 1913 and later into Mysore Agricultural College in 1946. In 1958, Veterinary College, Hebbal was established. Later the University has established on October 1, 1965, the Colleges of Agriculture with campuses at Hebbal, Bangalore and Dharwad. The Gandhi Krishi Vignana Kendra (GKVK) campus with an area of 1320 acres was inaugurated by Smt. Indira Gandhi, then Prime Minister of India on July 12, 1969, and the GKVK is a biodiversity hotspot, therefore the campus was declared as Bio-Heritage Site during 2009.

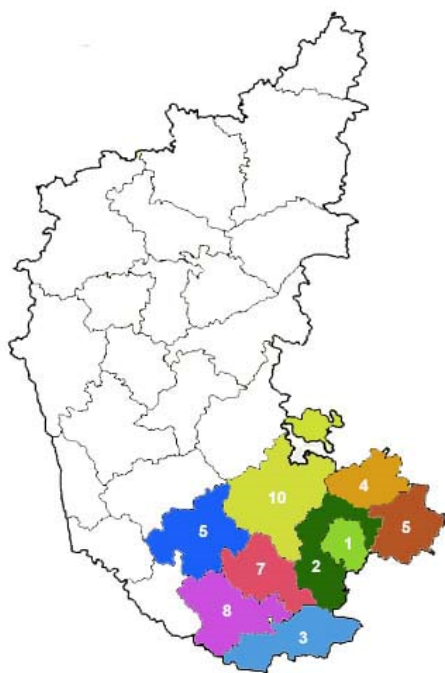
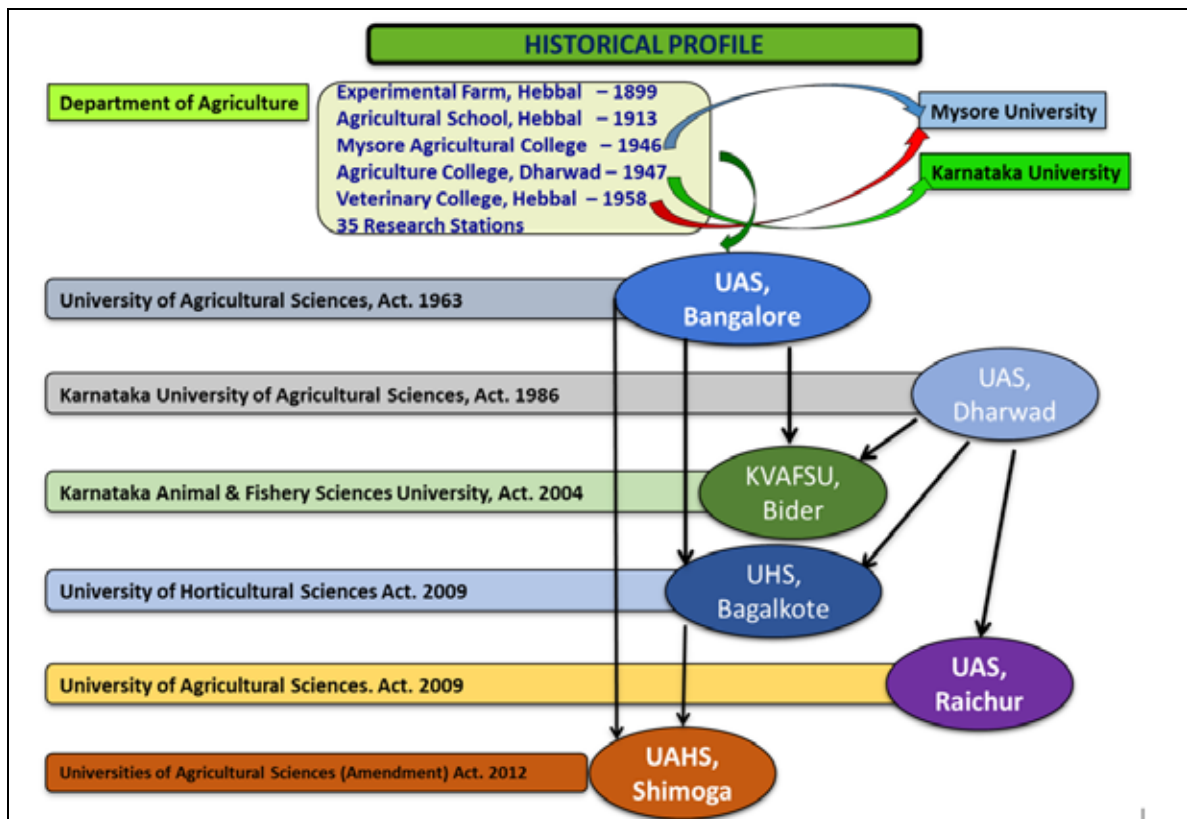
The University established the Fisheries College at Mangalore in 1969 to offer Bachelor of Fisheries Science training and the Agricultural Engineering Institute at Raichur to offer a three-year diploma in Agricultural Engineering. In 1974, Home Science College was started to impart education in Rural Home Science at Dharwad Campus, besides establishing a College of Basic Sciences and Humanities and the College of Post Graduate Studies at Hebbal. The degree programme on B.Sc. (Agricultural Marketing and Co-operation), the first of its kind in the country, was started during the academic year 1976-77 by the University of Agricultural Sciences, Bangalore, at two campuses, namely, Bangalore and Dharwad. College of Forestry, Sirsi was established in the year 1985.

The phenomenal growth of the University, the differences in agro-climate in the parts of the state, led to the bifurcation of the University into two agricultural universities. An amendment to the University of Agricultural Sciences Act in 1986 saw the birth of the second University for agriculture in the state. The University of Agricultural Sciences, Bangalore was entrusted territorial jurisdiction over 15 southern districts of Karnataka comprising nearly fifty per cent of the total area of the state, while the University of Agricultural Sciences, Dharwad, was given jurisdiction over the remaining area in the northern districts of the state.

In 2005, with the need to provide better autonomy to the veterinary education and research in the state, the Veterinary and Animal Sciences was bifurcated from both the Universities of Agricultural Sciences, Bangalore and Dharwad and placed under the single University - Karnataka Veterinary, Animal and Fisheries Sciences University with its headquarters in the northern district of Karnataka, Bidar by passing the Karnataka Veterinary, Animal and Fisheries Sciences University Bill, 2004 in the Legislative Assembly on 10 February 2004.

Realising the importance and foresightedness of the Karnataka Government, His Excellency, the Governor of Karnataka has approved the establishment of the University of Horticultural Sciences (UHS) at Bagalkot through a special Ordinance No 2 of 2008 dated: 22-11-2008, bifurcated from both the Universities of Agricultural Sciences, Bangalore and Dharwad and placed under the single University.

In the year 2012, University of Agricultural and Horticultural Sciences, Shivamogga was established under Karnataka Act No. 38 of 2012 by separating seven districts from the jurisdictional area of the University of Agricultural Sciences, Bangalore. Presently, the University covering with broad geographic area spread in different regions/jurisdiction covering 10 districts of Karnataka State.



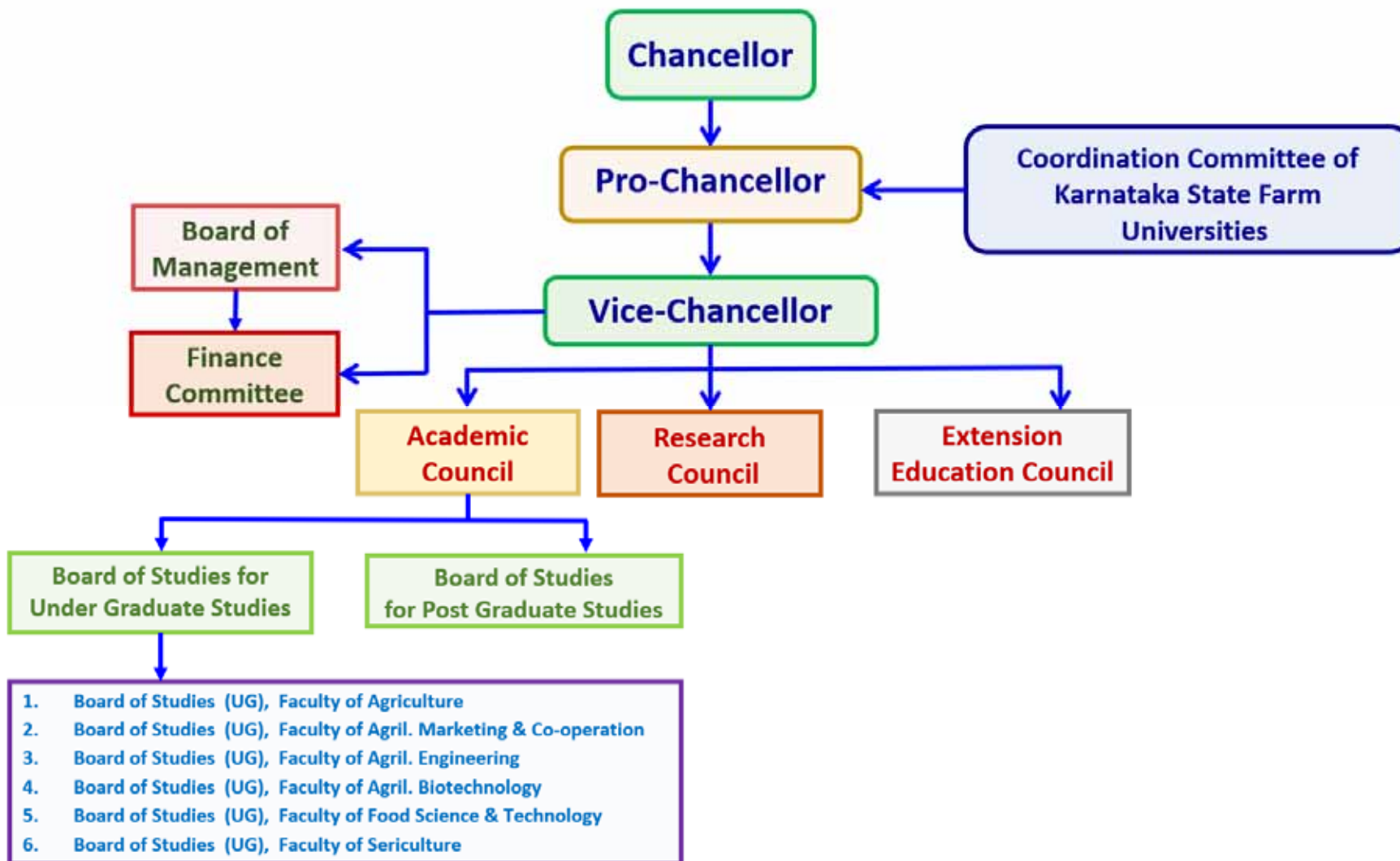
Sl. No.	District	Geographical Area (ha.)
1	Bengaluru Urban	2,17,410
2	Bengaluru Rural	2,29,519
3	Chamarajanagara	5,69,901
4	Chikkaballapura	4,04,501
5	Hassan	6,62,602
6	Kolar	3,74,966
7	Mandya	4,98,244
8	Mysore	6,76,382
9	Ramanagara	3,55,912
10	Tumukuru	10,64,755
	Total	50,54,192

Jurisdiction and Geographical Area of UAS, Bangalore

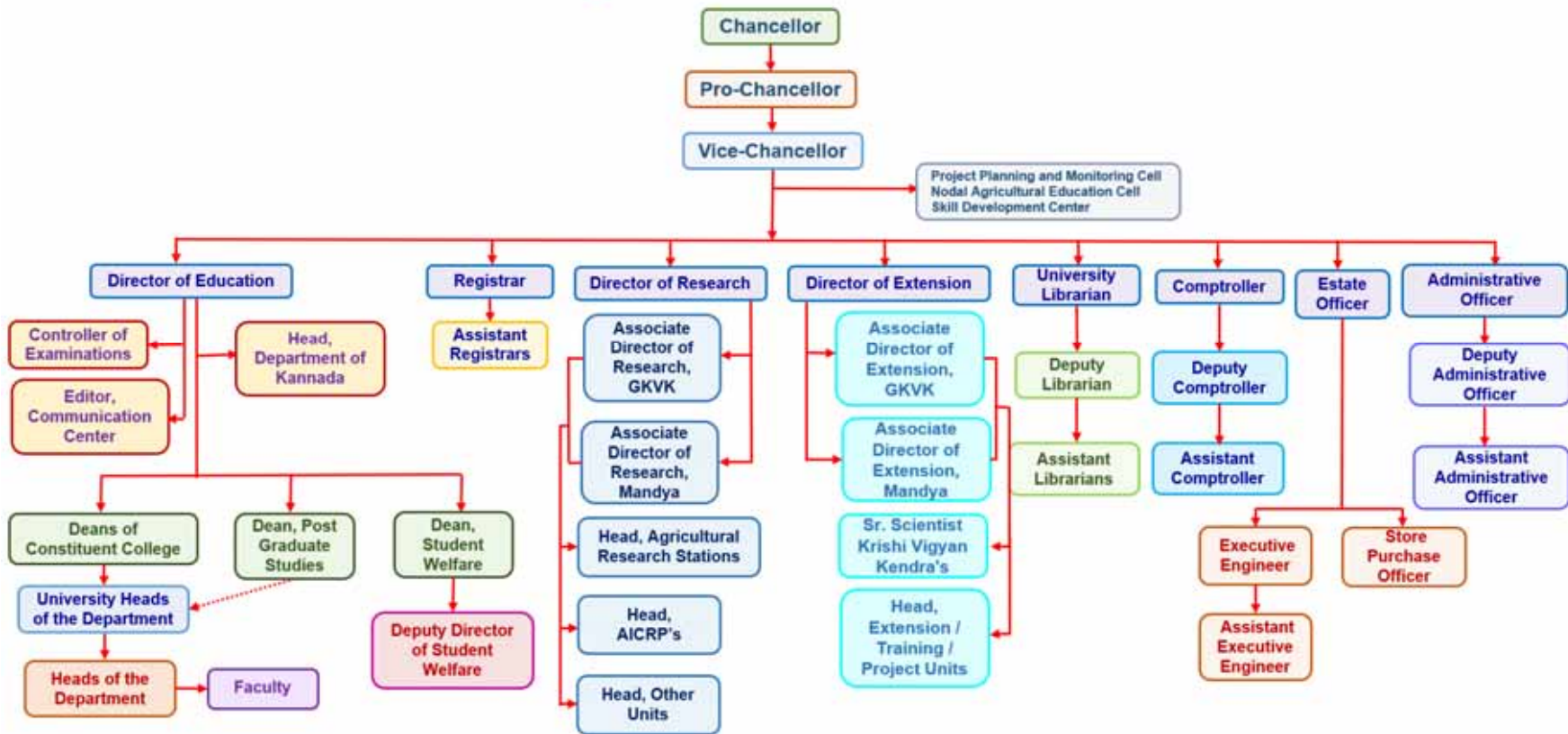
6.6.1. University Governance

The University of Agricultural Sciences, Bangalore currently has administrative headquarters at the Gandhi Krishi Vigyan Kendra (GKVK), Bengaluru. Presently, the University has six constituent Colleges with 19 Departments, one Main Research Station (MRS), two Zonal Agricultural Research Stations (ZARS), nine Agricultural Research Stations (ARS) and seven Krishi Vigyan Kendras (KVKs)

GOVERNANCE STRUCTURE



Organizational Structure



Authorization

Karnataka State Act No.22 of 1963 subsequently amended vide Karnataka Act No.10 of 2010 vests with powers to University of Agricultural Sciences, Bangalore to institute various degrees, diplomas and other academic distinctions. Accordingly, the University has the power to give instruction in agriculture, sericulture and other allied sciences and in such other branches of learning as the University may deem to fit. The University has been authorized to establish and maintain Colleges relating to Agriculture, Sericulture, Agricultural Engineering, Agricultural marketing & Co-operation and other allied sciences, institute courses of study and hold examination leading to the conferment of degrees, diplomas and other academic distinctions on persons who pursued a course of study or carried out research in the University or an institution recognized in this behalf by the University. The University is empowered to award fellowships, scholarships, medals, prizes, besides conferring honorary degrees or other distinctions as deemed fit. The University is also authorized to make provision for research and dissemination of the findings of the research and technical information through of extension education programme. Keeping in view the wider objective of taking agricultural education to the farming community in the State, University has made provision to provide lectures and instructions for field workers, village leaders and other persons not enrolled as regular students of the University and to grant certificates to them. The Academic Council and Board of Studies, which are statutory authorities of the University, oversee all the educational programmes.

Statutory Authorities

The following are the authorities of the University of Agricultural Sciences, Bangalore viz., Co-ordination Committee, Board of Management, Academic Council, The Board of Studies, Finance Committee, Research Council, Extension Education Council. A copy of the Universities of Agricultural Sciences Act -2009 is available on the University website (www.uasbangalore.edu.in).

Co-ordination Committee for Agricultural Education, Research and Extension:

As per Sec.67 of the UAS Act-2009, a Committee “State Co-ordination Committee for Agricultural Education, Research and Extension” came in to force under the Chairmanship of Hon’ble Minister for Agriculture of the State for effective coordination in the activities of all the Agricultural Universities in the State, particularly concerning teaching, research, extension education and other matters of common interests.

Composition of Present Coordination Committee: As per Sec.67 of UAS Act-2009, the Coordination Committee consists with the following members:

Sl. No.	Name & Designation	Position
1.	The Minister in charge of Agriculture, Government of Karnataka	Chairperson
2.	Vice-Chancellors of All Agricultural Universities in the State	Member
3.	Directors of Education, Research and Extension of all Agricultural Universities in the State	Member
4.	Registrars of all the Agricultural Universities in the State	Member
5.	The Secretary to Government, Agriculture Department in the State	Member Secretary

The details of the Coordination Committee meetings held from 2016-17 to 2020-2021.

Sl. No.	Year	Details of the Meeting
1	2016-17	24 th Coordination Committee Meeting held on 11-03-2016
2	2017-18	25 th Coordination Committee Meeting held on 08-03-2017
3	2018-19	26 th Coordination Committee Meeting held on 30-07-2018
4	2019-20	27 th Coordination Committee Meeting held on 05-07-2019
5	2020-21	28 th Coordination Committee Meeting held on 13-05-2020
6	2020-21	29 th Coordination Committee Meeting held on 22-01-2021

Board of Management:

The Board of Management of the University is the policy-making body for the functioning of the University in all its spheres. The Board of Management exercises its power to establish and review basic policies that govern the institution based on Acts and Statutes, besides Regulations / Guidelines formed from time to time.

Composition of present Board of Management: As per Sec.12 (2) of UAS Act-2009, the Board of Management consists of the following members:

U/Sec.	Criteria for Nomination	Position
12(2)(i)	The Vice-Chancellor	Chairman
12(2)(ii)	The Principal Secretary or Secretary to Government, Agriculture Department or their nominee not below the rank of Joint Secretary	Ex-officio Member
12(2)(iii)	The Principal Secretary or Secretary to Government, Finance Department or their nominee not below the rank of Deputy Secretary	Ex-officio Member
12(2)(iv)	The Principal Secretary or Secretary to Government, Horticulture Department or their nominee not below the rank of Joint Secretary	Ex-officio Member
12(2)(v)	Three progressive farmers from the jurisdiction of the University of whom one person shall belong to the Scheduled Caste or the Scheduled Tribes to be nominated by the State Government	Members
12(2)(vi)	One Member of Karnataka State Legislative Assembly or Legislative Council on rotation basis, nominated by the Speaker	Member
12(2)(vii)	One eminent educationist or expert in Agriculture sector to be nominated by the Chancellor	Member
12(2)(viii)	One agro-industrialist or woman social worker to be nominated by the Chancellor	Member
12(2)(ix)	One representative from the Indian Council of Agriculture Research to be nominated by the Director General	Member
12(2)(x)	One Dean to be nominated by the Vice-Chancellor, by rotation for a term of two years	Member
12(2)(xi)	Registrar of the University	Member Secretary

The list of Board of Management meetings held from 2016-17 to 2020-21:

Sl. No.	Year	Details
1.	2016-17	368 th Meeting of the Board of Management held on 28 th April 2016 369 th Meeting of the Board of Management held on 26 th May 2016 370 th Meeting of the Board of Management held on 3 rd November 2016 371 st Meeting of the Board of Management held on 5 th January 2017

2.	2017-18	372 nd Meeting of the Board of Management held on 13 th April 2017 373 rd Special meeting of the Board of Management held on 23 rd April 2017 374 th Emergent meeting of the Board of Management held on 29 th May 2017 375 th Meeting of the Board of Management held on 11 th July 2017 375 th Adjourned meeting of the Board of Management held on 25 th July 2017 376 th Meeting of the Board of Management held on 5 th December 2017 377 th Special meeting of the Board of Management held on 29 th January 2018
3.	2018-19	378 th Meeting of the Board of Management held on 12 th June 2018 379 th Meeting of the Board of Management held on 5 th January 2019 380 th Special meeting of the Board of Management held on 20 th March 2019 381 st Meeting of the Board of Management held on 4 th June 2019 382 nd Meeting of the Board of Management held on 3 rd October 2019 383 rd Meeting of the Board of Management held on 16 th December 2019
4.	2019-20	384 th Special meeting of the Board of Management held on 29 th January 2020 385 th Meeting of the Board of Management held on 21 st April 2020 386 th Meeting of the Board of Management held on 1 st September 2020
5.	2020-21	387 th Meeting of the Board of Management held on 21 st January 2021

6.6.1.1. Vision, Mission and Goals

The University of Agricultural Sciences, Bangalore was established in 1963. To expand Agricultural Education, the UAS, Bangalore has ensured a broad geographic spread of its teaching, research and extension campuses in different regions covering 10 districts of Karnataka. Project on “Centre for Next Generation Technologies (NGT) in Adaptive Agriculture (AA)” under the Centre for Advanced Agricultural Science & Technology (CAAST) program is a feather to the University.

Vision

Transforming University of Agricultural Sciences, Bangalore into world-class Farm University. The University has built a sound knowledge base through its unique programmes in basic, strategic and translational research. This strong foundation of knowledge drives the research programmes of the University to enhance the productivity of agriculture in the State.

Mission

Generating quality human resource in the area of agriculture and allied disciplines, cutting-edge competitive technologies and evolve efficient disseminating mechanism to serve the farming community of the State and the Country.

The University of Agricultural Sciences, Bangalore has grown into an institution of national and international repute. More importantly, it has carried out its mission in agricultural education, research and extension to transform agriculture in the state bringing smiles to farmers.

Goals:

- Making provision for imparting education towards the development of quality human resource in different branches of agriculture and allied subjects;
- Further, the advancement of learning and conducting of research, particularly in agriculture and other allied sciences;
- Undertaking the extension education of such science and technologies, especially for the rural people of the State;
- Such other purposes as the State Government may by notification in the Official Gazette specify from time to time; and
- Promoting partnership and linkages with national and international educational, Industries, research and other institutions.

The University has planned, developed, implemented and evaluated intentional and purposeful programs/services facilitated by students, faculty and farmers, industrialist and other stakeholders of the University in the areas of Teaching, Research and Extension by re-oriented Vision of the University time and again.

Vision-2020:

The Vision-2020 Plan enables the University to project and capture the future growth and effect with necessary changes to equip the organisation to respond positively to the challenges of the future in the field of agriculture and allied disciplines. It would concentrate on the following key areas:

- a) Strengthen institutional felicities in terms of laboratories, teaching aid, models, mobility for field visits, *etc.* for instructional programmes. Emphasis on vocational training in identified branches of agriculture by adopting approaches like distance and non-formal education mode.
- b) Use varied communication technologies such as satellite-based, remote sensing and eco-friendly practice.
- c) Chalk out activities on a zonal basis covering a wide range of issues like water management, soil health and nutrient building, developing new hybrids seed production, increasing the internal receipts, *etc.*
- d) Reform agricultural extension trainings in generating self-employment opportunities by collaborations with public and private, national and international organizations.

Vision-2025:

Vision-2025 is focusing on attaining the overall empowerment of farmers in Karnataka by ensuring productivity and income security through climate-resilient technologies, value addition and a reformed market network to achieve sustainable livelihood.

The key goals and targets of Vision-2025 as guiding principles and key drivers as follows:

- a) To increase the farmer's income by increased production, reduced cost of cultivation and improving the market infrastructure to attain sustainable living.
- b) To sustain the production of Agriculture and allied sectors on a long term basis by adopting the principles of better soil fertility and better rates of feeding in animal-based enterprises.
- c) To establish good forward linkages to offer support to the farmers to store or market or process their produce at profitable rates easily with minimum losses
- d) To diversify the income base of the farmers to offer stability and certainty of year-long income generation
- e) To generate employment to both skilled and unskilled labours so that farmers own family labour is engaged for longer period and the society will generate a batch of skilled technicians to assist the farmers
- f) To reduce migration from the villages and make the profession of agriculture more attractive and profitable so that rural youth are retained in villages.
- g) To reduce the recent social menace of farmers suicides by offering them better social security in terms of assured income

Vision-2030:

The Vision-2030 plan focuses on streamlining agricultural education to impart quality education and to encompass frontier sciences to develop agricultural scientists with global competitiveness. The vision aims to take up research for the development of cutting-edge technologies identifying production and marketing environments. Priority to take developed technologies closer to the farmers to reap the benefits of University efforts during the vision period. The major goals of Vision-2030 are in the following key areas:

- a) Generate new knowledge and quality of human resources in support of the sector.
- b) Develop end-use technologies to resolve farmer issues and foster research conceptual advances in agricultural disciplines
- c) Evolve mechanism for sustainable utilization and management of natural resources.
- d) Develop innovative outreach systems for knowledge transfer at all levels of the supply chain
- e) Establishment of state of art infrastructure for effective teaching and research programmes.
- f) Promoting partnerships and linkages with national and international educational, industries, research and other institutions.

Objectives of Teaching:

- a) To make agricultural education responsive to the growing and changing needs of the society in general and aspirations of the farming community in particular.
- b) To establish a dynamic system of agricultural education to train highly skilled and competent manpower to address the challenging tasks with new emerging areas of research, extension and industry.

University has drawn-out its academic programs to meet the different disciplines requirement of human resources in the face of changing agriculture scenario. A range of new technology-oriented six Under-Graduate Degree programs under the disciplines of Agriculture, Sericulture, Food Science & Technology, Agricultural Marketing & Cooperation, Agri-Biotech and Agricultural Engineering including 23 disciplines of Postgraduate program & 16 disciplines of Doctoral degree program. Also four diploma and six certificate courses are offered by University across its five campuses.

The University of Agricultural Sciences, Bangalore has six constituent Colleges, which is as follows:



Jurisdiction 10 Districts	Bengaluru, Bengaluru Rural, Chamarajanagara, Chikkaballapura, Hassan, Kolar, Mandya, Mysore, Ramanagara and Tumakuru
Geographical Area (Ha,)	50,54192

Jurisdiction of Colleges of UAS, Bangalore

ACADEMIC PROGRAMMES

DEGREE PROGRAMMES

NON-DEGREE PROGRAMMES

Bachelor Degrees – 6

1. B.Sc.(Hons.) Agriculture
2. B.Sc.(Hons.) Agri. Business Management
3. B.Tech. (Biotechnology)
4. B.Tech. (Food Technology)
5. B.Sc.(Hons.) Sericulture
6. B.Tech. (Agricultural Engineering)

Master Degrees - 23

1. Agril. Economics
2. Agril. Extension
3. Agril. Entomology
4. Agril. Microbiology
5. Agronomy
6. Crop-Physiology
7. Food Science and Nutrition
8. Genetics and Plant Breeding
9. Horticulture
10. Plant Pathology
11. Seed Science & Technology
12. Sericulture
13. Soil Science and Agril. Chemistry
14. Agril. Marketing & Cooperation
15. Apiculture
16. Plant Biotechnology
17. Processing & Food Engineering
18. Environmental Science
19. Plant Biochemistry
20. Agricultural Statistics
21. MBA in Agri. Business Management
22. Soil and Water Engineering
23. Bioinformatics

Doctoral Degrees - 16

1. Agril. Economics
2. Agril. Entomology
3. Agril. Extension
4. Agril. Microbiology
5. Agronomy
6. Crop Physiology
7. Food Sci. & Nutrition
8. Genetics & Plant Breeding
9. Plant Biotechnology
10. Plant Pathology
11. Seed Science & Technology
12. Sericulture
13. Soil Science & Agril. Chemistry
14. Forestry & Environmental Science
15. Agril. Business management
16. Horticulture

DIPLOMA COURSES - 4

- Diploma in Agriculture (2 Yrs)
- Diploma in Sericulture (2 Yrs)

DISTANCE MODE

- Diploma in Agriculture (1Yr)
- PG Diploma in Agriculture (1Yr)

CERTIFICATE COURSES - 6

- Baking Technology
- Sericulture
- Integrated Farming
- Horticulture Nursery Management
- Agricultural Extension Services for Input Dealers (DAESI)
- Food processing & Value Addition
- Apiculture

DISTANCE MODE

- Organic Farming

Objectives of Research:

- a) To develop suitable end-use technologies to solve farmers' problems vis-à-vis agricultural production including animal husbandry and fisheries and foster research aimed at conceptual advances in all disciplines for technology development in the long run.
- b) To establish state-of-art infrastructure including well-equipped laboratories, extensive farmlands and an operational research management system that will ensure quick, efficient and cost-effective implementation of research programmes.
- c) To attract qualified and talented personnel to undertake research in the University.

The University of Agricultural Sciences, Bangalore is a premier institution of agricultural education and research that celebrated its golden jubilee recently and attained many laurels nationally and internationally. The University is catering for the research needs of 10 southern districts of Karnataka, coming under the Eastern dry zone (Zone 5), Southern dry zone (Zone 6) and parts of the Central dry zone (Zone 4) and Southern transition zones (Zone 7).

The University has state of art research facilities supported with classic laboratories, administrative buildings and other infrastructures to carry-out location-specific research. There are nine Agricultural Research Stations, one Main Research Station and one Organic Farming Research Station monitored through two Zonal Research Stations at GKVK (Zone 4 & 5) and Mandya (Zone 6 & 7). The University has built a sound knowledge base through its unique programmes in basic, strategic and translational research. This strong foundation of knowledge drives the research programmes of the University to enhance the productivity of crops in the State.



Objectives of Extension:

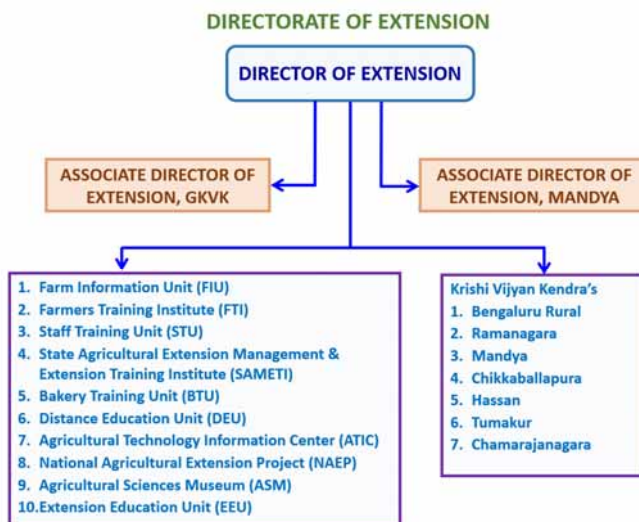
- a) To ensure that the research findings and innovations, after their proven demonstration, are communicated to the farmers on a logistically feasible scale. This mechanism acts as an interface between farmers and researchers and enables the identification of problems through positive feedback.
- b) To reach the knowledge and technology to farmers on a wider scale by training the grassroot level workers and officers of the state departments of agriculture, horticulture and sericulture on recent advances in the respective fields through Subject Matter Specialists

The University has played a pivotal role in carrying out front-line extension involving all the stakeholders for technology dissemination and also identifying problems that require technological interventions. Agricultural Technology Information Centre, UAS Agri-portal, Krishi Vignana Kendras, Extension Education Units, Bakery Training Unit, Staff Training Unit and Farmers' Training Institute of the University have been nationally commended for their role in outreach activities both at the State and National level. Krishimela of UASB has proved to be a substantial boon to the surging development of agriculture in the State.

The Directorate of Extension of the University has a statutory role to play with regard to extension. Extension service is a vehicle, which carries scientific agricultural technology interventions developed

at the Research Stations to the farm, for the overall benefit of the farming community. The farming community can avail the services of the units of the Directorate of Extension to get the solutions to their farming problems and to increase their economic status.

Functional Units of the Directorate of Extension



6.6.1.2 Statutes and Regulations

Subject to the provisions of this Act, the Statutes of the University may provide for any matter connected with the affairs of the University. The notified copy of the University Statutes-2008 is uploaded to the University website which is enclosed as Annexure - II

List of Statutes and Regulations published in the gazette notification and implemented (year-wise from 2016-17 to 2020-21)

Sl. No.	Year	Details
1.	2016-17	Nil
2.	2017-18	Nil
3.	2018-19	Nil
4.	2019-20	The Statutes related to appointment/recruitment of Officer Posts at University of Agricultural Sciences, Bangalore have been revised as per G.O No: KruE/69/KruVV/2018 dated 23-11-2018 and 05-06-2020 and notified in the State Gazette issue-151, dated December 26, 2019.
5.	2020-21	Nil

Regulations

As per Sec.54 of UAS Act-2009, the authorities of the University may make regulations consistent with the Act and Statutes for various purpose such as;

- For laying down procedures for meetings of higher authority and conduct of meeting business,
- Providing for matters which by this Act or the Statutes are to be regulated by Regulations subject to such direction as the Board may from time to time give in this behalf.
- For making provisions through the Academic Council towards;
 - (a) holding of convocations to confer degrees and diplomas;
 - (b) conferment of honorary degrees, academic distinctions and withdrawal of degrees;
 - (c) Courses of study to be laid down for all degrees, diplomas and certificates of the University;
 - (d) Institution of fellowships, scholarships, stipend, bursaries, medals and prizes and the conditions of award thereof;

(e) Entrance or admission of the students of the University and their enrolment and continuance as such and the conditions and procedures for dropping students from enrolment, *etc.*

The regulations made by any authority of the University shall be subject to such directions as the Board of Management from time to time give on this behalf.

6.6.1.3. University Statutory Officers and their Selection Process

The chief executive of the University is the Vice-Chancellor, who is appointed by the Governor of Karnataka and the Chancellor of the University on the recommendation of the Search Committee constituted by the State Government. The Vice-Chancellor is supported by Directors, Deans and other Officers (14 Nos) for discharging various activities related to teaching, research, extension and general administration. The list of statutory officers of the University is as follows:

Sl. No.	Name of the Officers	Date of Appointment	Date of Duty Report	Tenure	Mode of Appointment
1	Dr. S. Rajendraprasad Vice-Chancellor, UAS, GKVK, Bangalore	17.09.2018	17.09.2018	Four years	Direct Recruitment
2	Dr. S. Rajendraprasad Director of Education UAS, GKVK, Bangalore	17.09.2018	17.09.2018	Temporary	Nomination
3	Dr. G. N. Dhanapal Registrar UAS, GKVK, Bangalore	30.09.2020	30.09.2020	Temporary	Nomination
4	Dr. N. Srinivasa Dean (PGS) UAS, GKVK, Bangalore	30.05.2020	30.05.2020	Temporary	Nomination
5	Dr. D. L. Savithamma Dean (Agri.) College of Agriculture, GKVK, Bangalore	10.09.2019	10.09.2019	Temporary	Nomination
6	Dr. M. Byre Gowda, Director of Extension UAS, Bangalore	30.04.2020	30.04.2020	Temporary	Nomination
7	Dr. Y. G. Shadakshari, Director of Research UAS, GKVK, Bangalore	29.05.2020	29.05.2020	Temporary	Nomination
8	Dr. S. V. Suresha, Comptroller UAS, GKVK, Bangalore	31.01.2020	31.01.2020	Temporary	Nomination
9	Dr. T. Narendrappa Dean of Student Welfare UAS, GKVK, Bangalore	30.05.2020	30.05.2020	Temporary	Nomination
10	Dr. G. Gopinath Administrative Officer UAS, GKVK, Bangalore	17.10.2018	17.10.2018	Temporary	Nomination
11	Mr. D. Krishnamurthy Estate Officer UAS, GKVK, Bangalore	31.03.2020	31.03.2020	Temporary	Nomination
12	Dr. V. Srinivasa University Librarian	07.12.2019	15.07.2019	Temporary	Nomination

	UAS Library, GKVK, Bangalore				
13	Dr. Venkatesh Dean(Agri.) College of Agriculture, Mandya	31.07.2019	31.07.2019	Temporary	Nomination
14	Dr. N. Devakumar Dean(Agri.), College of Agriculture, Hassan	29.05.2020	30.05.2020	Temporary	Nomination
15	Dr. P. Venkataravana, Dean(Seri.) College of Sericulture, Chintamani	31.07.2020	31.07.2020	Temporary	Nomination

Selection Process of University Statutory Officers and reason of those statutory officers who have not been appointed so far:

The Government of Karnataka issued an Order dated 23-11-2018 to adopt Qualification and Scorecard for Recruitment of Director of Education (DoE), Director of Research (DR), Director of Extension (DE) & Dean's Post Graduate Studies under Direct Recruitment in Farm Universities of Karnataka. Accordingly, Qualification and Scorecard for recruitment of the above posts have been developed.

The minimum qualification for recruitment of Director of Education includes Bachelor degree in Agriculture Sciences, Master degree in Agriculture Sciences with minimum CGPA of 2.75 out of 4.00 under trimester system or minimum OGPA of 8.00 out of 10.00 under the semester system, Doctoral degree in Agriculture Sciences, 10 years of services in the Cadre of Professor and 5 Publications in refereed Journals with NAAS rating of not less than 5.00 during their services.

Further, the minimum Qualification for recruitment of Director of Research, Director of Extension & Dean's includes Bachelor degree in Agriculture Sciences, Master degree in Agriculture Sciences with minimum CGPA of 2.75 out of 4.00 under trimester system or minimum OGPA of 8.00 out of 10.00 under the semester system, Doctoral degree in Agriculture Sciences, 08 years of services in the Cadre of Professor and 5 Publications in refereed Journals with NAAS rating of not less than 5.00 during their services.

The allocation of marks out of 100 marks for Recruitment of Director of Education, Director of Research, Director of Extension & Dean's Post is furnished below:

Sl. No.	Particulars	Marks allotted
1	Academic Qualifications	12
2.	Academic/Administrative Experience (in the cadre of Professor & above).	15
3.	Externally funded projects operated (in the cadre of Professor & above).	10
4.	Organizing Symposia/Seminars/Summer Institutes/ Winter Institutes/Refresher courses/Workshops/Training programmes / Krishimela's / Extension Field days/ Exhibitions (in the cadre of Professor & above).	05
5.	Scientific publications (in the cadre of Professor & above).	15
6.	Outstation experience	05
7.	Special Awards/Medals/Fellowships/Recognitions only for Professional excellence in Teaching/ Research/ Extension (in the cadre of Professor & above).	05

8.	Discipline contribution/Institution Building/Special Attainment in Teaching/Research/Extension (in the cadre of Professor & above).	15
9.	International exposure	03
10.	Confidential reports of the preceding 5 years (in the cadre of Professor & above).	05
11.	Performance in the interview	10
Total		100

Further, the minimum Qualification for recruitment of University Librarian includes Master's Degree in Library Science/Information Science/Documentation with at least 55% marks or its equivalent grade of B in the UGC 7 points scale, 13 years as Deputy Librarian in a University Library or 18 years experience as a University/National Institutes/College/Librarian of which at least 3 years shall be as Deputy Librarian (or) M.Phil. / Ph.D. Degree in Library Science/Information Science / Documentation / Archives & Manuscript keeping with 10 years experience as a University / National Institutes / College/ Librarian of which at least 3 years shall be as Deputy Librarian. The allotment of 100 marks for Recruitment of University Librarian Post is furnished below:

Sl. No.	Particulars	Marks allotted
1	Academic Qualifications.	20
2.	Experience in the field of Library Science/Information Science/Documents.	20
3.	Outstation experience.	05
4.	Scientific publications.	15
5.	Attainment in the field (as Assistant Librarian/College Librarian / Document list / Deputy Librarian & above).	20
6.	Exposure to Symposium/Seminar/Summer Institute/winter Institute / Refresher Courses / Workshop & Training Programme (during the tenure of Assistant Librarian/College Librarian/Documentarist/Deputy Librarian & above).	05
7.	Confidential reports of the preceding 5 years	05
8.	Performance in the interview	10
Total		100

Reason for not been appointing Statutory Officers so far:

The government had given approval for the recruitment of Officers posts in UAS, Bangalore. On approval, the notifications were issued for recruitment of Statutory Officers in the University vide Notification dated 16.01.2020 and 16.06.2020. Meanwhile, the Government issued a circular dated 06.07.2020 stating that no recruitments to be conducted including Backlog and Kalyana Karnataka posts during the year 2020-21 due to financial crisis because of the Covid-19 pandemic. Further, letters dated 02.07.2020 and 17.07.2020 were addressed to the Government accepting permission to appoint the Officers in UAS, Bangalore.

6.6.1.4 Decentralization of Powers

The decentralization of administrative and management functioning powers is being reviewed from time to time. The following are the powers of officers of the University.

1 The Chancellor:

- The Governor of the State of Karnataka shall by virtue of his office be the Chancellor of the University
- The Chancellor shall be the Head of the University and shall when present, preside at the Convocation of the University
- Every proposal to confer an honorary degree shall be subject to the confirmation of the Chancellor, with the approval of the Board of Management
- The Chancellor may by an order in writing annual any order or proceedings of the officer or authority of the University which is not in conformity with the Act and Statutes:

2 The Pro-Chancellor:

- The Minister for Agriculture of the State of Karnataka shall by virtue of his office be the Pro-Chancellor of the University
- The Pro-Chancellor shall exercise such powers and discharge such functions of the Chancellor as may be conferred on him by or under the Act or under the Statutes. He shall also exercise such other powers and discharge such other functions of the Chancellor as the Chancellor may by order in writing delegate to the Pro-Chancellor and such delegation may be subject to such restrictions as may be specified in such order

3 The Vice-Chancellor:

- The Vice-Chancellor shall be the principal executive academic officer of the University and the ex-officio Chairperson of the Board. Academic Council and other authorities and shall in the absence of the Chancellor and Pro-Chancellor preside at the Convocation of the University and confer degrees on persons entitled to receive them.
- The Vice-Chancellor shall exercise general control over the affairs of the University and shall be responsible for the due maintenance of discipline in the University
- The Vice-Chancellor shall convene meetings of the Board, Academic Council, Research Council and Extension Education Council.
- Subject to the provisions of the preceding sub-sections the Vice-Chancellor shall give effect to the decisions of the Board regarding the appointments, promotions and dismissal of officers, teachers and other employees of the University.
- The Vice-Chancellor shall be responsible for the proper administration of the affairs of the University and for a close Co-ordination and integration of teaching research and extension education.
- The Vice-Chancellor shall exercise such other powers and perform such other duties as are conferred or imposed upon him under the provisions of the Act and Statutes

Terms and Conditions of service or other officers of the University

The Officers of the University shall be appointed by the Vice-Chancellor with the approval of the Board on such terms and conditions as may be prescribed: Provided that the Vice-Chancellor may make appointments of such officers as a temporary measure for a period of six months under intimation to the concerned authority of the University

4 Director of Education

- Shall be responsible for the coordination of teaching, research and extension programs of the University. He will be concerned with the policy matters and system regarding resident instruction in the University and the development of educational technology and teachers training programme. He shall also oversee examinations.
- Shall function as Member secretary of the Academic Council and Chairman of Board of Studies for undergraduate and post graduate programs.
- Shall Co-ordinate and review all research and extension education programs in the University

5 The Director of Research:

- Shall be responsible for the direction and Co-ordination of research programmes in the University as specified below:
- Shall carry on strategic, basic and applied research in agriculture
- The University through its research organization shall be the principal agency of control over research activities in Agriculture, Animal Husbandry and other allied branches in its jurisdiction.

6 The Director of Extension:

- Shall be responsible for the Agriculture Extension Education programmes as specified below:
- Ensure technology assessment and refinement and facilitate adoption and technology based on research findings to farmers and others for accelerated agricultural growth. It shall conduct demonstrations and training programmes for the benefit of various stakeholders. Extension shall be co-ordinated with various units of the University and other appropriate agencies of the Centre and the state
- The University shall be responsible for developing models of Agricultural Extension in the State.

7 Dean

- Shall be Head of the College and be responsible for administering and implementation of teaching, research and extension activities in the College.

8 Dean of Post Graduate Studies

- Shall be responsible for the administering and implementation of postgraduate studies and other Education programmes including diplomas.

9 The Dean of Student Welfare

- Shall plan and direct the programme of students' advisement and counselling and to enlist the co-operation of prospective employers and employment agencies to assist in the placement of graduates of the University and to promote discipline amongst the students.
- Shall plan and organize students' extra-curricular activities such as sports, cultural and other recreational activities, National Cadet Corps, NSS and communication skill improvement and other allied activities at the university level.
- Shall assist the Deans in supervision and management of students' hostel, cafeteria and conduct of sports and cultural events.
- Shall supervise and control medical and health services and other welfare measures of students in the University

10 The Registrar:

- Shall be the member secretary of the Board of Management and shall be a permanent member of all councils
- Shall be responsible for human resource development and general administration in the University
- Shall receive applications for entrance to the University, and shall keep a permanent record of all courses, curricula and other information as may be necessary.

11 University Librarian:

- He shall be responsible for the maintenance and management of the University Library Information System and to guide and co-ordinate library activities of all the constituent units of the University

12 The Comptroller:

- The Comptroller shall, subject to the control of the Finance Committee, exercise such powers and perform such functions as may be prescribed by the Statutes and the Regulations or as may be required from time to time by the Vice-Chancellor or the Registrar. He shall be ex-officio Member of the Academic Council and the ex-officio Member Secretary of the Finance Committee.

13 The Estate Officer

- Shall maintain buildings and other physical facilities of the University and provide for protection against theft, fire and other dangers;
- Supervise the supply of electricity, water, telephone and other services and the operation and maintenance of the University vehicles;
- Direct operations providing for cleanliness, sanitary and aesthetic conditions of the University facilities;
- Shall have the assistance of Stores Purchasing staff, which shall be entrusted with the responsibility of maintaining the University Stores inventory of all University property, purchasing through tenders furniture, equipment and supplies as may be required by various Divisions and for the repair of all existing University property except buildings and he shall have the assistance of competent and adequate engineering staff for the construction, maintenance and repair of buildings, roads, gardens, machinery, electric and water supply and drainage system, *etc.*, for which he is responsible
- The Estate Officer shall have an adequate watch and ward staff to safeguard the interests and property of the University and the personnel.

14 The Administrative Officer

- Shall serve as administrative assistant to the Vice-Chancellor
- Be responsible for the recruitment, selection and appointment of all service personnel of ranks and salary scales approved by the Board, and in the manner prescribed and for the maintenance of the service and leave records of service personnel in accordance with Statutes
- act as liaison officer between the University and the State and Indian Governments and other bodies under the instructions of the Vice-Chancellor

Details of Decentralization of powers to Directors and Deans of the UAS, Bangalore are as follows:

Sl. No.	Statutory officer	List of Financial Autonomy	List of Administrative Powers
1	Director of Education	The Director of Education is authorized to issue Financial sanction up to Rs.2,00,000/- vide Office Order No. C/ DC (Scheme)/ 2007-08 dt.11.02.2008.	1. The DOE is overall in-charge of teaching in the University
2	Dean of constituent Colleges	<ol style="list-style-type: none">1. The Deans are authorized to issue Financial sanction up to Rs.2,00,000/- vide Office Order No. C/ DC (Scheme)/ 2007-08 dt.11.02.2008.2. Disburse the grants received from the University by allotting the same to different departments.3. The Deans are authorized to sign the books of accounts related to O/o Dean (Agri.) (Day Book of	A. Transfer of Teachers and Service Personnel <ol style="list-style-type: none">1. Transfer of Teachers is affected ordinarily on the recommendation of the Dean.2. Transfer of service personnel coming under the jurisdiction may be affected by the Dean.

		<p>Receipts, Day Book of Issue, Stock Ledger <i>etc.</i>)</p> <ol style="list-style-type: none"> 4. The Deans are authorized to disburse the Scholarship amount received from the Government of Karnataka and ICAR, New Delhi to the students 5. The Deans are authorized to Write-off unserviceable items up to Rs.1,00,000/- 6. The Deans are authorised to handle Revolving funds. <p>The fee received from the students is remitted to the Comptroller</p>	<p>B. Appointment of Asst. Professors & Service Personnel on a contract basis.</p> <p>C. Annual Inspection - Calendar year</p> <ol style="list-style-type: none"> 1. The Dean inspects the work of Head of the Departments and Professors working in the Teaching and submits reports to the Vice-Chancellor through the Director of Education. 2. All inspections will be completed before the end of the March of the succeeding year. <p>D. Approval of official Tour Programmes and Tour Diaries</p> <ol style="list-style-type: none"> 1. Dean is delegated the powers of approving the official tour programmes and tour diaries of all those working under them. <p>E. Sanction of Leave</p> <ol style="list-style-type: none"> a. Casual Leave: Sanction of Casual leave to teachers and Service Personnel b. All other kinds of leave: Sanction of all other kinds of leave in respect of teachers/service personnel up to a period of six months and also making in-charge arrangements.
3	Directors of Research / Extension / Dean of Student Welfare	<ol style="list-style-type: none"> 1. The Director of Research / Extension / Student Welfare is authorized to issue financial sanction up to Rs.2,00,000/- vide Office Order No. C/ DC (Scheme)/ 2007-08 dt.11.02.2008. 2. Disburse the grants received from the University by allotting the same to different sub units comes under each Directorate. 3. The Directors are authorized to sign the books of accounts related to their respective directorate (Day Book of Receipts, Day Book of Issue, Stock Ledger <i>etc.</i>) 4. Authorized to disburse the funds to different subunits of the directorates received from various sources of funding. 5. Directors are authorized to Write-off unserviceable items up to Rs.1,00,000/- 	<p>F. Transfer of Scientists and Service Personnel</p> <ol style="list-style-type: none"> 1. Transfer of Scientists is affected ordinarily on the recommendation of the respective Directors. 2. Transfer of service personnel coming under the jurisdiction may be affected by the Directors. <p>G. Appointment of Scientists, RAs/SRFs & Service Personnel on a contract basis.</p> <p>H. Annual Inspection - Calendar year</p> <ol style="list-style-type: none"> 3. The Directors inspects the work of Head of the Stations/ KVKs/ Schemes and Scientists working in the research and extension submits reports to the Vice-Chancellor through the Director of Education. 4. All inspections will be completed before the end of the March of the succeeding year.

			<p>I. Approval of official Tour Programmes and Tour Diaries</p> <p>2. Directors are delegated the powers of approving the official tour programmes and tour diaries of all those working under them.</p> <p>J. Sanction of Leave</p> <p>a. Casual Leave: Sanction of Casual leave to scientists and Service Personnel</p> <p>b. All other kinds of leave: Sanction of all other kinds of leave in respect of teachers/service personnel up to a period of six months and also making in-charge arrangements.</p>
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6.6.1.5. Supporting Units of the University

University has maintained well established supporting units such as Maintenance Cell, SC/ST cell, Health Care Centre, Equipment's, University Examination Centre, Communication Centre, Study Centre, Grievance Redressal Cells for students and Staff, Student Welfare Cell- other States, Differently abled student welfare Committee, Internal Complaint Committee, Intellectual Property Rights & Commercialization Unit, Agriculture knowledge Management Unit, Agri. Innovation Centre, Cafeteria, Guest House, International centre, Foreign Students Advisory Cell, CAAST Project, Foreign Students Centre, Bank, Post Office, Skill Development Centre. Most of the -sub-campuses also equipped with sub-centres of these supporting units. However, the detailed report on various activates of these at different campuses are summarised in the following Table.

Sl. No.	Supporting Units	Established (Yes / No)	Mode of functioning for student/ staff/ University infrastructure
1	Maintenance Cell	Yes	<ul style="list-style-type: none"> • Day to day maintenance of water supply and electrical works in the University Buildings, hostels etc., • Supply of uninterrupted electrical power with support of Solar power grid & Generator. • Providing upkeeping and segregation of dry & wet wastes at source and recycling, security arrangements to safeguard all property belong to UAS, Bangalore including farm lands. • Motor vehicle workshop for minor repair and maintenance of all officers and other University vehicles.
2	SC/ST cell	Yes	<ul style="list-style-type: none"> • SC and ST Cell is established in the University to watch the periodical implementation of the State and Central Govt. Polices and orders in favour of SC & ST candidates (students & Employees). • Under the Chairmanship of Vice-Chancellor, it was decided to pool the entire money available in the "SCP and STP" project, in to a corpus fund entitled "Revolving fund for UAS B, SC/ST students' welfare". • During 2019-20, 490 SC/ST students were awarded contingency amounting to Rs.9,80,000/-

			<p>under revolving fund for UAS-B SC/ST, students' welfare grant</p> <ul style="list-style-type: none"> • Every year more than 120 laptops were given to SC/ST students for digital education in long term. • Four students benefited from the conference outside the country. • A total of 1973 students were benefited from 2016-17 to 2020-21 under different activities of SC-ST programmes
3	Health Facility	Yes	<ul style="list-style-type: none"> • The dispensary has seven beds and is equipped with Laboratory, pharmacy, Causality / first aid room, Medical record room, Observation room, consultation rooms for examining the patient and waiting lounge for patients, and Female and Male washrooms. The dispensary is equipped with specialized equipment viz., ECG, • All constituent College campuses of the University have a dispensary. • All students are covered by health Insurance of Rs.2 Lakh (in the time of death) by United India Insurance Company Ltd., Malleshwaram Branch, Bangalore. • The centre is delivering health care facilities to the students (UG, PG, PhD, International students and their families), staff, faculty and the families of the employees residing in the quarters of the campus. • Medical reimbursement is provided for all students with a maximum limit of up to Rs. 50000/- per student through the Student Aid Fund. • Cases of severe nature are referred to as major hospitals for diagnosis and advice. In addition to Government Hospitals, some well-established private hospitals are also recognised for taking treatment. Hospitals are available within a radius of 5 km. • Hired services of doctors are provided at all constituent Colleges on scheduled days.
4	University Examination Centre	Yes	<p>The University has established the 'University Examination Centre (UEC)' at the GKVK campus during the academic year 2011-12. Over a period of time, separate External Examination Cells have been established at each of the constituent colleges of the University, as a consequence to the introduction of an external examination system during 1999-2000, mainly to co-ordinate the Examination related activities. The UEC is responsible for conducting centralised common examinations across the constituent Colleges, which have resulted in maintaining uniformity in offering courses, complete coverage of syllabus by the teachers, centralised evaluation of answer scripts and the speedy announcement of results. This also has minimized the cost of the examination process. Issuing of digital degree certificate on electronic mode.</p>
5	Communication Centre	Yes	<p>The Communication Centre headed by Editor with the Dean as the honorary Director was established on 1 May 1972. Publishing Journal, Newsletter,</p>

			Magazine and other needed text deemed fit for publication in the University both in Kannada and English. The Centre now functions directly under the administrative control of the Director of Education.
6	Study Centre	Yes	Different student Clubs (Fine arts, social service, Adventure, Literary & Science Club) are formed at each College & have nominated to represent students in organizing various students' activities. Class Representatives at each College to represent students in organizing various student activities. In the timetable, Wednesday afternoon is reserved exclusively for students' activities. The fee collected from the students towards Association, Sports and Magazine are kept at the disposal of the respective Dean's for conducting the College level student's activities. Accordingly, college days and college-level sports and cultural activities are being conducted at each College and souvenirs / Magazines are brought out every year regularly.
7	Grievance Redressal Cells for students and Staff	Yes	Address the issues on students and staff in coordination with HQ
8	Student Welfare Cell- other States	Yes	Directorate of Student's welfare. The Dean Student Welfare who is heading is vested with all powers in consultation with NODAEC and manpower to redress the issues associated with students of other states. Issues are addressed at the appropriate time and resolved.
9	Differently-abled student welfare Committee	Yes	The issues related to differently-abled students are resolved by constituting a committee including their parents at the appropriate time.
10	Internal Complaint Committee (ICC)	Yes	University has ICC including constituent Colleges. To look after women safety at workplace. At Chairman level, consoled and resolved.
11	Intellectual Property Rights & Commercialization Unit	Yes	The structure of IPR Cell was established in 2016. Intellectual Property Advisory Committee (IPAC) headed by the Vice-Chancellor of the University as Chairman. IPAC shall monitor and guide the functioning of the Intellectual Property Management Cell (IPMC). Intellectual Property Management Cell (IPMC) is coordinating all the IP issues in the University
12	Agriculture knowledge Management Unit (AKMU)	Yes	Maintenance of UAS, Bangalore Website, Training Programme on "Managing Digital Resources Using Open-Source Software". Providing statistical consultancy to the staff and students for their statistical analysis. Enabled institution to get electronically connected and have E-mail facility. All the campuses were connected with Wi-Fi and Local Area Networks (LANs) including hostels with a coverage capacity of 4557 beneficiaries.
13	Agri. Innovation Centre (AIC)	Yes	A broader umbrella of Agri. Innovation Centre was formed in Jan 2019. The Agri-innovation centre at UAS, Bangalore will nurture and strengthen the Agri. innovation and entrepreneurship. The aim is to foster cutting-edge innovations in Agri based sector leading to job creation and product development resulting in economic benefits to the farming sector. There are a

			total of nine numbers of incubates and startups on the campus.
14	Cafeteria	Yes	<p>Two cafeterias are operated at GKVK Campus, (i) UAS Canteen-1 and (ii) UAS Canteen-2. Only vegetarian food items are served in the Cafeteria. The Cafeteria facilities are for 1000 students and staff. Timings of the cafeteria are: Monday to Friday: 8.00 am to 6.00 pm, Saturday: 8.00 am to 4.0pm, Sunday holiday.</p> <p>The following committee under the Chairmanship of Dean PGS supervise the cafeteria</p> <ul style="list-style-type: none"> • Dean PGS, UAS, GKVK- Chairman • Director of Research, UAS, GKVK- Member • Dean Student Welfare, UAS, GKVK – Member • Dean - Agri., CoA, GKVK – Member • Estate Officer, UAS, GKVK- Member • Deputy Director - Student Welfare, UAS, Bangalore • Senior Farm Superintendent, GKVK, Bangalore • Director, SC&ST cell, GKVK, Bangalore • Secretary, ATUASB, UASB, GKVK, Bangalore • General Secretary, Employees Association • Two Students representative PG Boys Hostel and PG Girls Hostel, GKVK, Bangalore • Warden of the UAS Cafeteria – Member Convener <p>Any circumstantial grievances about the cafeteria are sorted through periodical meeting(s).</p>
15	Guest House	Yes	<p>Providing accommodation to farmers, parents, faculties, VIP & VVIP's those who are attending the University meetings, functions and trainings in the UAS, GKVK, Bangalore with a capacity of 110 and other campuses with 50 each.</p> <p>Revenue generation from the guest house is about Rs.45.00 lakhs in five years period from 2016-17 to 2020-21 from all the campuses.</p>
16	International Student Centre	Yes	<p>International Centre established in 2019 to facilitate the students & faculty exchange to different International Organizations and to increase International awareness and improve the quality of teaching and research.</p> <ul style="list-style-type: none"> • Strengthen/inflate International awareness among students & faculty • Refine the quality of teaching and research through international mobility programmes. • Foster International Co-operation and capacity building • Promote internationalization of the curriculum. • International networking by faculty and researchers. • International placements for higher education and jobs in MNCs of food processing/ fertilizers/seeds/pesticides/world bank/ Universities/ other Institutes.

			<ul style="list-style-type: none"> • The international centre has collaboration for education and research with National and International Institutes (Purdue University, USA, IOWA, State University, USA, University of Bremen, Germany, Mc-Gill University, Canada, Ghent University, Belgium, IARI, ICRISAT etc.). • International Centre has facilitated the students & faculty exchange to different International Organizations. A dual degree programme has been initiated with Western Sydney University supporting two students (Sanjay Pradhan, PhD (Agri. Entomology) & Naveen .B.M, Ph.D (Agronomy). • Facilitated representatives from the Canadian Agritech mission delegation on 03-01-2020 for research opportunities. • Facilitated the Consulate General of the Kingdom of the Netherland to UAS Bangalore on 17.10. 2019. • Facilitated the representatives from Western Sydney University and International Centre, UAS, Bangalore on 06-09-2019 for collaborative research and student exchange. • Initiated collaboration with Taiken University on 15th Feb 2020 to have collaboration in higher education and provide employment opportunities to UAS(B) students in Japan.
17	Foreign Students Advisory Cell	Yes	The University also admits foreign students for both UG and PG Programmes. The University has redeployment / assigning additional assignment to faculty as Foreign Student Advisor and Assist Foreign Student Advisor under Dean Student Welfare to facilitate their admission, stay on the campus and their welfare with nominated faculty to perform the defined activities of the cell.
18	CAAST Project	Yes	As part of the supporting unit under the CAAST Project, 13 PG students are been selected for International Exposure Training. The student exchange programme is also being implemented between the UASB & Gottingen University, Germany.
19	Foreign Students Centre	Yes	The Foreign Students Centre is established to promote, facilitate and coordinate academic interactions of the University with other universities outside India to establish a global research network in the area of agriculture and allied sciences. The centre would also assist international students who may wish to pursue their studies at the University. The University already has a sizeable number of international students studying in various degree programmes. Currently UG/PG/Ph. D students from Kenya, Rwanda, Botswana, Uganda Afghanistan, Myanmar, Mozambique, Nepal, Angola, are pursuing their courses at the University of Agricultural Science, Bangalore as full-time students
20	Bank	Yes	Exclusive banking facility from Canara Bank, GKVK branch, to facilitate the employees and students bank accounts, financial transactions, credit requirements, lockers and deposits.

21	Post Office	Yes	<p>Provided space for Post Office to facilitate the employees and students of UAS (B) for their mail services on the Campus. Despatch of speed posts, register letter, parcels and airmails of the University and banking and insurance facility.</p>
22	UAS Dispensary	Yes	<p>To ensure the good health of the students and the staff of the University, the University has established Dispensary with two resident doctors, with basic medicines, equipment and an ambulance to meet the health emergencies at the campus. The University is providing minimum medical facilities to the students and staff at all the campuses for the treatment of common ailments. Cases of severe nature are referred to major hospitals for diagnosis and advice. There are well-qualified medical, paramedical and assisting staffs, who coordinate well for smooth delivery of health care. In addition to Government Hospitals, some well-established private hospitals are also recognised for providing treatment. Hospitals are available within a radius of 5 km. Hired services of doctors are provided at all constituent colleges on scheduled days.</p> <p>In the University headquarters, a health facility is provided to the UG, PG, Ph.D., International students and their families, staff, faculty and the families of the employees residing in the quarters of the campuses. The facilities available are: 12 Lead ECG machine – basic investigation for heart diseases.</p> <ul style="list-style-type: none"> • Biothesiometer (VPT)- to find out the sensitivity in the foot (diabetic neuropathy) • Otoscope- aids in the examination of the external ear. • Direct Ophthalmoscope- Retinal examination (the posterior segment of the eye) • Glucometer- for estimation of capillary glucose • Tuning forks for basic hearing tests (Rennes / Weber's) • Autoclave – For autoclaving wound dressings, instruments of suture removal, wound debridement <i>etc.</i>, Nebulizer –For nebulizing acute bronchial asthma, X-Ray viewer – paste photo, Vein viewer- used in obese individuals and children for finding vein
23	Skill Development Centre	Yes	<p>The University has established Skill Development Centre (SDC) under ICAR- SC-SP: 2019-20 at UAS, GKVK, Bangalore from the academic year 2019-20 vide AO order No. AO/Gen/SDC/3824/2019-20 dtd. 31.12.2019. SDC is focusing on “Development of graduates with skills of fundamental and contemporary technology and gross root work force of agricultural production processes with multi skills”</p> <p>Mission:</p> <ul style="list-style-type: none"> • Imparting skills to graduating students and transforming rural unskilled youth workforce to the

			<p>skilled workforce for self-sustained agro-ecosystem with entrepreneurship for livelihood.</p> <ul style="list-style-type: none"> • During 2019-20 student-centric and 2020-21 farmer centric training programmes were conducted for upscaling of skills in SC/ST students of UASB and SC/ST farmers of University jurisdiction. • The assets created while conducting trainings in different departments such equipment for Mushroom Lab, Horticulture Tool Kit, Cow Mats, Sewing Machines and accessories, Milk cans, the establishment of Ragi reaper & small millet processing Unit, procurement of livestock and procurement of feed for animals. • SDC competitive examination zone was created in UAS(B) Library and Purchased printed books for resource materials. • Under University support, “Phala Sampada” a Model perennial fruit orchard was established at GKVK, Bangalore.
24	Faculty House	Yes	<p>Dr. Trilochan Mohapatra, Secretary (DARE) and Director General, ICAR, New Delhi in the presence of Dr. S Rajendra Prasad, Hon’ble Vice-Chancellor, University of Agricultural Sciences, Bangalore, inaugurated the well-established Faculty House conveniently located beside the College of Agriculture, GKVK on 20.03.2021. The Faculty House aims at providing congenial environment for creating friendly and healthy atmosphere for fitness programme and recreational activities. It is going to provide inexpensive and a convenient access to high quality fitness equipments. It will be open on all working days from 4.00 to 6.00 PM. The Faculty House is equipped with modern fitness equipments such as:</p> <ol style="list-style-type: none"> 1. Treadmills - to improve cardio fitness 2. Four Station multi-gym- to improve functional strength (Specific parts of the body such upper body and lower body) 3. Dumbells – to improve muscular strength 4. Stationery bicycles- to improve e strength and endurance 5. Carom board- for recreation / fine motor skills and concentration 6. Table Tennis Board- improves agility, speed and reaction ability 7. Snooker Table – Recreation and to improve aiming, focus and accuracy.



National Academic Depository (NAD) Cell

During the academic year 2017-18, the University established a NAD Cell in accordance with UGC and MHRD guidelines. Initially, a Service Level Agreement was signed with CVL Ventures Ltd., Mumbai, in order to obtain depository facilities in accordance with the recommendations of the MHRD, GOI, New Delhi. The UEC staff participated in a series of training programmes and workshops on uploading and creating academic databases hosted by the UGC in New Delhi and CVL Ventures Ltd.

Academic certificates (OGPA cards, PDCs, and degree certificates) of students who graduated from UAS, Bangalore during 2015-16 to 2019-20 have been uploaded to the NAD. Subsequently, the University has registered with the National e-Governance Division (NeGD), Ministry of Electronics and Information Technology (Meity), GOI's Digi Locker, and academic certificates pertaining to 2020-21 are being uploaded.

6.6.1.6 Technology Support

GKVK Campus

The technology support in the GKVK Campus is being implemented with the support of the Agriculture Knowledge Management Unit (AKMU). The AKMU provides all technical support related to the internet, computer and relevant software. The details of available technological facilities are provided below.

Technology in classrooms

- All the 17 Lecture halls (SB-9 & NB-8) are fitted with LCD projector, UPS, computer and AV including collar mic for the teacher.
- Established 3 Smart / Model Classrooms: 1) LH3 (Virtual classroom) in South Block: with LED TV Computer with internet facility, Wireless microphones and speakers, UPS Document Camera Wide angle webcam, 2) Dr. Jalihal Hall: LCD Projector, CDx2510, Hitachi Projector, Visual presenter, Promethean LCD Projector screen 7'x6', Interactive Board Model 178, In focus Projector Model no. 2104EA, Computer with internet facility and Wireless microphones and speakers and 3) Dr. R. Dwarakinath Hall (Model Class Room): Automatic slide projector screen, Sony LCD Projector PLC XW 250, Drawing Boards & 'T' square, Sony LCD TV Model KEV 32S400A, Computer with internet facility, Wireless microphones and speakers.
- All these Lecture Halls and smart Classrooms are being used for UG and PG teaching, PG Seminars, workshops and conducting trainings.

Computer labs: There are 17 computer labs with 296 computers in the College of Agriculture, GKVK and are being used for teaching practical class, students' assignments/presentations, conducting trainings, communication, *etc.*

Technology in laboratories: The department-wise availability of laboratories for UG and PG teaching, faculty research, trainings and Student READY programmes are presented hereunder.

- **Department of Agril. Entomology:** Soil Biology Lab, Niche area of excellence for the taxonomy of insects and mites lab, Insect Molecular Biology Lab and Insect Chemical Ecology Lab.
- **Department of Agril. Engineering:** Food Processing Lab, Soil and water conservation lab, Computer lab, Pilot Plant, Engine lab and Engineering physics lab.

- **Department of Agril. Microbiology:** Bio-control Lab, Food Processing & Value addition Lab, Mushroom Lab, Bio-fertilizers mass production and quality control lab, DST Hub Laboratory on Finger Printing of Edible Mushrooms Molecular Biology Lab.
- **Department of Apiculture:** Honey Processing-cum-Testing Lab
- **Department of Agronomy:** Water Management lab, Soil Testing lab, Analysis of soil samples for pH, EC, N, P, K and S content, Plant analysis lab PG
- **Department of Plant Biotechnology:** Laboratories for Biotechnology Studies, Biochemistry lab and Tissue culture lab
- **Department of Crop Physiology:** Tissue Culture Lab, Plant Physiology (Markers), Plant molecular biology lab and Stress physiology lab
- **Department of Food Science & Nutrition:** Food Processing Lab and Food Science Chemistry Lab.
- **Department of Forestry & Environmental Sciences:** Bio-Fuel Lab and Tissue culture Lab.
- **Department of Genetics & Plant Breeding:** Marker-Assisted Lab (Rock Feller Foundation), Kirk House Trust Lab, Tissue Culture Lab, Molecular Biology Lab and Common MAS lab.
- **Department of Plant Pathology:** Mycology Lab (DST-FIST), Bacteriology Lab (RKVY) and Virology Lab (RKVY)
- **Department of Sericulture:** Silkworm Rearing Lab, Silk Technology Lab (World Bank), Silkworm Pathology Lab (World Bank).
- **Department of Soil Science & Agril. Chemistry:** Chemical analysis for soil, plant fertilizers, manures.

Online learning tools: Under Graduate Academic Management (UGAM) software has been developed, which covers the entire study cycle of the student including cashless fee payment and paperless registration by the students. E notes are hosted in the cloud and a link is provided with credentials at the University website. Plagiarism check (Drill bit)-link provided in the website for the benefit of PG students.

Digital Evaluation Hall: One digital evaluation hall equipped with 30 PCs and other required infrastructure is established in the University for centralized digital evaluation of answer scripts of UG courses for quick and accurate processing of results.

Internet Wi-Fi connectivity: In and around major buildings of the University, free internet connectivity is provided for the benefit of students and faculty mainly for communication like e-mail, digital learning, online payments of fee and other social activities.

Student Systems: Thirty-three systems are placed in the Library for students' academic usage.

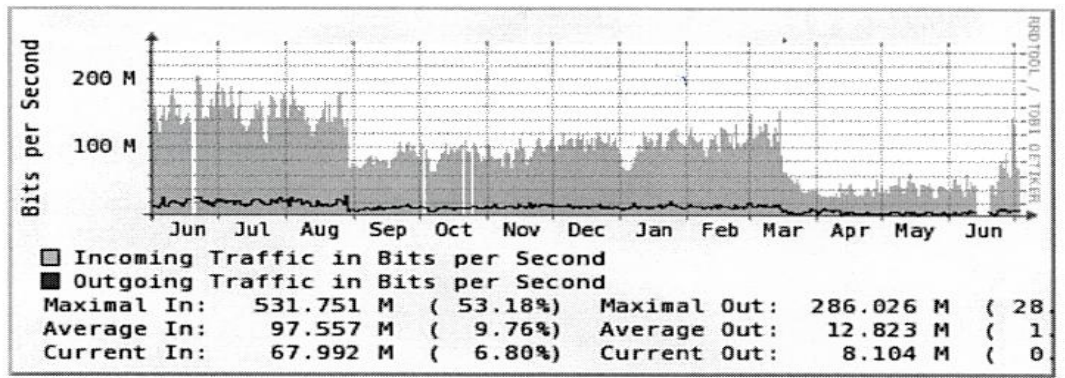
Setup for email: Email address with exclusive domain name has been provided to the faculty and students.

Email address with the exclusive domain name: User password reset facility is provided in the email as well as in e-notes for security purpose.

Firewall: The firewall is installed in the server room of University Examination Centre to secure the data from hackers and also to monitor internet utilization and activities.

Apps Developed: The android based UGAM App has been developed and deployed for cashless fee payment and paperless semester registration by the students. This App also helps in the collection of feedback on the course contents delivered and the quality of teaching imparted by the faculty for further improvement. The University of Agricultural Sciences, Bangalore organized the 107th Indian Science Congress at GKVK campus for which ISC2020 UASB is the official Mobile App. Beej Aadhar - A platform contains all the information related to new plant varieties, the best package of practice, availability of seeds, cost and latest research.

'Yearly' graph (1 Day Average)



Mandya Campus

Using state-of-art technology one classroom is converted into a smart class with an interactive board system during 2019-20, which was further extended to all six available classrooms for undergraduate programme with the digital podium, LCD projector with Wi-Fi internet facility & screen during 2020-21. Further, these facilities were also extended to all five Departments having Post Graduate programme. ICT facilities in the College campus have been created for students and faculty members to acquire and disseminate the latest technological knowledge. Some of the ICT facilities at the College of Agriculture, VC Farm Mandya are present below:

- One computer laboratory is equipped with 44 numbers of Core- i3 computer systems.
- Internet facility is provided using BSNL's Optic fibre line. Tariff Plan is Fibro ULD 16999 which has Unlimited data download capacity with 100 MBPS speed.
- Hostels (UG, PG Boys and Girls) are connected with internal OFC lines and Access points to extend the Internet facility after College hours.
- The library is connected using a pair of media converters and an internal OFC line to extend the Internet facility.
- A separate BSNL line with a static IP port was assigned to the Server which was installed in the library to make use of KOHA software.
- Students on the campus are provided access to use the CeRA Facility even on their mobile phones.
- Students are allowed to make use of e-notes provided on University website.
- It is made mandatory for PG students, to enrol for two non-credit compulsory e-course for partial fulfilment of the programme.
- PG students are allowed to make use of Plagiarism software in their thesis report.
- A virtual classroom and lecture capturing system facility was created for real-time access of information.
- Seminar hall with video conference facility to interact with speakers/guest of other campuses is provided.
- Licensed version of Software like ZOOM and Google Meet are available to conduct online classes.
- CCTV surveillance in all classrooms, corridors, seminar hall and fields is established.
- A server with a network security gateway (Manageable Firewall) is installed in the server room to provide individual ID and password to faculties and students.
- Students of UG and PG are enrolled through the online system at University are being registered at College and their respective documents are being maintained digitally through NAD cell.

Hassan Campus

Details of Technology Support

Sl. No.	Technology	Estd	Features / Nos.	Purpose Served / Utility for student
1	Technology in class rooms	.	<ul style="list-style-type: none"> 12 Nos. of Audio visuals like LCD projectors, CPU, Microphones, CCTV cameras in all class rooms 'Impartus lecture capture system' established in Class room No. 1 	<ul style="list-style-type: none"> For smooth conduct of classes
2	Computer labs	2007	<ul style="list-style-type: none"> High end desktops (43 Nos.) Dedicated internet connections Software <ul style="list-style-type: none"> - SPSS, - M-stat C - R - C, C+ 	<ul style="list-style-type: none"> For conducting UG Practical classes Online evaluation of answer booklets Invigilation of online exams Online document verification for UG admissions.
3	Technology in laboratories		GIS – (ARC-GIS) Bio-informatics Software's	<ul style="list-style-type: none"> Special analysis of soil data To map human – elephant conflict area Mapping of forest genetic resources of Western Ghats Agro technological planning Pymol (3D str determinaters) G – MENDEL BLASTP NCBI QTL Cartographer i-MAS
4	Online learning tools	2017	01	To play back recorded videos of lectures.
5	Internet Wi-Fi connectivity	-	50 Mbps dedicated lease line	<ul style="list-style-type: none"> For conducting online classes For accessing e-journals and e-books For attending online webinars / workshops For conducting practical classes on bio-informatics and computer courses For uploading and retrieving academic records For uploading documents for scholarships in student scholarship portal (SSP)

6	Student System	2007	SC/ST students were issued with Laptops 2019-20 – 88 nos. 2020-21 – 91 nos.	Improvement of academic purposes, access to the syllabus, preparation of class presentation, studying e-books and e-journals
7	Setup for email		University e-mail ID's are allotted to individual faculty under AKMU (Agri. Knowledge Management Unit)	For communication purpose and also to access AUMS and research journals (science direct, scopus, springer, publons and nature)
8	Password reset		Yes	For security reasons
9	Firewalls	2017	01	Block Traffic intended for particular IP addresses.

A brief note on each of the above technological support extended

- **Computer lab:** Conducting UG Practical Classes.
- **Online learning tools:** Impart us to use for recording the classes and same is accessible by students at any time.
- **Student System:** computer systems are accessed by the students for attending practical classes and browsing the information and library systems are meant for accessing the e-journals by the student and staff.
- **Firewall:** Block Traffic intended for the particular IP address on the campus.

6.6.1.7 Institutional Database and Website Updates

The University Website is maintained and hosted by Agriculture Knowledge Management Unit (AKMU) and providing and maintaining the essential IT services viz., distribution of internet, e-mail and the web server. The UAS Bangalore website is being updated daily basis and as and when required (i.e. more than once a day).

The University Data Centre, i.e., Agriculture Research Information System (ARIS) was established in 1997 for setting up connectivity for the headquarters with its constituent Colleges, Directorates of Research, Extension, Education, KVKs and Research Stations. The connectivity makes it easy for people to interact and maximize productivity in any environment, anywhere around the globe. With the above intentions in view 2 Mbps lease line base connectivity was established from UAS, Bangalore in five teaching campuses, seven KVKs and three Research Stations. To meet the growing need for high-speed internet connectivity additional 8Mbps was procured during 2010 from ERNET (An Autonomous Society of Department of Information Technology, New Delhi).

National Knowledge Network (NKN) aimed at establishing a strong and robust internal Indian network which will be capable of providing secure and reliable connectivity was taken up by the Government of India during 2010. The NKN was intended to connect all the knowledge and research institutions in the country using a high bandwidth / low latency network under this ARIS was renamed as Agriculture Knowledge Management Unit (AKMU) with the following objectives.

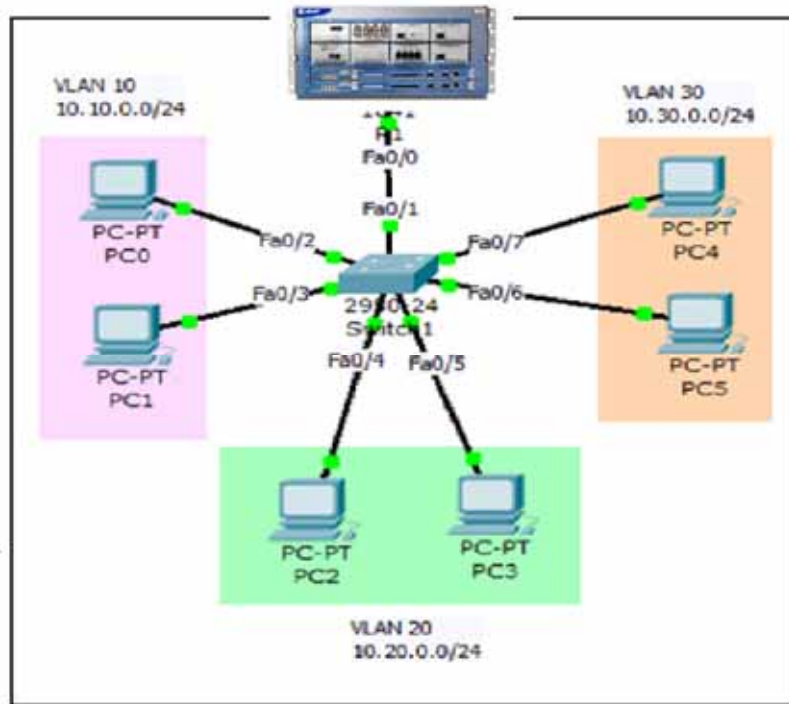
- Establishing high-speed backbone connectivity.
- Facilitating distance education.
- Virtual Library.

The network with a link of 1Gbps and internet bandwidth of 120 Mbps provided by NKN through NIC. All offices and hostels are well connected with LAN / Wi-Fi Internet connectivity and between the building's connections are established using OFC (Optical Fibre Cable). The details of the Internet facility at different campuses with users are as follows.

Internet Facilities with Bandwidth at Different Campuses

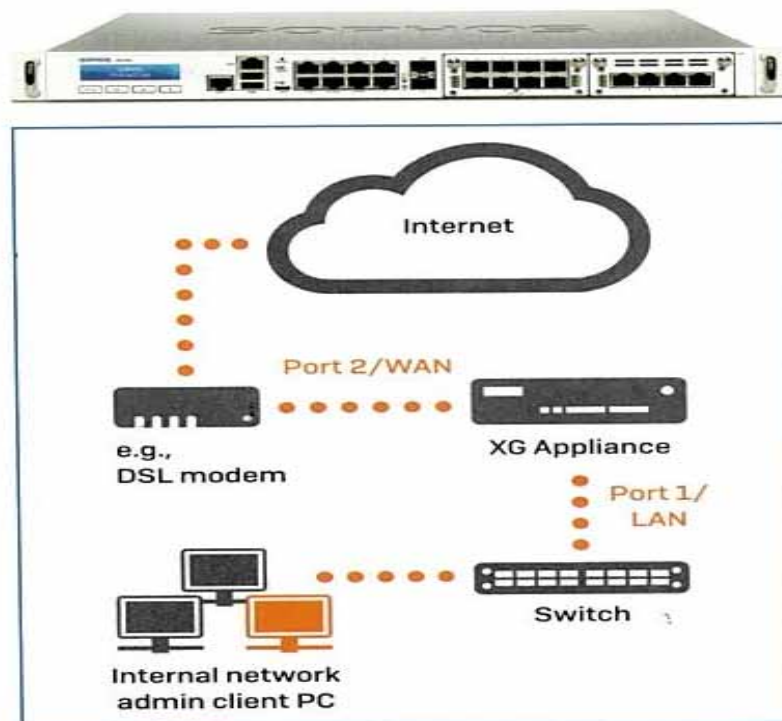
SI No	Institution	Type of institution	Place with District	Bandwidth	No of Users
1	Administrative Block	Head Office	GKVK, Bangalore	120Mbps	130
2	North Block	Dean Post Graduates studies	GKVK, Bangalore	120Mbps	350
3	College of Agriculture, UAS, GKVK, Bangalore	College and Dean's Office	GKVK, Bangalore	120Mbps	250
		Library	GKVK, Bangalore	120Mbps	70
		PhD Boys Hostel	GKVK, Bangalore	120Mbps	230
		PhD Girls Hostel	GKVK, Bangalore	120Mbps	200
		PG Boys Hostel Block I	GKVK, Bangalore	120Mbps	120
		PG Girls Hostel	GKVK, Bangalore	120Mbps	150
		UG Boys Hostel Block II	GKVK, Bangalore	120Mbps	80
		UG Boys Hostel Block III	GKVK, Bangalore	120Mbps	70
		UG Girls Hostel	GKVK, Bangalore	120Mbps	50
		International students hostel Block I	GKVK, Bangalore	120Mbps	20
		International students hostel Block II	GKVK, Bangalore	120Mbps	40
		Working women's hostel	GKVK, Bangalore	120Mbps	25
4	College of Agriculture, Hassan	College and Dean's office	Hassan	50Mbps	200
5	College of Sericulture, Chintamani	College, Dean's office, Library and Hostels	Chintamani	60Mbps	100
		Computer Lab	Chintamani	10Mbps	32
6	College of Agriculture, Mandya	College, Dean's office, Library and Hostels	VC Farm, Mandya	100Mbps	450
7	College of Agriculture, Chamarajanagara	College and Dean's office	Chamarajanagara	50Mbps	150
8	University Examination Centre	Examination & Evaluation	GKVK, Bangalore	p2p network with 4Mbps	60

To improve the performance of the network and optimum utilization of bandwidth CISCO (1700) Model router upgraded to the Juniper M-10i router.



Network System in the University

The Sophos (XG430) firewall is connected to the network for security threats which enhanced the available bandwidth and also protected the misuse of the internet from non-academic purposes. It helped in the optimum distribution of bandwidth on a priority basis. It also helps in the maintenance of user logs to monitor the appropriate utilization.

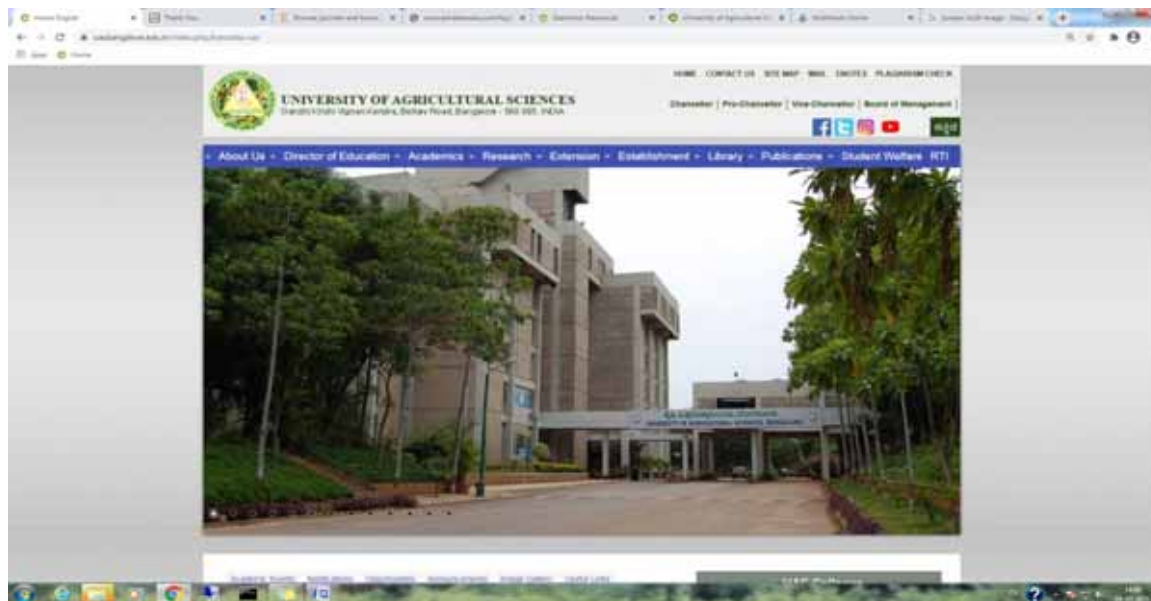


Internet Distribution Pattern

The network was upgraded to L3 technology for better management of LAN. All unmanaged switches were replaced by L2 switches which will enable to detect and rectify the problems and monitor the

network efficiently. All classrooms are provided with LAN connectivity for the proper use of available IT facilities. Campus Wi-Fi connection at important places is made through Google network. Official domain Email ID is provided to all officers and teaching staff for fast, reliable and secured communication. The network is utilized for delivering effective distance education wherein the teacher and student can interact in real-time. The network enables co-sharing of information such as classroom teacher's presentations, notes among different Colleges through E-notes. Further, the virtual library involving sharing of Journals, Books and Research papers across different institutions is one of the important applications.

University website earlier which was in html format upgraded to CMS with the latest features. The website is updated daily. For the benefit of local people/farmers, the website is made available in the local language also.



Home Page of University website

The website provides many links to access the latest technology developed and improved agricultural practices, as well as government schemes for the benefit of farmers.

6.6.1.8 Interdepartmental Linkages

The University is promoting interdepartmental linkages under six constituted Colleges. These Colleges have various department with close linkages to each other. The academic programmes of the Colleges have been framed and implemented as per recommendations of the Fifth Deans' Committee (FDC) of ICAR. The academic support for the various UG programmes is well supported by interdepartmental linkages. The support is provided by the Departments of College of Agriculture to the UG programmes of Agri-Business Management and Agricultural Engineering College of Agriculture. In the PG programmes, students opt for minor and supporting courses from departments within their departments or from other departments depending upon the area of research to be undertaken by the student. This allows for very effective linkages within the departments, Colleges, and University. The academic programmes of all constituent Colleges have a close link with the Directorate of Research and Extension for undertaking different identified area of Research on a priority basis in the University.

In the Directorate of Research, the University has created and filled two posts of Associate Director of Research (ADR) at Headquarters and ZARS Mandya for effective management and enhancement in Crop Improvement, Horticulture & Food Science, Natural Resource & Plant Health Management and Farm Machinery & Bio-energy to augment research capability of the University in the prioritized areas and enhance coordination in research planning & monitoring. The ADR's are assisting the Director of Research in planning, monitoring and coordinating scientific research on various aspects relating to

Crop Improvement and IPR across the Colleges in UAS Campus and outstations. They also motivate the faculty to write new research projects, The Directorate will scrutinize the submitted research projects by the faculty. The Directorate Post Graduate studies also scrutinize and review the synopses of PG students research as decided during the ZARS meeting.

Inter-disciplinary group of scientists have been formed to solve the emerging problems of Agriculture and allied subject. There are few examples such recent examples are water management by the Department of Agronomy, Soil Science & Agricultural Chemistry and Soil and water conservation. Another example crop residue management group formed for developing an intervention for effective paddy straw management/utilization in the Cauvery command area. This group consists of scientists from Agronomy, Soil Science & Agricultural Chemistry, Farm power machinery and Soil and water conservation etc.

The Directorate of Extension is supporting interlinking with progressive farmers and industrialists and the Directorate of Education is occasionally inviting to deliver special lectures to UG& PG Students in the respective specialized subjects/courses. During RAWEP programme the undergraduate students of all the programmes are closely working with progressive farmers, KVKs, State Agricultural Department, State Forest Department, Food Processing Industries, Wood-based industries, *etc.* for Rural Agriculture Work Experience (RAWE), Experiential Learning Programme (ELP) and Agro-Industrial Attachment (AIA) trainings. Students develop close linkage with various organizations like cooperative societies, panchayats, industries and departments. Apart from this, exposure visits are arranged for students of many UG courses to the related industry, sites, situations, *etc.* to fulfil their course curriculum requirements. During mandatory, educational tour visits, the students interact with industries, farmers, students and teachers in various national and international institutions outside the state. The Postgraduate and Ph. D. students are undergoing internship Industry attachment and collaborative with different public and private institutions within the state, outside the state and abroad also. Experts from these industries are invited to share the latest developments in the industry for the benefit of students. Based on the needs of the industry, the research problems of the students are decided.

6.6.1.9 Monitoring Mechanism

To bring about quality in teaching, research and extension University has designed and implementing a suitable monitoring mechanism/review system at all levels of academic activity. The details of which are presented below.

- **Teachers' self-reflection:** Students are providing feedback on the teacher's performance in delivering the quality teaching along with quality material of the courses offered in the preceding semester through UGAM App while registering for the present semester. Further, teachers are also taking students' feedback at end of the course.
- **Surveys on teaching effectiveness:** Teachers are taking student's feedback at end of the course: Students can give course delivery feedback at the end of the course in the online tool 'UGAM' developed by the University Examination Centre. Other than this, students' feedback by the outgoing students for teacher and course is being collected as the standard operating procedure for the selection of the best teacher.
- **Lesson observation:** Progress of the course and syllabus covered are reviewed at the department level during the monthly staff meeting.
- **Assignment inspection:** As per the lesson plan course teacher decides the assignment topics and the assignments is being evaluated by the respective course teachers.
- **Examination papers review:** Internal examination papers for the mid-term and practical examinations are set by the respective course teacher based on the portion of the syllabus covered and the course teacher himself is the reviewer and evaluator of the answer scripts. Whereas, the external examination paper is set by the external subject matter expert from outside University

for 50 marks. The selected paper is reviewed for the extent of syllabus covered, examination pattern, key answers etc. at the University Examination Centre by the subject experts.

- **Appraisal system:** Annual Evaluation reports and confidential reports evaluated by the controlling officer.
- **Curriculum evaluation:** The University adopted the ICAR- 5th Dean committee syllabus. As per the flexibility provisions in the syllabus to incorporate the local curriculum requirement of each discipline/ subject are first reviewed at the department level in the Annual Technical Meetings of the Department. The proposals for the modifications/additions will be sent to the Board of Studies and finally, Academic Council will review and approve if it deemed fit.

6.6.1.10. Institute Quality Assurance Cell/Project Planning and Monitoring Cell

Realizing the importance of a PPMC Cell and the critical role it could play in facilitating effective management of research projects proposals, facilitating and execution of MoU and MoA. The PPMC directly works under the Vice-Chancellor. The cell collaborates with teaching, research, extension and other administrative staff in its operations and provides managerial support to Vice-Chancellor in the smooth functioning of the University. The PPMC has played an active role in bringing out appraisal and Vision documents of the University. Training programme for HRD and support for various action committees of the University are other major activities of PPMC.

6.6.1.11. Collaboration with Academic Institutions and industries

The University of Agricultural Sciences, Bangalore is the premier state Agricultural University in the country and leading SAU amongst all Agricultural Universities in India. The university has 144 collaborations with top academic institutions (international as well as national), various departments of the Government of India and the state, and civil societies and industry-related with agriculture and allied subjects during the reporting period (Annexure 1).

The abstract of collaborations with academic institutions & industries from 2016-17 to 2020-21

Sl. No.	Collaboration	No. of collaborations in the last five years					Total
		16-17	17-18	18-19	19-20	20-21	
1	Academic Institutions	14	03	08	10	06	41
2	Industry / Private Organizations	06	11	11	12	25	57
3	Others	10	05	06	09	08	38
	Total	30	19	25	31	39	144

6.6.2. Academic Support

6.6.2.1. Academic Council

As per the Statutes of the University, the Academic Council is the highest decision taking body for the academics. The Academic Council shall advise the Vice-Chancellor on all academic matters as requested by the Vice-Chancellor and / or as deemed appropriate by the Academic Council. All recommendations of the Academic Council, prior to implementation, shall be subject to the approval of the Vice-Chancellor.

Composition of Academic Council:

- 1) Academic Council shall consist of the following members, namely:
 - The Vice-Chancellor – Chairperson
 - The Directors of Research and Extension Education
 - Deans of Constituent college
 - Two University Heads of the Department nominated by the Vice – Chancellor on rotation basis
 - One Teacher not below the rank of a Professor from each faculty to be nominated by the Vice-Chancellor on rotational basis
 - One eminent Agricultural educationist from outside the University to be nominated by the Vice-Chancellor
 - Registrar
 - The Director of Agriculture, Government of Karnataka as the case may be
 - The Director of Education –Member Secretary
- 2) Academic Council shall co-opt, as members not more than two persons for such period and in such manner as may be prescribed so as to secure adequate representation of different sectors of Agricultural and allied fields.
- 3) All Members of the Academic Council, other than then the ex-officio members shall hold office for a term of two years and they shall not be eligible for re-nomination to any of the authorities of the University.
- 4) One third of the Members of the Academic Council shall form quorum at a meeting of the Academic Council: Provided that if a meeting of the Academic Council is adjourned for want of quorum, no quorum shall be necessary at the adjourned meeting of transaction of the same business.
- 5) Ordinarily the Academic Council shall meet at least once in every three months on such date as may be fixed by the Vice-Chancellor. However, special meeting of the Academic Council may be called by the Vice-Chancellor.

Powers and functions of the Academic Council

- 1) The Academic Council shall subject to the Provisions of this Act and the Statutes have power, to make regulations, for specifying all courses of study and determining curricula, and shall have general control on teaching and other educational programmes within the University, and shall be responsible for the maintenance of standards thereof.
- 2) The Academic Council shall have power to make regulations consistent with this Act and the Statutes relating to all academic matters subject to its control and to amend or repeal such regulations.
- 3) Without prejudice to the generality of the provisions of Sub-section (1) the Academic Council shall exercise the following powers and functions, namely
 - To advise the Board and Vice-Chancellor on all academic matters including the control and management of libraries
 - To make recommendations for the institution of Professorship, Associate Professorships, Assistant Professorships and other posts including posts in research and extension education and in regard to the duties thereof.
 - To make recommendations for the establishment/ amalgamation/ abolition of faculty, colleges, departments of teaching, research and extension education

- To make regulation regarding admission of students of the University and determine the number of students to be admitted
- To make regulations relating to courses of study leading to degrees, diplomas and certificates courses
- To make regulations relating to the conduct of examinations and to maintain and improve the standard of education
- To make recommendations to the Board regarding conferment of honorary degree
- To make recommendations regarding qualifications to be prescribed for teachers and service personnel in the University
- To consider and approve Memorandum of Understanding and Memorandum of Agreement with educational, research, corporate and other institutions
- To exercise such other powers and perform such other functions as may be conferred or imposed on it under provisions of this Act, by the Board or the Vice-Chancellor

The year wise composition of Academic Council and details of Academic Council meetings held during the reporting period are presented in Annexure -2 and Annexure -3 respectively.

6.6.2.2. Innovation and Best Practices

The University has adopted various educational innovations in furthering the interest of students, institution and internal quality assurance. The details are furnished below:

Sl. No.	Innovation Type	Innovative Efforts / Best Practices
1	Furthering the interest of the student	<ul style="list-style-type: none"> ▪ Merit scholarship for the top academic performers. ▪ Allotted counsellors monitor and guide the students curricular and co-curricular activities throughout their degree programme. ▪ Students exchange programmes with leading foreign Universities like Western Sydney University, University of Saskatoon; University of Groningen; ETH, Switzerland; Noble Research Institute, USA, University of Zurich, Switzerland, Functional genomics centre Zurich, Kansas State University, USA, Queensland University, Brisbane, Australia, Wageningen University and Research, The Netherlands, Gottingen University, Germany. ▪ Student Ready Programmes and Guest lectures with motivational speakers for enhancing the student's confidence level to become entrepreneurs. ▪ Personality development activities for facing interview & group discussion during placement. ▪ Arranging classes by domain experts to enhance students critical / problem solving skills to become effective and productive professionals through competitive exams ▪ Experts in the field were invited to impart training to students on communication skills which are vital for employability ▪ Periodic field / exposure visits provides confidence among the students on various facets of Agri and allied activities.
2	Furthering the interest of the institution	<ul style="list-style-type: none"> ▪ Interactive teaching modules ▪ Digital display of information for the benefit of the students and faculty.

		<ul style="list-style-type: none"> ▪ Conducting of online classes and examinations during COVID-19 pandemic to ensure the timely completion of courses. ▪ Implementation of different teaching aids helps the students to overcome the challenges successfully ▪ Coaching classes for career advancement such as JRF and SRF coaching classes were conducted every year ▪ Active participation of students in sports and cultural activities at National and International level provides excellence in various co-curricular aspects
3	Internal quality assurance	<ul style="list-style-type: none"> ▪ Internal quality assessment is being done at the department level by the Heads of the Department in their staff meetings. ▪ The 'UGAM online tool' of the university facilitates, online evaluation of students' answer scripts and timely declaration of the results ▪ CCTV enabled class rooms ensures both teachers and students punctuality in the class rooms and physical delivery of the courses and conduct of examinations. ▪ Regularly sending faculty for short term and medium term training courses to upgrade their knowledge in the subject. ▪ Well planned instructional management.
4	Inclusive practices	<ul style="list-style-type: none"> ▪ Online teaching with recording facilities and cloud storage. ▪ The students are given individual access to pre-recorded lecture contents (IMPARTUS solution). ▪ Integration of theory and practical classes ▪ Exposure visits to progressive farmer fields / Research stations / KVKs / Industries / other institutes ▪ Establishment of Experiential Learning units ▪ An Incubation Centre for students
5	Stakeholder relationships	<ul style="list-style-type: none"> ▪ Establishment of functional Placement cell ▪ Conducting Alumni Interaction Meets ▪ Interactive session with achievers ▪ Counselling meeting with Students & Parents

Education has become competitive and so also the educational institutions. In order to survive the competition, institutions have to improve the quality of their services. Changes in culture, aspiration and levels of skills required in securing employment for students, force higher educational institutions today to rework on their educational models and add value to each and every aspect of the service. Innovations and best practices serve to enhance quality and add value. UASB, combines education, technology, management and social service and has identified and implemented innovations and best practices to differentiate itself among the competitors and to add value in its educational services. Some of the best practices adopted and implemented by UASB are listed below:

- Admissions are made through Karnataka Common Entrance Test which provides equal opportunity for students to compete irrespective of their caste, religion, nationality, gender and academic performance.
- The college conducts counselling programmes to support students, faculty serve as counsellors.
- Conducting various of customized personality development and training programmes to suit the needs and requirements of students bridge the gap in curriculum based learning.

- Skill building / Skill development programmes have been introduced to build job-specific skills.
- Improving proficiency Group / team projects for the students, particularly in Student Ready and HoT courses.
- Digitalization of library and related information system provides ample utilization of e-resources for students and faculty
- The institution encourages social service programmes involving students through its National Service Scheme and Youth Red Cross Society Units.
- Course outlines and study materials are prepared according to the syllabus with chapter end assignments in all courses and subjects.
- Apart from imparting learning through University curriculum, workshops, conferences, seminars, symposia etc. are conducted to provide value addition to the agricultural education.
- Library and computer facility are kept open for extended hours till late evenings hours and holidays.
- Student feedback is treated as a valuable output and is collected through a variety of ways such as feedback form, counselling meetings, suggestion box, etc.
- Comprehensive performance management system for self-evaluation and rating of faculty by students.

6.6.2.3. Library

About University Library

The University Library was established during 1966-67 which is one of the oldest and biggest University libraries in the field of Agricultural Sciences in Karnataka. The Library has a collection of about 2 lakh documents which comprises of Books, Journals, University publications, Government publications, Rare books, Thesis/dissertations, Reports, Pamphlets, Maps, Microfilms, Microfiche, CD ROM's/DVD's etc. The Library provides seamless access to e-resources of the world's leading online journal databases through EZproxy. It is a member of Online Computer Library Centre (OCLC) which is situated in America, through WorldCat, the users can access the metadata of 200 million documents available in 72,000 various libraries across the globe. The Library has been upgraded with sophisticated video library cum virtual classrooms to provide unique and dynamic real time online multimedia services to the user fraternity. The library is completely automated with Koha Open Source Software package and integrated with RFID Technology.



University Library, GKV campus, Bengaluru

The Library is one of the most important information center, which facilitates the teaching, research and extension programmes for both faculty and students extensively. Library has developed the database of Books, Journals, Thesis, Reports and other sources of information under the Koha open software. Users can access the OPAC through Internet. University Library has subscribed several Online Journals, Offline Databases, e-books and e-Journals. In addition to this, ICAR under NAIP

Programme is providing access to around 4,000 full text journals related to the field of Agriculture and allied sciences through Consortium of e-Resources in Agriculture (CeRA) also created facilities to access Krishikosh, e-Pubs, IDEAL etc., The Indian Council of Agricultural Research (ICAR) has made it mandatory to all Agricultural Libraries to offer PGS 501 (0+1) non-credit compulsory course on 'Library and Information Service' for Master's Degree Students. The Library is also offering one-month Internship Training Program for Master of Library and Information Science (M.L.I.Sc.) students from other universities.

There are three libraries which were established at constituent colleges of UAS, Bangalore viz., such as College of Agriculture, Mandya, College of Agriculture, Hassan and College of Sericulture, Chintamani which are technically guided by the University librarian at GKVK through the respective Dean's and Assistant Librarian of the constituent colleges.

a) Library at College of Agriculture, Mandya:

The college library is located adjacent to the main College building with easy access to both boys and girls Hostel, KVK and Zonal Agricultural Research Station. The college library is providing computerized library, digital information Centre, reference service, C.D. ROM service, internet service, newspaper clipping service, books lending service, current awareness service, question paper banks general text book bank, book bank (SC/ST students) and competitive exams book section for the benefit of students, teachers and scientists of the campus. Hands on Training is given to the students to access e-resources through internet. Many students have secured ICAR-JRF, ICAR-SRF and CSIR-SRF ranks and passed other national competitive exams by using these library resources.



College Library, College of Agriculture, Mandya

b) Library at College of Agriculture, Hassan:

It is a well-established library with a capacity of 21,986 books and journals with daily newspaper and weekly magazines. The library situated in the campus next to the auditorium caters to the needs of the all three degree programs (Agriculture, Food Technology and Biotechnology). The library facility is used by both the students and teachers of the college. It functions as the primary information resource center and repository of resources for teaching, research and extension. The library houses text books, reading materials, reports, dictionary, encyclopedia, handbooks from national and international authors etc. In addition to the course curricular requirement, it also houses books to prepare for competitive exams, books related to geography, history, current affairs, entertainment and story books in English and Kannada. The library has a seating capacity of 250 to accommodate readers in reference and issue sections. The library is equipped with solar lighting that facilitates reading even in absence of power. The library is open even beyond office hours to facilitate students with access of excellent reading material so as to prepare for internal/external exams, competitive exams, banking and civils. The library facilitates access to electronic journals through CeRA consortium, in addition to direct subscription from publishers of journals. The library has computer and internet facility, that helps students and

teachers to access information online. In a nut shell, College of Agriculture, Hassan houses a fully functional library with more than 18000 accessions from diverse knowledge domains which strengthens the teaching and learning processes. The library has digital archive, online journals, offline e-books, etc. Association with NAIP, ICAR provides access to 1706 full text e-journals to facilitate ongoing and prospective research. The library also has basic facilities like honeycomb cubicles for students to place their bags and books, RO drinking water facility and toilets that are housed in the library.



College Library, College of Agriculture, Hassan

e) Library at College of Sericulture, Chintamani:

The Library at College of Sericulture was started in the year 1995 and is located at latitude of 13°34' and longitude of 78°10'. The College Library functions as the primary information resource center and repository of printed and electronic resources for teaching, research and extension activities. Apart from text books and recommended reading materials prescribed for each course; periodicals, thesis, reports, maps, subject CD and encyclopedia relevant to the mandated areas of the degree programmes have been stocked in the College Library. Every year new collections in the form of books and CDs are added to the library. The library facilitates access to electronic journals through its participation in consortia, such as CeRA. The library also subscribes to several e-journals directly from publishers as well as through reputed subscription agencies. The library resources can be accessed through <https://uasbangalore.edu.in/index.php/library-en/at-college-of-sericulture-chintamani-en>.



College Library, College of Sericulture, Chintamani

Details of Library Space for stacking:

Sl. No.	Type	Area / Space in (Sq. ft.)			
		University Library, GKVK	CoA, Mandya	CoA, Hassan	CoS, Chintamani
1.	Stacking of Books	8500	1357	2251	753
2.	Stacking of Periodicals	12276	355	517	377
3.	Reading Area	6000	2353	5124	10
4.	Internet / Browsing Area	1200	906	560	484
5.	Reprography	150	14	54	140
6.	Issue Counter	100	283	151	215
7.	Newspaper / Magazine Area	2000	182	258	323
8.	Thesis Area	1000	202	-	108
9.	Reports Area	151	-	-	344
10.	Any other				
	a) Store Room	383	150	161	161
	a) Binding Section	400	-	-	-
	b) Virtual Class Room	1500	-	-	-
	c) Text book lending section	2000	161	205	104
	d) Librarian Chamber	500	-	323	180
	e) Research Cubicles for 50 scholars	2000	-	-	-
f) Office room	800	-	151	-	

Present library staff position (in place) at different campuses of UAS, Bangalore

Sl. No.	Cadre / Designation	University Library, GKVK			CoA, Mandya			CoA, Hassan			CoS, Chintamani		
		S	F	V	S	F	V	S	F	V	S	F	V
1	University Librarian	1	1	-	-	-	-	-	-	-	-	-	-
2	Documentalist	1	1	-	-	-	-	-	-	-	-	-	-
3	Assistant Librarian	5	5	-	1	1	-	1	1	-	1	1	-
4	Personal Secretary	1	-	1	-	-	-	-	-	-	-	-	-
5	Reprographic Assistant	1	1	-	-	-	-	-	-	-	-	-	-
6	Sr. Typist	1	-	1	-	-	-	-	-	-	-	-	-
7	Processing Assistant	1	1	-	-	-	-	-	-	-	-	-	-
8	Assistant	5	5	-	-	-	-	2	2	-	-	-	-
9	Sr. Binder	1	-	1	-	-	-	-	-	-	-	-	-
10	Typist cum Computer Operator	1	1	-	-	-	-	1	1	-	1	1	-
11	Shelf Assistant	7	6	1	1	1	-	-	-	-	1	1	-

Sl. No.	Cadre / Designation	University Library, GKVK			CoA, Mandya			CoA, Hassan			CoS, Chintamani		
		S	F	V	S	F	V	S	F	V	S	F	V
12	Jr. Composer	1	1	-	-	-	-	-	-	-	-	-	-
13	Assistant Binder	1	1	-	-	-	-	-	-	-	-	-	-
14	Attender	7	5	2	-	-	-	-	-	-	1	1	-
15	Press Helper	1	-	1	-	-	-	-	-	-	-	-	-
16	Messenger	2	1	1	1	1	-	-	-	-	1	1	-
17	“D” Group Farm Labour	4	3	1	-	-	-	-	-	-	-	-	-
Total		41	31	10	3	3	-	4	4	-	4	4	-

Note : S-Sanctioned, F-Filled, V-Vacant

Library Committee Meetings

The Library Sub-Committee meets to decide need based issues under the Chairmanship of Dean (Post Graduate Studies) at GKVK and under the Chairmanship of Deans of constituent colleges. The campus wise library Sub-Committee reviews and recommends actions are furnished in the **Annexure – 4**.

Profile of books and other reading materials availability:

The details of books/ reading material available in the University library and constitute college libraries are being as below:

Sl. No.	Type of Books/Reading Material Available	University Library, GKVK	CoA, Mandya	CoA, Hassan	CoS, Chintamani
1	Books	129110	24002	20,574	13116
2	Pamphlets	8748	98	-	1271
3	Gift books	13467	1009	863	1917
4	Thesis/Dissertations	12313	234	-	68
5	Reports	17158	1749	136	241
6	Microfilms	04	-	-	-
7	Microfiche	53	-	-	-
8	Maps	60	16	157	-
9	CD/DVD	381	314	227	-
10	e-books	207	-	29	20
11	e-Journal	30	-	-	-
Total		181531	27,422	21,986	16,633

Library Facilities

The facilities available in the University library and constitute college libraries are being as below:

Sl. No.	Particulars	University Library, GKVK	CoA, Mandya	CoA, Hassan	CoS, Chintamani
1	Computers	33	24	27	05
2	Seating Capacity for reading	550	150	227	96
3	Seating Capacity of e-learning with gadgets	550	50	23	04
4	Reprographic Service	02	01	01	01

5	Cubicles Room	40	-	-	-
6	Elevator	01	-	-	-
7	Video Conference Hall	01 (Cap. 80 Nos)	-	-	-
8	Fire Extinguisher	08	01	01	01
9	Senior citizen zone	01 (Cap. 10 Nos)	-	-	-
10	Divyangjan zone	01	-	-	-
11	CCTV Security	01	01	01	01
12	Coffee/ Tea Vending Machine	01	-	-	-

Details on collection of volumes on different subjects

The Library resources are arranged using Dewey Decimal Classifications (DDC) Scheme and these classified books are divided using the classification number and arranged in different section of the library. The below mentioned data is extracted from Koha database based on classification system which covers all the resources.

Sl. No.	Subjects	University Library, GKVK	CoA, Mandya	CoA, Hassan	CoS, Chintamani
1.	Agricultural Marketing Agricultural Engineering Apiculture Agronomy Animal Science Crop Physiology Food Science & Nutrition Forestry & Environmental Sciences Genetics & Plant Breeding Horticulture Microbiology Seed Science & Technology Sericulture Soil Science & Agricultural Chemistry	66938	7227	10084	9490
2.	Philosophy and Psychology, Agricultural Statistics, Applied Mathematics	1972	620	296	649
3.	Computer Science, General Studies	4678	2192	1258	1630
4.	Religion	669	-	-	-
5.	Social Science, Public administration, Social problems, Commerce, Education	28053	3455	920	1320
6.	Language	620	610	1181	235
7.	Plant Biotechnology Plant Pathology Agricultural Entomology Mathematics, Allied Sciences, Physics, Chemistry, Earth Science, Botany	52950	4003	6113	3857
8.	Arts	712	-	-	-
9.	Literature, Literature in English	1932	-	-	-
10.	History, Biography, Geography	2104	-	-	-
11.	Miscellaneous	595	980	110	120
	Total	161223	19807	19962	17301

Details on Subscription in the Fields of Relevant Subjects

The year wise subscription in the field of relevant subjects in the University library is as follows:

Sl. No.	Relevant Subject	Books					Pamphlets					Gift Books					Thesis				
		16-17	17-18	18-19	19-20	20-21	16-17	17-18	18-19	19-20	20-21	16-17	17-18	18-19	19-20	20-21	16-17	17-18	18-19	19-20	20-21
1.	Dept. of Agricultural Economics	7	57	95	-	22	-	1	-	3	-	4	4	4	24	-	24	17	14	24	19
2.	Dept. of Agril. Marketing, Co-operation & Business Management.	50	185	11	3	-	-	5	-	2	-	2	3	9	15	5	30	32	40	40	14
3.	Dept. of Agronomy	77	125	37	4	16	-	1	1	1	-	33	8	14	8		21	24	25	20	21
4.	Dept. of Kannada		86	1	243	10	4	105	48	107	92	26	10	56	28	1016					
5.	Dept. of Agricultural Engineering	49	137	134	44	47	-	-	-	2	-	2	-	-	15	2	7	4	12	9	10
6.	Dept. of Agricultural Entomology	35	46	22	1	14	-	5	-	-	-	1	-	-	10	-	20	17	22	20	21
7.	Dept. of Agricultural Extension	26	28	20	20	-	-	1	2	-	-	-	-	-	7	3	20	19	16	25	16
8.	Dept. of Agricultural Microbiology	52	69	23	20	10	-	-	-	1	-	5	-	-	-	-	16	17	20	15	11
9.	Dept. of Animal Science	7	38	-	2	-	-	-	-	-	-	-	-	-	-	13					
10.	Dept. of Apiculture	6	34	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	11	2	1
11.	Dept. of Crop Physiology	12	17	2	9	10	-	1	-	-	1	-	-	-	1	10	13	15	11	18	7
12.	Dept. of Distance Education	0	13	-	-	-	-	-	-	-	-	-	-	-	-	-					
13.	Dept. of Food Science & Nutrition	13	66	15	26	25	-	-	1	-	-	2	1	2	1	2	17	14	16	12	9
14.	Dept. of Genetics & Plant Breeding	7	46	35	-	10	-	-	1	1	-	-	2	-	-	-	27	20	17	22	21

15.	Dept. of Plant biotechnology	16	30	1	-	8	-	-	3	-	-	-	-	-	7	-	19	25	30	19	
16.	Dept. of Plant Pathology	10	20	4	-	-	-	-	1	1	-	5	-	8	3	10	23	18	23	14	16
17.	Dept. of Seed Science & Technology	149	76	30	8	-	-	1	-	-	-	-	-	-	7	2	19	16	14	14	9
18.	Dept. of Sericulture	10	32	9	2	-	-	-	-	1	1	1	-	3	-	2	6	9	9	7	11
19.	Dept. of Soil Science & Agril. Chemistry	21	28	2	9	10	6	-	-	-	-	-	-	-	1	-	26	21	28	30	45
20.	Dept. of Agricultural Stats. App. Mathematics & Comp. Sci.	7	43	15	-	-	-	-	-	-	-	-	-	-	-	1	8	10	15	12	12
21.	Dept. of Forestry & Environmental Sciences	6	82	19	12	35	-	-	-	-	2	-	1	4	7	-	3	9	9	12	7
22.	Dept. of Horticulture	9	91	6	18	10	-	2	-	1	14	7	-	3	1	26	6	14	14	10	19
23.	Others Books	60	145	156	897	260	1	-	-	13	7	24	18	48	70	155					
Total Publications (No.)		629	1494	637	1318	487	11	122	57	133	117	112	47	151	205	1247	306	303	346	325	269

Details of Wi-Fi facility in the Library

At University library, Wi-Fi facility is made available in the different sections of the library since 2009 which is provided by National Knowledge Network (NKN), Govt. of India and managed by Agricultural Knowledge Management Unit (AKMU). This facility is connected by “Aruba” Wi-Fi instrument & D-Link Wi-Fi instrument to the computer section. The benefit of these instruments are accessible to 250 computers and a separate D-Link Wi-Fi instrument is also made available in University Librarian chamber and it can be accessible to 25 computers. Further, the library also has “Reference-A” Wi-Fi instrument which is accessible in the Reference Section which covers the entire ground floor and connects about 250 computers at a time.

The College Libraries situated at Mandya and Chintamani have been provided with LAN and Wi-Fi facilities with good band strength to accesses the different e-resources. However, the College library at Hassan has only LAN facility.



Facilities for Divyangjan (Physically challenged) - 2019



New arrival corner – 2019



Circulation Counter - 2018



Video Library cum Virtual Class Room





Server Room in order to store and access the data of RFID, Koha and other softwares



Fire Extinguisher (smoke and fire alarm) in order to avoid untoward incidents



Hands on training class in Library course



Internship training Program: M.L.I.Sc., Students form Bengaluru North University, Kolar, Karnataka – Dec, 2020

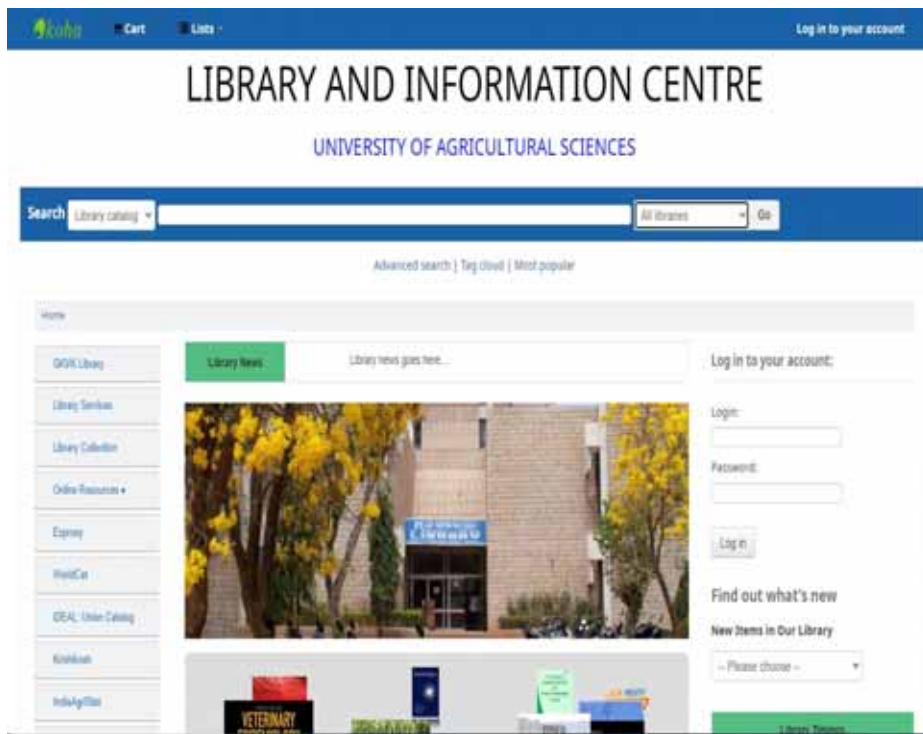
Details of Library Management System

All the libraries in the University had been automated using KOHA Integrated Library Management System for circulation activities. This software is built to handle the primary up-keeping functions of a library. It also involves maintaining the database for entering new books, recording borrowers with their respective due dates. The necessary equipment's required for the library automation viz., computers, printer, scanner, barcode label printer, barcode readers etc., have been procured under ICAR Development Grant.

State-of-the-Art Software/ Programme:

The University Library has adopted recent developments using information communication technology (ICT) such software's such as RFID Technology. Institutional Repository D Space, Vidwan faculty profile database, Krishikosh, Krishi Chitralaya, EZproxy CeRA, e-books and OPAC (Online Public Access Catalogue) which were implemented for the better utilization of e-resources by the students and faculty. The details of library automation softwares furnished below:

- **Koha Library Management System Linked with Constituent Colleges:** Koha is the library automation software, used in library. KOHA has all the modules with fully-functional library software – acquisition, serials, members, circulation, cataloguing, reports, and tools. Koha is the library automation software has installed in 2012 and upgraded in 2019. This software has been implemented to adopt new technologies to keep pace with the growing information needs of the user's community to provide better information services such as acquisition, serials, members, circulation, cataloguing, reports and tools. The University Library is accessible 24/7 all over the Globe through its website.



- **RFID (Radio frequency identification Device) Technology:** Each book in the library is tagged with RFID tag. It is easy for Library staff to handle during lending, returning, sorting, tagging etc. of books, using RFID tags in the library system.



RFID Tagging using Work station



GUI Integrated with Koha



Cross verification using Handled reader



Inventory & Identification



RFID technology based self-check-in & self-check-out service KIOSK.



RFID security gate installed in 2020

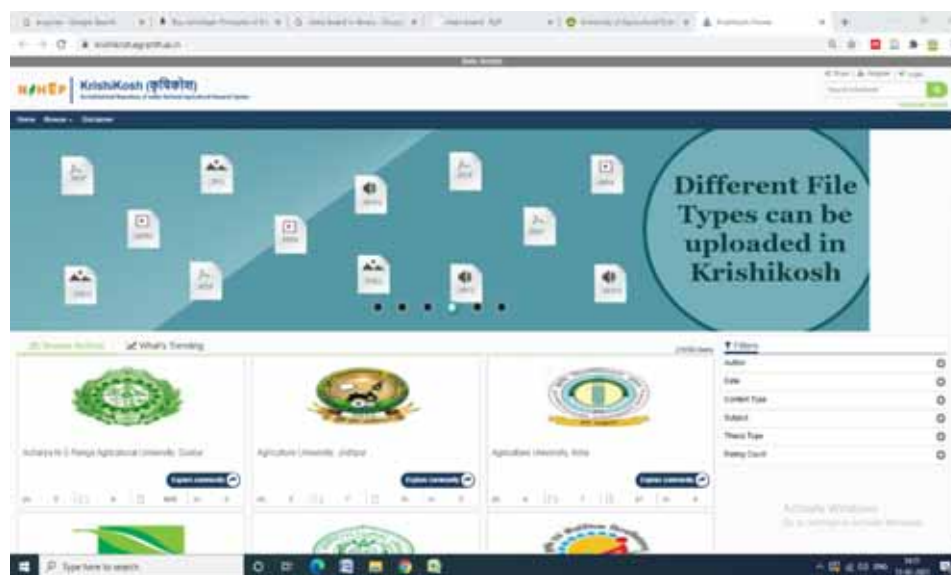
- Institutional Repository DSpace:** DSpace is an open source repository application that allows library to capture, store, index, preserve and distribute the digital material including text, video, audio and data to the users of UASB in the field of Agriculture and allied science.



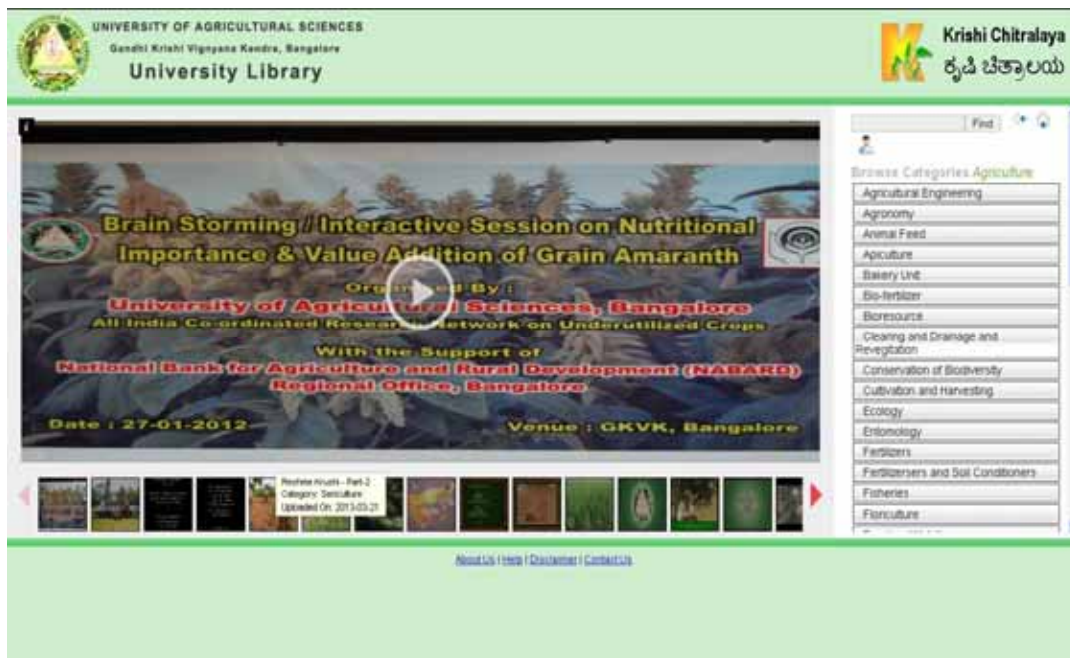
- **Implementation of Vidwan faculty profile database (IRINS):** Indian Research Information Network System, IRINS is web-based Research Information Management (RIM) service developed by the Information and Library Network (INFLIBNET) Centre. The portal facilitates the academic, R&D organisations and faculty members, scientists to collect, curate and showcase the scholarly communication activities and provide an opportunity to create the scholarly network.



- **Krishikosh** is the Institutional Repository of National Agricultural Education and Research System (NARES) of India. This project was envisaged under National Agricultural Innovation Project (NAIP) of Indian Council of Agricultural Research (ICAR), New Delhi. Currently KrishiKosh is housing about 65,200 records of articles, books, journals, institutional publications, conference proceedings, reports, thesis and dissertations, etc., University library has uploaded 13164 thesis to Krishikosh.



- **Krishi Chitralaya:** UAS-B Library is established with sophisticated Video Library cum Virtual classroom to provide unique and dynamic real-time online multimedia services to the users.

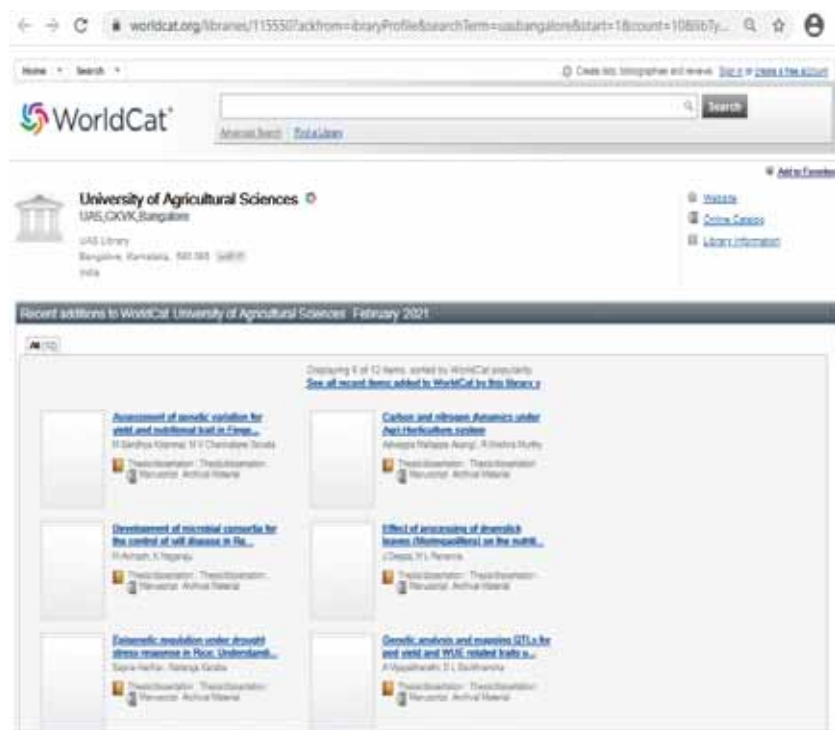


- **EZproxy:** is a web proxy server was implemented in the year 2019 to access the library subscribed resources outside the library's computer network with restricted-access websites that authenticate users by IP address. This allows library patrons at home or elsewhere to log in through their library. EZproxy server helps to gain access to resources to which their UASB Library subscribes. It provides access to e-Resources to users when and where they need it, this software helps to extend our services beyond the library hours, save the Library users travel time, and provide new services to users who may need access from across town or around the globe.



Mendeley and Zotero: is a free Reference management tool installed in all computers helps to collect references, organize citations and create bibliographies.

- **OCLC WorldCat:** is a non-profit membership organization that promotes cooperation among libraries worldwide. More than 54,000 libraries in 109 countries use OCLC services to locate, acquire, catalogue, lend and preserve print and electronic library materials.



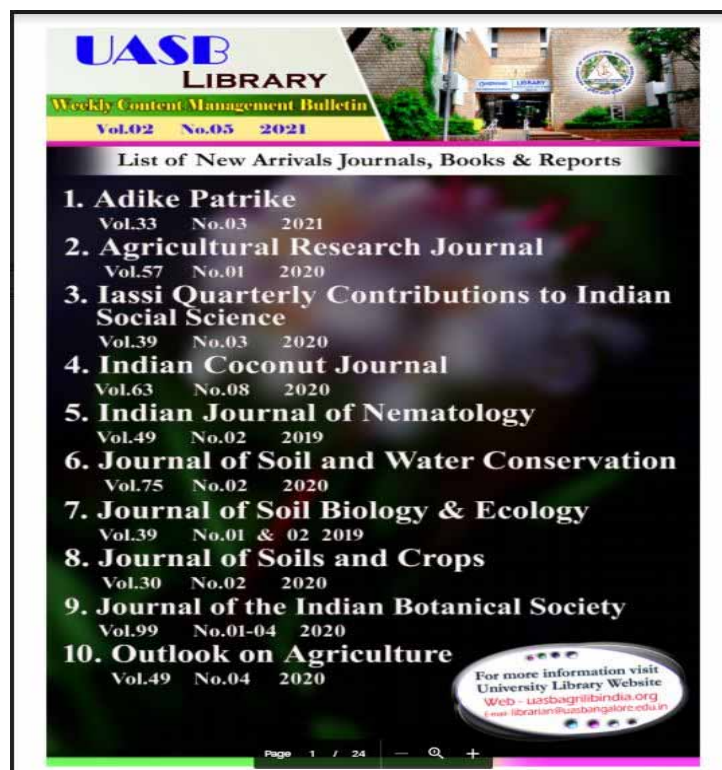
- **Document Delivery Service (DDS):** refers to the physical or electronic delivery of a document from a library collection to the residence or place of business of a library user, upon request. Library has received 529, 427, 254, 294 and 91 requests during 2016-17, 2017-18, 2018-19, 2019-20 and 2020-21, respectively.



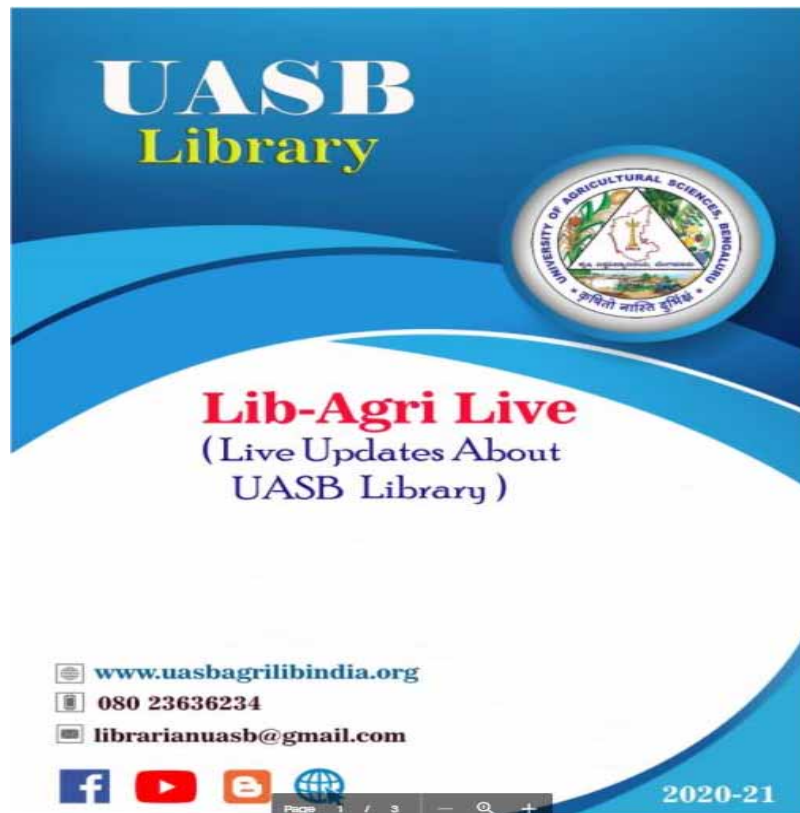
- **News Paper Clipping Service:** The Library started new service called “Newspaper Clippings Service” was started in the year 2019, which collaborates all the agricultural information / articles published in the newspapers and send through email of the registered students and faculty.



- Content Management:** The Library started content management service by scanning all the contents of the book, journals and reports from 2020 which collaborates all the agricultural information and sends through mail to the students and faculty.



- Lib-Agri Live:** Lib-Agri live (Latest updates about library on a daily basis) was started in the year 2020



UASB
Library

Lib-Agri Live
(Live Updates About
UASB Library)

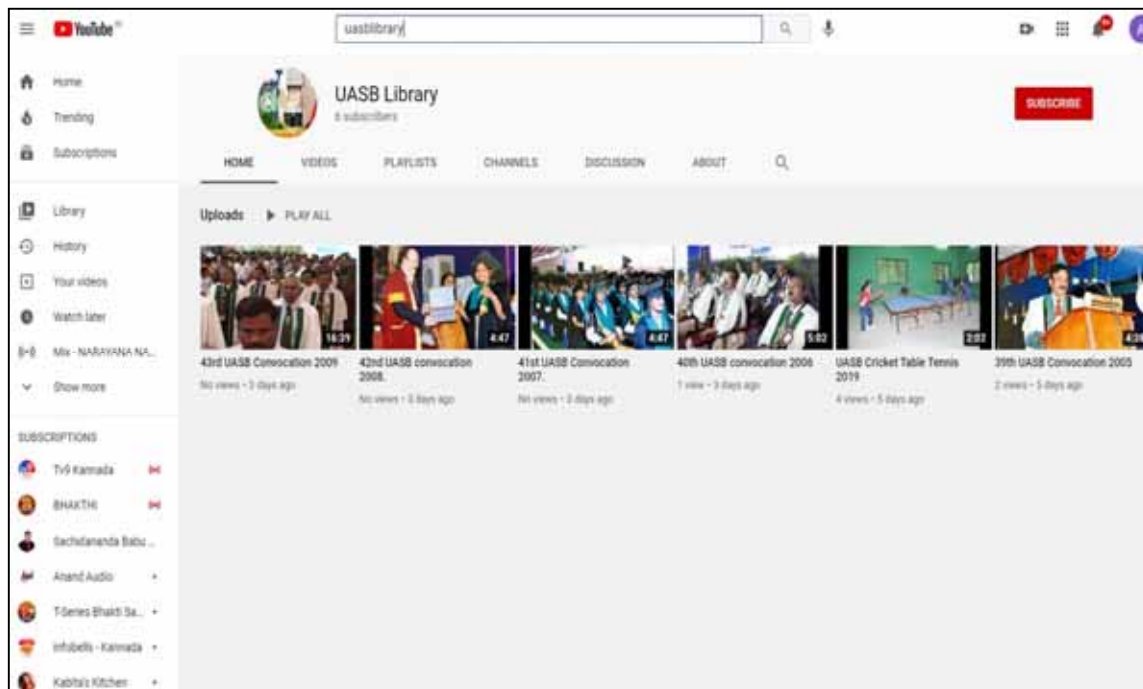
www.uasbagrilibindia.org
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2020-21

- UAS Library Social Media Link:

- YouTube – Link

<https://www.youtube.com/channel/UCohYSpBji4PNtKaeBirnSVQ>



YouTube channel page for UASB Library. The channel has 8 subscribers. The video uploads section shows several videos related to UASB convocations and sports events, including:

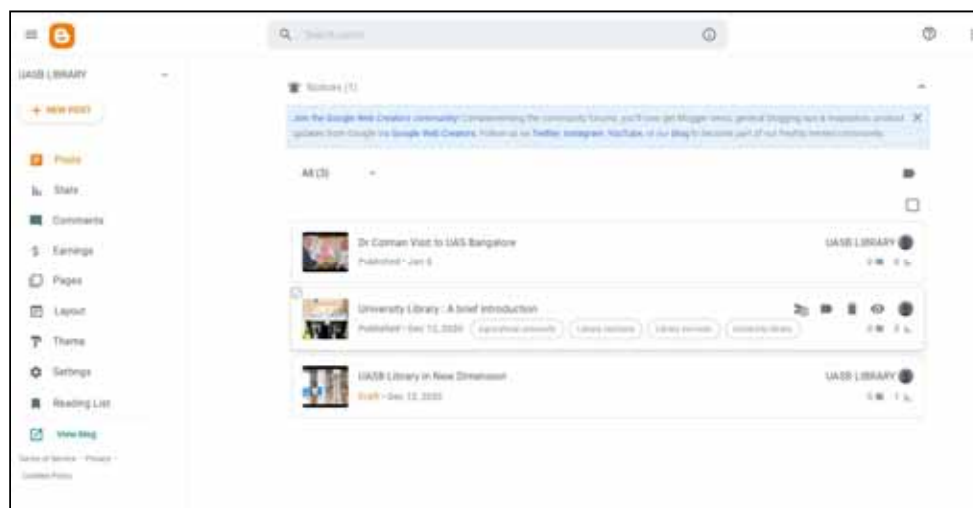
- 43rd UASB Convocation 2009 (18:39)
- 42nd UASB convocation 2008 (4:47)
- 41st UASB Convocation 2007 (4:47)
- 40th UASB convocation 2006 (5:02)
- UASB Cricket Table Tennis 2019 (3:08)
- 39th UASB Convocation 2005 (4:28)

- Facebook - Link: <https://www.facebook.com/uasblib>



○ Blog - Link:

<https://www.blogger.com/blog/posts/7744912460309132355?tab=mj&bpli=1&pli=1>

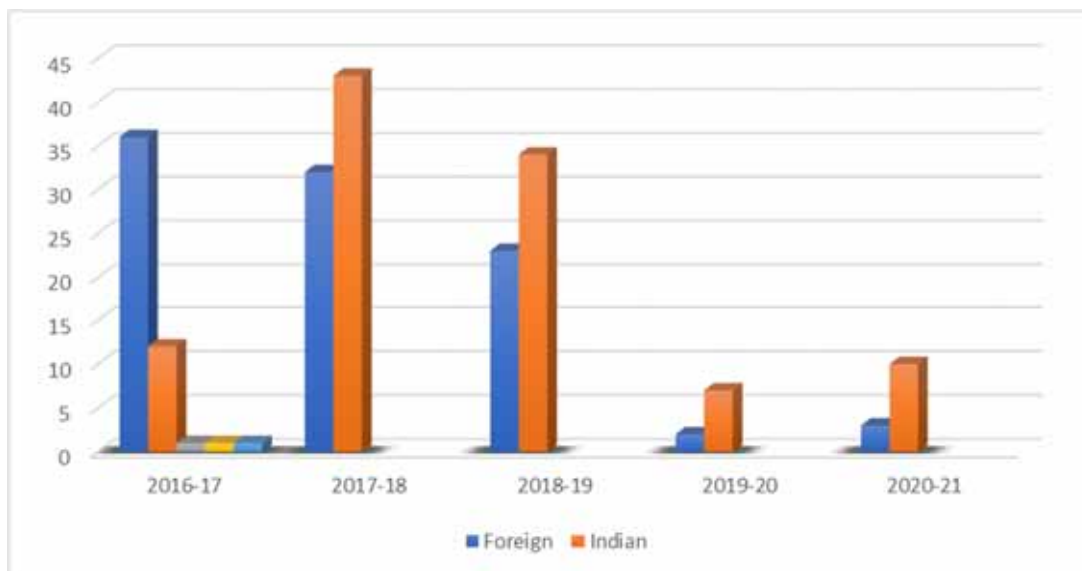


Details of e-Books, Periodicals and Reports for the period 2016-2021

Sl. No.	Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	Total
1.	e-Books	24	98	-	43	46	201
2.	Periodicals	49	72	56	12	13	202
3.	Reports	182	137	168	83	142	712
4.	CAB CD Rom	1	1	-	-	-	2
	Total	256	308	224	138	201	1130

Subscription status of Research Journals

Details of the Periodicals Subscribed in the University During the year 2016-2021							
Sl. No.	Journals	2016-17	2017-18	2018-19	2019-2020	2020-2021	Total
1	Foreign	36	32	23	2	3	96
2	Indian	12	43	34	7	10	106
	Total	48	75	57	9	13	202



Library has decreased the subscriptions of print journals during the year 2019-2020 and 2020-21 because, ICAR under NAIP Programme is providing access to nearly around 4,000 full text journals related to the field of Agriculture and allied subject through Consortium of e-Resource in Agriculture (CeRA)

Profile of Periodicals, Research Journals and e-journals

The University library subscribe 112 journals comprises of Periodicals, Research Journals and e-journals. University procures 49 Foreign and 63 Indian journals in the form of online, printed and both the forms. The details of the journals available are as below:

Details of Periodicals, Research Journals and e-journals

Sl. No.	Discipline Major Area	Name of the Journals	Foreign Journal	Indian Journal
1	Agricultural Biotechnology	Biotechnology and Bioprocess Engineering	√	
		Indian Journal of Agricultural Biochemistry		√
		Indian Journal of Agricultural Research		√
2	Agricultural Economics	Agricultural Economics and Research Reviews		
		Canadian Journal of Agricultural Economics	√	
		Finance India		√
		Indian Journal of Agricultural Economics		√
		Indian Journal of Forestry		√
		Journal of Rural Development		√

Sl. No.	Discipline Major Area	Name of the Journals	Foreign Journal	Indian Journal
3	Agricultural Engineering	Agricultural Engineering Today		√
		Agricultural Research Journal		√
		Agricultural Reviews		√
		Agricultural Science Digest - A Research Journal		√
		Agriculture and Industry Survey		√
		Indian Journal of Agricultural Research		√
		Indian Journal of Dryland Agricultural Research and Development		√
		Journal of Agricultural Engineering		√
		Journal of Irrigation and Drainage Engineering	√	
		Journal of Soil & Water Conservation		√
		Transaction of the ASABE	√	
		Water and Energy International		√
4	Agricultural Extension	Indian Journal of Extension Education		√
		Journal of Extension Education		√
5	Agricultural Marketing	The Cooperator		√
6	Agriculture	Outlook on Agriculture	√	
		SKUST Journal of Research		√
		Sujatha Sanchike		√
7	Agriculture Economics	Economic Botany	√	
		Vyavara Jagathu		√
8	Agronomy	Experimental Agriculture	√	
		Indian Journal of Agronomy		√
		Indian Journal of Weed Science		√
		Journal of Agricultural Development and Policy		√
		Outlook on Agriculture	√	
9	Crop Physiology	Crop Research Journal		√
		Legume Research		√
		Oryza : An International Journal of Rice		√
		Theoretical and Experimental Plant Physiology	√	
10	Entomology	Annals of the Entomological Society of America	√	
		Apidologie	√	
		Australasian Bee Keeper	√	
		Canadian Entomologist	√	
		Indian Journal Nematology		√
		Indian Journal of Entomology		√
		Indian Journal of Nematology		√
		Journal of Economic Entomology	√	
		Journal of Entomological Research		√
Oriental Insects	√			
11	Extension Education	Indian Journal of Extension Education		√
12		Cereal Food World	√	

Sl. No.	Discipline Major Area	Name of the Journals	Foreign Journal	Indian Journal
	Food Science and Nutrition	Food Protection Trends	√	
		Food Science & Technology	√	
		Journal of Food Processing and Preservation	√	
		Journal of Food Protection	√	
		Journal of Food Science	√	
13	Forestry and Environmental Sciences	Annual Review of Ecology and Systematics	√	
		Applied & Environmental Microbiology	√	
		Indian Journal of Ecology		√
		Indian Journal of Forestry		√
		Journal of Agricultural Development and Policy		√
		Journal of Ecofriendly Agricultural		√
		Journal of Hill Agriculture		√
		Journal of Tree Sciences		√
		Land Economics	√	
		Legume Research		√
		National Geographic Magazine	√	
		Range Management and Agroforestry		√
		The Journal of Indian Botanical Society		√
14	Genetics and plant breeding	Canadian Journal of Plant Science	√	
		Genes and Genomics	√	
		Genetic Research	√	
		Indian Journal of Genetics and Plant Breeding		√
		Indian Journal of Plant Genetics Resources		√
		Nature	√	
		Oryza : An International Journal of Rice		√
15	Horticulture	Indian Journal of Horticulture		√
		Pest Management in Horticulture Ecosystem		√
		Progress Horticulture		√
		Vegetable Sciences		√
16	Microbiology	Canadian Journal of Microbiology	√	
		MMBR (FRMLY: Microbiological Reviews)	√	
17	Plant Biotechnology	Indian Journal of Agricultural Biochemistry		√
		Journal of India Botanical Society		√
18	Plant pathology	Cytologia	√	
		Indian Journal of plant Protection		√
		International Journal of Plant Science	√	
		Journal of Mycology and Plant Pathology		√
		Journal of Plant Biology	√	
		Journal of Plant Nutrition and Soil Science	√	
		Journal of Plant Research	√	
		Phytomorphology		√
		Phytopathology	√	
		Plant Disease	√	
		Plant Disease Research		√
Tropical Plant Pathology	√			

Sl. No.	Discipline Major Area	Name of the Journals	Foreign Journal	Indian Journal
19	Seed Science and Technology	Current Science		√
		Seed Science & Technology	√	
		Seed Science Research	√	
		Seed World	√	
20	Sericulture	Indian Journal of Sericulture		√
		Indian Silk		√
21	Soil Science and Agricultural Chemistry	Cereal Chemistry	√	
		Indian Journal of Chemical Society		√
		Journal of Soil and Water Conservation (Foreign)	√	
		Journal of Soil and Water Conservation (Indian)		√
		Journal of the Indian Society of Soil Science		√
		Science	√	
		Soil Science	√	
		Soil Science and Plant Nutrition	√	
22	Statistics	Australian and New Zealand Journal of Statistics	√	
		Journal of the Indian Institute of Science		√
Total			49	63

Library Timings

The University and College libraries will remain open on all days except on government holidays. Students and faculty can utilize the services for 13.50 hours on week days, 9.50 hours on Saturdays and 4.50 hours on Sundays.

Days	Opening time	Total Duration (Hrs Per Day)
Week Days	8.30 AM to 12.00 Midnight	15hrs 30 Min.
Saturdays	8.30 AM to 6.00 PM	9hrs.30 min.
Sundays	8.30 AM to 1.00 PM	4hrs 30 min.
Holidays	Closed during all Government Holidays	



Circulation Counter



Self-Check In & Check Out KIOSK



Computer Section



Reference Section



Periodicals Section



Kannada Section



Reading Hall



Skill Development Centre



Online Public Access Catalogue



Recreation Activity (Chess)

6.6.2.4. Centre for Excellence (CoE) /Advance Studies/ Centre for Advanced Faculty Training

Agricultural human resource development is playing a pivotal role in transforming agricultural scenario of the country. In this endeavour, UASB has established centres for excellence for the overall development and strengthening its staff to orient its research activities towards current concerns of agriculture, viz., climate change, new pest invasion, nutritional security etc... Facilities with respect to drought research were created under Niche Area of Excellence (NAE) “Integrate centre for drought research Genetic enhancement of crops by molecular approaches and phenotyping” while to understand the insect biodiversity, Niche area of excellence for capacity building in Taxonomy of Insects and Mites were initiated in 2012 by utilizing ICAR funds. Centre of Excellence for Nutri-Cereals (small millets) was established under National Food Security Mission, Ministry of Agriculture & Cooperation, GOI, New Delhi during 2012. The details of the centres established are furnished in the following table

Sl. No.	Name of the CoE / CAS / CAFT	No.	Year of Establishment	Funding Agency	Facilities Available	Outcome																		
1	Niche Area of Excellence (NAE) “Integrated centre for drought research Genetic enhancement of crops by molecular approaches and phenotyping”	1	2012-13	ICAR	<ul style="list-style-type: none"> • Phenomics facility: To establish a cost effective phenomic facility for precise imposition of moisture stress to capture genetic variability in stress adaptive traits • Training and HRD: To impart training and provide comprehensive exposure on different aspects of drought research • Mini-lysimeter phenomics platform • Phenotyping techniques: Non-Invasive imaging device, Field-Spec: plant-water relation; IR camera thermal Imaging; Plant eye growth measurement; CLT mechanisms viz., TIR, accelerated adding, oxidative stress tolerance mechanisms, Protein carbonyls etc 	<ul style="list-style-type: none"> ✓ Trait introgressed Rice variety KMP175 sustains productivity (22.43%) and saves water under semi-irrigated aerobic conditions. KMP-175 (Daksha) was notified in S.O. 1379 (E) dated 27.03.2018 ✓ QTLs for drought adaptive traits introgressed into IR-64 by MABAC: promising DC-BC₃F₅ line was identified <ul style="list-style-type: none"> • 98% background gene recovery and • 32% yield advantage under aerobic condition ✓ Groundnut transgenic events expressing Alfin: PDH45: HSF4A- 6 lines are found promising that could increase yield by 21-27% ✓ Double haploid technology has been standardized using rice hybrid KRH-4 anthers <p>Five training modules were developed such as 1) Drought adaptive traits, 2) Drought stress response, 3) Trait donor lines for adaptive traits, 4) QTL discovery and introgression by MAS and 5) Drought mitigation options and approaches</p>																		
2	Niche area of excellence for capacity building in Taxonomy of Insects and Mites.	1	2012-13	ICAR	<ul style="list-style-type: none"> • State of the art insect taxonomy lab and museum: One of the largest insect collections is being maintained in India • Training and HRD 	<ul style="list-style-type: none"> • Taxonomic manuals of Insects and mites with pictorial keys were prepared and it is made available at the libraries of all colleges of UASB • 37 Training Programmes were organized for both faculty and students <table border="1"> <thead> <tr> <th>Year</th> <th>Faculty (No.)</th> <th>Students (No.)</th> </tr> </thead> <tbody> <tr> <td>2012-13</td> <td>38</td> <td>9</td> </tr> <tr> <td>2013-14</td> <td>46</td> <td>19</td> </tr> <tr> <td>2014-15</td> <td>36</td> <td>21</td> </tr> <tr> <td>2015-16</td> <td>11</td> <td>76</td> </tr> <tr> <td>2016-17</td> <td>67</td> <td>89</td> </tr> </tbody> </table>	Year	Faculty (No.)	Students (No.)	2012-13	38	9	2013-14	46	19	2014-15	36	21	2015-16	11	76	2016-17	67	89
Year	Faculty (No.)	Students (No.)																						
2012-13	38	9																						
2013-14	46	19																						
2014-15	36	21																						
2015-16	11	76																						
2016-17	67	89																						
3	Centre of Excellence for Nutri-Cereals (Small Millets), UAS, GKVK, Bangalore	1	2012-13	National Food Security Mission, Ministry of Agriculture & Cooperation, GOI, New Delhi	<ul style="list-style-type: none"> • Established small millets processing unit with facilities like popping, flaking, pearling etc. to serve the needy farmers • Facilitating diversified utilization and small millets value-added product preparation 	<ul style="list-style-type: none"> • Technologies developed: More than 50 small millet value-added products were developed by the centre • 16.7 tonnes of small millets produced by farmers/ entrepreneurs were processed by utilizing the facilities created at the centre • 36 Trainings were organized 																		

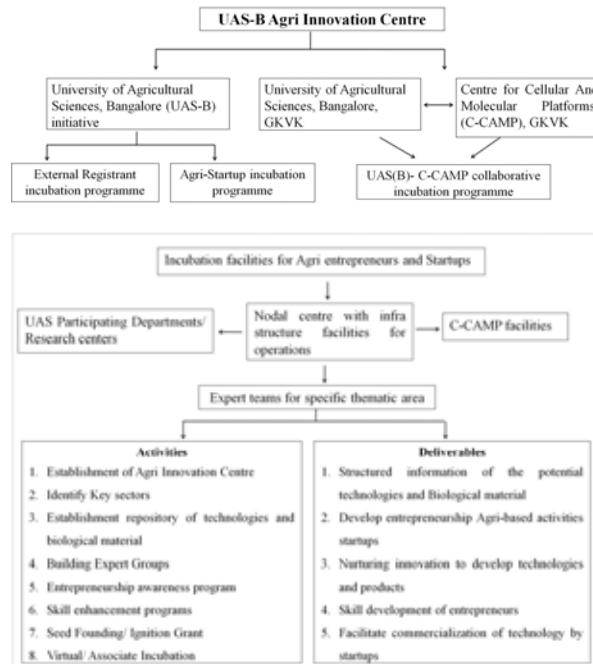
					<ul style="list-style-type: none"> • Incubation facility was created using the existing infrastructure facilities • Hands on Training for capacity building of farming community, entrepreneurs, etc. 	<table border="1"> <thead> <tr> <th>Year</th> <th>Trainings</th> <th>Trainees</th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>5</td> <td>150</td> </tr> <tr> <td>2017-18</td> <td>17</td> <td>534</td> </tr> <tr> <td>2018-19</td> <td>4</td> <td>149</td> </tr> <tr> <td>2019-20</td> <td>8</td> <td>235</td> </tr> <tr> <td>2020-21</td> <td>2</td> <td>80</td> </tr> <tr> <td>Total</td> <td>36</td> <td>1148</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Sale counter at the campus was opened during February-2018 in collaboration with the Davanagere and Chitradurga District Regional Co-op. Organic Farmer Federation which has sold nearly 50 tonnes of millet rice till date and the benefit of profit has gone directly to them • 5 Companies have signed MoAs to have its employees as Incubatee 	Year	Trainings	Trainees	2016-17	5	150	2017-18	17	534	2018-19	4	149	2019-20	8	235	2020-21	2	80	Total	36	1148												
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Total	36	1148																																					
4	UASB-VST Centre of Excellence for Farm Mechanization and Skill Development Training Centre	1	2018-19	VST Tillers and Tractors Ltd.	<ul style="list-style-type: none"> • Classroom – Charts, • Worktable • Three Cylinder Engine • Four Cylinder Engine • 6+2 and 8+2 sliding mesh gearbox • 1800 kg hydraulic • Partially constant mesh gearbox • Special tools for tractor and tiller • Tiller, Tractor, Reaper cut section models. • Dihonical case for big tractor • Implements for tractor • Weeders for operation and practical • Reaper for operation and practicals • Rice transplanter for operation and practical 	<ul style="list-style-type: none"> • The Centre has conducted 93 training benefiting a total of 1929 mechanics/students/farmers. <table border="1"> <thead> <tr> <th rowspan="2">Sl. No.</th> <th rowspan="2">Year</th> <th rowspan="2">No. of trainings</th> <th colspan="3">Total number of trainees</th> </tr> <tr> <th>Mechanic</th> <th>Students</th> <th>Farmers</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2018-19</td> <td>5</td> <td>95</td> <td>51</td> <td>0</td> </tr> <tr> <td>2</td> <td>2019-20</td> <td>45</td> <td>424</td> <td>351</td> <td>22</td> </tr> <tr> <td>3</td> <td>2020-21</td> <td>43</td> <td>830</td> <td>63</td> <td>0</td> </tr> <tr> <td></td> <td>Total</td> <td>93</td> <td>1349</td> <td>465</td> <td>22</td> </tr> </tbody> </table>	Sl. No.	Year	No. of trainings	Total number of trainees			Mechanic	Students	Farmers	1	2018-19	5	95	51	0	2	2019-20	45	424	351	22	3	2020-21	43	830	63	0		Total	93	1349	465	22
Sl. No.	Year	No. of trainings	Total number of trainees																																				
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1	2018-19	5	95	51	0																																		
2	2019-20	45	424	351	22																																		
3	2020-21	43	830	63	0																																		
	Total	93	1349	465	22																																		
5	Mahindra Excellence Centre	1	2004	Mahindra and Mahindra	<ul style="list-style-type: none"> • Arjun Complete tractor cut section • Gearbox • 235 DI Engine • Spring Tyne Cultivator 	<ul style="list-style-type: none"> • Provided practical trainings for students of UASB, farmers and service personnel • Students carried out their Project works with this facility • In-plant trainings were imparted to the UG students 																																	

Trainings of Centre of Excellence for Farm Mechanisation



6.6.2.5. Incubation Centre / Start up unit's / Venture Capital

The Agri-innovation centre (AIC) at UAS, Bangalore will nurture and strengthen the Agri. innovation and entrepreneurship. The aim is to foster cutting edge innovations in Agri. based sector leading to job creation and product development resulting in the economic benefits to the farming sector. The incubator centre is becoming instrumental in translating the potential scientific discoveries into products for economic development. Unlike IT and Pharma area, the Agri. entrepreneurship has just begun its impact in contribution to economic development. The conceptual framework of AIC is presented as flowchart.



Conceptual Framework of Agri-Innovation Center of UASB

The centre will be a virtual incubation centre with the participation of several departments/research centres of the university in the incubation activity. Yet another novel feature of the centre is to function as a Knowledge centre of Agri-based technologies with commercial potential and as a repository of biological material in terms of seeds, QTL and trait donor lines, microbial strains, genomic resources which can be outsourced by entrepreneurs to develop innovative products and processes. Till date 15 Agri Start Ups have registered at the UAS-B, Agri Innovation Centre while Two incubatees have registered for virtual incubation. The University started a collaborative incubation program with C-CAMP on 10th December 2017 to nurture the incubation in the areas of Molecular Biology in agriculture. Under this collaboration C-CAMP submitted and obtained the projects for Agri. Incubation (K-TECH TBI) from the Government of Karnataka on 24th January 2018. Under this three incubatees have completed the project and 6 projects are in progress.

The incubatees will be provided space (labs, aeroponics, green house etc.) and will physically incubate their start-up idea at the UAS-B Agri Innovation Centre, Bangalore. The deliverables of the Agri. innovation Centre:

- Nurturing innovations to develop technologies and products
- Develop entrepreneurship in Agri-based activities to start-ups
- Skill development of entrepreneurs
- Facilitate commercialization of technology by start-ups
- Structured information of the potential technologies and Biological material

The major equipments available in AIC are Confocal microscope, Scanning electron microscope, Fluorescent microscopes, LC/ GC-MS/ MS, 3D Printer, qRT-PCR.

The University generated technologies promoted through AIC are:

- Market Intelligence
- Small millets value added products viz., porridge products and instant / ready to consume / cook products
- Greener antimicrobial for control of postharvest pathogens fruits and vegetables
- Seeds of high yielding varieties/ hybrids
- Mushroom cultivation technology
- Advanced Invitro techniques for rapid micro-propagation techniques of tree species viz., teak, sandal wood and floriculture crops Anthurium species and Dahlia species.
- Low cost Plant Tissue Culture system
- Early detection and forecasting of pest and disease infestation

Agri Start Ups at the UASB-Agri Innovation Centre

Sl. No.	Name of the Company / Incubate	Project/objectives	Location of Incubation	Contact Details
1.	Sachin Hegdekudgi Dakappagowda, Managing Director, Roots Goods OPC Pvt. Ltd.,	To solve marketing problems for farmers by providing a transparent intuitive online platform for trading agricultural commodity	Department of Agricultural Marketing and Co-operation	9483004926
2.	Nandeesh, P. H, NARM Healthy food and beverages Pvt. Ltd, Bengaluru rural	Providing healthy fresh millets and high protein vegetable beverages to consumers at affordable price	Centre of Excellence for millets and Post-Harvest Technology	8123473732

3.	Dr. Vanitha, S. C. KAVAN BioSolutions, Bengaluru	Developing methods for bio-actives purification from plants and supplying the same for pharmaceutical, agriculture and relevant industry	Department of Horticulture	9538915770
4.	Venugopal Govinda Gowda, Rayonnant Natural Care Excellence Pvt. Ltd., Bengaluru	Greener antimicrobial for control of postharvest pathogens fruits and vegetables	Department of Plant pathology	7760099728
5.	Dr. C. Ganesh and Dr. Nitin Deshpande, Tranalab Pvt. Ltd., Bengaluru	To demonstrate functional expression, purification and preliminary characterization of various biosimilars and biotherapeutics.	Department of Plant Biotechnology	9342677672
6.	Dr. H. E. Shashidhar, Cultiva Agri Tech Pvt. Ltd., Kumarapark West, Bengaluru	To apply internet technology to help farmers access high quality inputs for agriculture and allied activities, at the time and the place of their liking.	Department of Agricultural Marketing and Co-operation,	9886319919
7.	Snehalatha Bentur, Bengaluru	To develop technological interventions for the bottlenecks in mushroom cultivation to make it an economical venture, Spawn production and to develop innovative processed food with prime focus on nutraceuticals	Department of Agril. Microbiology (Mushroom Lab)	-
8.	Naga Pavan Kumar Chevala., Sri Naga Thirumala Agricultural Biotechnologies, Bengaluru	To develop advanced <i>Invitro</i> techniques for rapid micropropagation of tree species <i>i.e.</i> , teak, sandal wood and floriculture crops Anthurium species and Dahlia species.	Department of Horticulture (Tissue Culture)	7019460246
9.	Shiva Prakash N. Cauvery Sannidhi for Indian Culture	Low-cost Plant tissue Culture system for local production of quality horticultural planting materials in rural areas	Department of Crop Physiology	9886419870
10.	Mr. Rakesh G. Arambha Krushitech India Pvt. Ltd	To early detect and forecast diseases, nutrition deficiency and drought condition in food crops by using image processing and machine learning in the field of agriculture.	Z.A.R.S., College of Agriculture V.C. Farm, Mandya	9986552202
11.	Geetha Velapil, Handcraft Studio Academy	Development of high-quality value-added natural products from herbs, medicinal and aromatic plants for health and wellness	Department of Horticulture	9845038893
12.	Hemanth Kumar, B.	Grafting knife	Department of Agricultural Engineering	8059400676

13.	Vani Shree C. S, Shreeka Life Style (OPC) Pvt. Ltd	To promote organic and millet farming	Centre of Excellence for millets and Post- Harvest Technology	9844801544
14.	Rupak T.K, Shreeka Innovations	Organic and millet product sourcing and product development	Centre of Excellence for millets and Post- Harvest Technology	9845057756
15.	Vishwa R Surya	Creation of end-to-end solutions for growing units, specifically for microgreens including but not limited to seeding, growing, harvesting and even marketing	Agri. Innovation Centre, Department of plant Biotechnology	8123776771
16	Kushal Jain, Mandifarms, Zume Agritech Pvt. Ltd	Developing low-cost hydroponic technology	Department of Horticulture	9513373300 kushal@ma ndifarms.co m
17	Udhay Gopal, Perfura Technologies India Pvt. Ltd	Establishment of innovative primary processing units for processing of various dryland crops like millets, pulses and groundnut in Karnataka	College of Agriculture engineering	9894800009 udhay.gopal @perfuratech. com
18	Dr. Kariyanna, Hithkari Horticulture	Standardization of propagation techniques of Florida Gold Butter fruit, Byrachandra Variety of Jack fruit and Patel Jumbo variety of Jamun through grafting & budding	Department of Horticulture	9845218724 hithkariplants@gmail.com www.hithak arinursery.c om
19	Havyas K.S. Beegle Agritech Pvt. Ltd	Predictive analysis for precision farming and virtual market for perishable crops	Department of Agri marketing and cooperation.	8197472257 Havyaskudup aje17@gmail. com

External Registrant Incubates

Sl. No.	Name of the Company / Incubates	Project / Objective	Place of Incubation	Contact Details
1.	Dr. L. Ramakrishna Rao, Managing Director, R-Kay Value Foods Pvt. Ltd.	Instant fermented millet and instant millet porridge products	Centre of Excellence for millets and Post-Harvest Technology	9845287305
2.	Srinath. C. S,	Millet based ready to cook products	Centre of Excellence for millets and Post-Harvest Technology	9845200840
3	Dharendrakumar, HYFIBRON	High fibre dietary food mix	College of Agriculture engineering	8310440903 ndkumar1977@gmail.com
4	Anagha, K. Scion Agricos Private Limited	A unique data collection system for the Agriculture stakeholders through farm edge mobile app.	Department of Agri marketing and cooperation.	6362834069 anaghaks@scionagricos.com

6.6.2.6. Technology Enabled Learning Resources

Faculties are provided with computer and laptops that are enabled with LAN / and Wi-Fi connectivity to access of information about their respective disciplines pertaining to teaching, research and extension activities. They are also being deputed to capacity building programmes organized by national and international organizations both in virtual and offline mode. They are being constantly encouraged to participate in conferences / seminars / webinars of their respective disciplines. Further, the following technologies are being used to enhance the learning experience of the students and train the faculties of the College.

Sl. No.	Technology based Infrastructure created	Digital Contents loaded	Teacher training / Data systems created	Monitoring and Evaluation framework adopted to sustain
1	Phenomics facility	<ul style="list-style-type: none"> Automated and real-time data capturing 	<ul style="list-style-type: none"> Enhance skills of the teacher / researcher in this frontier area of research 	<ul style="list-style-type: none"> Regular monitoring of system operation by the Head of the department
2	Managed drought environment facility	<ul style="list-style-type: none"> Semi-automated 	<ul style="list-style-type: none"> Training students and staff for research on drought and water use efficiency 	<ul style="list-style-type: none"> Being maintained regularly
3	Greenhouse facilities	<ul style="list-style-type: none"> Semi-automated 	<ul style="list-style-type: none"> Training students and staff for research under controlled conditions 	<ul style="list-style-type: none"> Being maintained regularly
4	Growth chambers	<ul style="list-style-type: none"> Automated 	<ul style="list-style-type: none"> Training students and staff for research under controlled condition specially for model plants 	<ul style="list-style-type: none"> Being maintained regularly
5	National facility for Stable isotope studies	<ul style="list-style-type: none"> Continuous flow IRMS 	<ul style="list-style-type: none"> Training faculty and students through research and teaching activities 	<ul style="list-style-type: none"> Research program is being developed and is a self-sustained facility
6.	ICT enabled classrooms and laboratories	<ul style="list-style-type: none"> Animated videos on cell division, DNA replication, transcription and translation 	<ul style="list-style-type: none"> Quarterly and annual reports document the academic activities and accomplishments of faculty 	<ul style="list-style-type: none"> Dean of the College monitors the facility to sustain such initiatives
7	Vidwan-tool at library	<ul style="list-style-type: none"> e- portal of the faculty profile 	<ul style="list-style-type: none"> Comprehensive profile each faculty of the University is being maintained for the effective academic networking and research collaboration 	<ul style="list-style-type: none"> University Librarian regularly monitor and liaison with the faculty and IT-admin

8	IRINS	IRINS-Indian Research Information Network System of Information and Library Network (INFLIBNET) Centre.	<ul style="list-style-type: none"> This portal is being used for university and faculty members, scientists to collect, curate and showcase the scholarly communication activities and provide an opportunity to create the scholarly network. 	<ul style="list-style-type: none"> University Librarian regularly monitor and liaison with the faculty and IT-admin
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6.6.2.7. Integrated Learning Systems (Experiential Learning)

Number of Integrated Learning Systems sanctioned by ICAR: 03

ICAR has sanctioned Three ELP units during FY 2019-20 (December), each to College of Agriculture, Hassan, College of Agriculture, Mandya and College of Sericulture, Chintamani

Sl. No.	Name of the Integrated Learning Systems (Experiential Learning)	Functional Condition	Profit Sharing with students (Rs.)					Total
			16-17	17-18	18-19	19-20	20 - 21	
1	Production technology for Bio fertilizer and bio-inoculants	Functioning & 20 students registered	-	-	-	-	Biofertilizer production is in progress and the 75% of the profit will be shared among the students after the course completion.	-
2	Commercial Chawki Rearing Centre	Functioning & 14 students registered	-	-	-	-	Chawki rearing is going on and the 75% of the profit will be shared among the students after the ELP completion.	-
3	Production Technology for Bio-fertilizers.	Functioning	-	-	-	-	Started functioning and 75 % of the profit will be shared among the students after the completion of the ELP.	-

Note: The implementation of EL programmes have been hindered due COVID-19.

6.6.2.8. Academic Industry Interface

The details of the academic-industry interface made during the reporting period for the benefit of students at the College of Agriculture, GKVK and various constituent colleges are as follows:

Sl. No.	Name of the Academic Industry Interface	Digital Contents loaded	Important channels for knowledge transfer between Univ. & Firms	Benefits derived by University				
				2016-17	2017-18	2018-19	2019-20	2020-21
1	SRFMTTI, Garladinne, Anantapur. AP	NA	In plant training	54		54		
2	Jain Irrigation Systems Ltd., Jalgaon,	NA	Industrial attachment / Internship	24	44	14		
3	CSWCRTI, Bellary, Karnataka	NA	In plant training	22				

4	CIAE, Bhopal	NA	In plant training	7	10	15	12
5	VST, Bengaluru & ESCORTS, Bengaluru	NA	Industrial attachment / Internship	50		22	10
6	CIPHET, Ludhiana	NA	In plant training		10		
7	CSWCRTI, Ooty,	NA	In plant training			5	2
8	Paramount Nutritious India Pvt. Ltd.	NA	Industrial attachment			7	
9	Indian Institute of Food Processing Technology	NA	In plant training			11	
10	KRSRAC	NA	In plant training			15	16 8
11	Ratnagiri Impex	NA	In plant training			6	5
12	Rexroth Bosch	NA	In plant training			10	7
13	Cattle Feed Unit, Rajanukunte	NA	In plant training			6	2
14	Sujay Irrigation Pvt. Ltd.	NA	In plant training			8	8
15	CIAE- Coimbatore	NA	In plant training				12
16	Central Farm Machinery Training and Testing Centre, Tractor Nagar, Budni,	NA	Industrial attachment / Internship				20
17	KOMUL, NH4, Huthur (P),	NA	In plant training				4
18	ITC Pvt. Ltd.	NA	Internship/ Industrial attachment				2
19	Nestle India Pvt. Ltd., Mysore	NA	In plant training				2
20	Alcon Consulting Engineers Pvt. Ltd.	NA	In plant training				8
21	Mother Dairy, Yelahanka	NA	In plant training				7
22	Public-Private Linkage for Crop Breeding Research	NA	<ul style="list-style-type: none"> • 2 Ph.D. student research collaboration has been established with Bayer crop sciences and Namdhari Seeds • Research collaboration has been established for 2 Ph.D. students with Bayer crop sciences and Namdhari Seeds Pvt. Ltd. The students are also awarded with research fellowship for 3years. 				
23	Research collaboration with I & B Seeds Pvt. Ltd Bengaluru and AVRDC	NA	In each year two Senior Research Fellowships for the Ph.D. students @ Rs. 32,500/month.				
24	Effect of Moonlight on Night Foraging and communication behaviour of the Rock bee, <i>Apis dorsata</i> . F with NCBS	NA	One M.Sc. Student Mr. Mr. Sangamesh, K., was supported by Dr Axel Brockman of NCBS during 2017-18 and 2018-19.				
25	NABARD student internship	NA	One and two M.Sc. students of Department of Agricultural Economics got fellowship during 2016-17 and 2017-18, respectively.				

Apart from the Academic, University is also associated with firms, individual farmers and government organisations by providing various services such as Bio-efficacy studies, Biofertilizer analysis, Consultancy services, Equipment evaluation, Fertility analysis, Field inspection, Performance analysis,

Soil & Water analysis and Plant sample analysis. During the report period, University has generated about **Rs.1561.08/- lakhs** by providing the 1478 services.

Sl. No.	Year wise	Services Provided by the University	Resource generated (Amount in Lakhs)					
			Less than One Lakh		More than One Lakh		Grand Total	
			No.	Amount	No.	Amount	No.	Amount
1	2016-17	Bio-efficacy Studies	4	1.49	31	95.84	35	97.33
		Biofertilizer Analysis	19	2.92	2	3.71	21	6.63
		Equipment Evaluation	10	5.51	13	26.21	23	31.71
		Fertility Analysis	21	0.88	-	0.00	21	0.88
		Field Inspection	2	0.69	-	0.00	2	0.69
		Performance Analysis	32	2.39	8	18.99	40	21.38
		Soil & Water Analysis	149	6.55	3	16.18	152	22.73
		Plant Sample Analysis	4	0.18		0.00	4	0.18
		Total (2016 - 17)	241	20.60	57	160.93	298	181.53
2	2017-18	Bio-efficacy Studies	3	0.56	32	109.21	35	109.77
		Biofertilizer Analysis	18	1.89	2	4.34	20	6.23
		Consultancy Services	1	0.46	-	0.00	1	0.46
		Equipment Evaluation		0.00	6	10.06	6	10.06
		Fertility Analysis	28	2.12	1	2.83	29	4.96
		Field Inspection	3	1.09	-	0.00	3	1.09
		Performance Analysis	20	2.05	7	11.52	27	13.57
		Soil & Water Analysis	97	3.95	-	0.00	97	3.95
		Plant Sample Analysis	3	0.10	-	0.00	3	0.10
		Total (2017-18)	173	12.2	48	137.96	221	150.19
3	2018-19	Bio-efficacy Studies	8	2.71	42	340.17	50	342.88
		Biofertilizer Analysis	26	2.77	1	1.42	27	4.19
		Equipment Evaluation	4	2.25	10	22.22	14	24.47
		Fertility Analysis	24	1.24	-	0.00	24	1.24
		Field Inspection	4	1.77	-	0.00	4	1.77
		Performance Analysis	32	3.40	21	49.51	53	52.91
		Soil & Water Analysis	162	8.42	-	0.00	162	8.42
		Total (2018-19)	260	22.56	74	413.32	334	435.88
4	2019-20	Bio-efficacy Studies	6	0.65	37	243.83	43	244.48
		Biofertilizer Analysis	36	3.93	2	8.31	38	12.24
		Equipment Evaluation	7	4.34	15	34.70	22	39.05
		Fertility Analysis	32	1.25	4	31.86	36	33.11
		Field Inspection	1	0.44	-	0.00	1	0.44
		Performance Analysis	23	2.06	10	46.29	33	48.35

		Soil & Water Analysis	140	4.47	-	0.00	140	4.47
		Plant Sample Analysis	1	0.03	-	0.00	1	0.03
		Total (2019-20)	246	17.17	68	365.00	314	382.17
5	2020-21	Bio-efficacy Studies	9	3.53	36	280.70	45	284.23
		Biofertilizer Analysis	45	5.88	2	12.92	47	18.80
		Equipment Evaluation	1	0.30	4	9.98	5	10.28
		Fertility Analysis	19	0.94	-	0.00	19	0.94
		Field Inspection	1	0.44	-	0.00	1	0.44
		Performance Analysis	43	3.01	19	86.29	62	89.30
		Soil & Water Analysis	129	5.86	1	1.42	130	7.27
		Plant Sample Analysis	2	0.04	-	0.00	2	0.04
		Total (2020 - 21)	249	19.99	62	391.32	311	411.30
Grand Total			1169	92.56	309	1468.52	1478	1561.08

The list of major firms, farmers and government organisations associated with University is as below:

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					Grand Total
			2016-17	2017-18	2018-19	2019-20	2020-21	
1	Central Power Research Institute	Bio-efficacy Studies & Performance Analysis					6.76	6.76
2	IFFCO	Performance Analysis				3.19	3.19	6.37
3	M/ S Rallis India Ltd.	Bio-efficacy Studies	7.30					7.30
4	M/s Adama India Pvt. Ltd.	Bio-efficacy Studies, Biofertilizer Analysis & Performance Analysis			23.95	12.39	84.98	121.32
5	M/s Arunodaya Seeds Pvt. Ltd.	Bio-efficacy Studies & Performance Analysis	2.88		1.21			4.08
6	M/s Arysta Life science India Ltd.	Bio-efficacy Studies				8.85		8.85
7	M/s BASF India Ltd.	Bio-efficacy Studies			18.29	10.80	10.56	39.65
8	M/s Bayer Crop Science Ltd.	Bio-efficacy Studies, Performance Analysis & Soil Water Analysis	1.38		8.14	7.43	13.72	30.67
9	M/s Bioscience Pvt. Ltd	Performance Analysis				2.12		2.12
10	M/s Biostadt India Ltd.	Bio-efficacy Studies		6.52	7.61			14.13
11	M/s Caress Industries Pvt. Ltd.	Bio-efficacy Studies		1.73	1.95			3.67
12	M/s Charoen Pokphand Seeds (India) Pvt. Ltd.	Performance Analysis			3.10		2.83	5.93
13	M/s Chr-Hansen India	Bio-efficacy Studies & Biofertilizer Analysis				9.49		9.49
14	M/s Coromandel International Ltd.	Bio-efficacy Studies			4.25		11.80	16.05
15	M/s Crimsun Organics Pvt. Ltd.	Bio-efficacy Studies		1.24				1.24
16	M/s Crysal Crop Protection Ltd.	Performance Analysis			1.24			1.24
17	M/s Daya Enterprises	Equipment Evaluation		1.12				1.12

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					Grand Total
			2016-17	2017-18	2018-19	2019-20	2020-21	
18	M/s Deccan Fine Chemicals (I) Pvt. Ltd.	Bio-efficacy Studies					3.45	3.45
19	M/s Dhanuka Agritech Ltd.	Bio-efficacy Studies & Biofertilizer Analysis	24.29	4.07	4.60			32.96
20	M/s Dharma Agro Industries	Equipment Evaluation	1.63					1.63
21	M/s Dow Agrosiences India Pvt. Ltd.	Bio-efficacy Studies & Biofertilizer Analysis	1.14	9.83	14.87	4.87		30.71
22	M/s E.I. Dupont India Pvt. Ltd.	Bio-efficacy Studies	12.73	13.26		4.87		30.86
23	M/s Eldorado Agritech Pvt. Ltd.	Performance Analysis			1.77			1.77
24	M/s Eshaan Agro Traders And Agri. Implement Manufacturing	Equipment Evaluation	2.19					2.19
25	M/s Excel Crop Care Ltd.	Bio-efficacy Studies	6.90					6.90
26	M/s FIB – Sol Life Technologies Pvt. Ltd.	Performance Analysis				3.78		3.78
27	M/s FMC India Pvt. Ltd.	Bio-efficacy Studies & Performance Analysis		2.66	30.98		15.58	49.21
28	M/s Foliage Crop Solutions Pvt. Ltd.	Performance Analysis	1.15					1.15
29	M/s Ganga Kaveri Seeds Pvt. Ltd.	Bio-efficacy Studies & Performance Analysis	2.88	5.13	6.14	1.86		16.00
30	M/s Gharda Chemicals Ltd.	Bio-efficacy Studies	9.23		128.68	64.25	76.55	278.71
31	M/s Godrej Agrovet Ltd.	Bio-efficacy Studies			4.96	10.12	10.12	25.19
32	M/s Harmony Ecotech Pvt. Ltd.	Bio-efficacy Studies				1.42		1.42
33	M/s I & B Seeds Pvt. Ltd.	Performance Analysis		3.54	5.49			9.03
34	M/s India Pesticides Ltd.	Bio-efficacy Studies	1.55	3.32				4.88
35	M/s Indo-American Hybrid Seeds (I) Pvt. Ltd.	Performance Analysis	2.30	1.15	2.83			6.28
36	M/s Indofil Industries Ltd.	Bio-efficacy Studies		3.11	12.04	11.95	8.44	35.53
37	M/s Insecticides (India) Ltd.	Bio-efficacy Studies		14.95	38.65	8.85	5.78	68.23
38	M/s Irrigation Association	Performance Analysis			1.25			1.25

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					Grand Total
			2016-17	2017-18	2018-19	2019-20	2020-21	
39	M/s Isagro (Asia) Agrochemicals Pvt. Ltd.	Bio-efficacy Studies	3.22					3.22
40	M/s ISK Biosciences India Pvt. Ltd.	Bio-efficacy Studies	3.11					3.11
41	M/s Janani Agro Tech	Equipment Evaluation			2.25			2.25
42	M/s Kaveri Seed Company Ltd.	Bio-efficacy Studies & Performance Analysis			11.15	13.01	6.81	30.98
43	M/s L.G Life Sciences India Pvt. Ltd.	Bio-efficacy Studies		6.20				6.20
44	M/s Lakshmi Machineries	Equipment Evaluation			2.21			2.21
45	M/s LG Life Sciences India Pvt. Ltd.	Bio-efficacy Studies	6.18					6.18
46	M/s Madina Welding Workshop	Equipment Evaluation	1.09					1.09
47	M/s Maharashtra Hybrid Seeds Company Pvt. Ltd.	Performance Analysis				1.42		1.42
48	M/s Mate (India) Pvt. Ltd.	Performance Analysis	1.37					1.37
49	M/s Microbi Agrotech Pvt. Ltd.	Performance Analysis		1.29				1.29
50	M/s Nandu Chemicals	Equipment Evaluation				1.13		1.13
51	M/s National Innovation Foundation	Bio-efficacy Studies			4.25			4.25
52	M/s Nivven Industrial Works	Equipment Evaluation	2.17					2.17
53	M/s Novozymes South Asia Pvt. Ltd.	Bio-efficacy Studies, Performance Analysis & Soil Water Analysis	11.81	14.41		3.54	6.20	35.95
54	M/s NSL Sugars Ltd.	Fertility Analysis				7.67		7.67
55	M/s Omni Active Health Technologies	Fertility Analysis & Performance Analysis		2.83	2.66			5.49
56	M/s Parijat Industries India Pvt. Ltd.	Bio-efficacy Studies		1.24	1.24			2.48
57	M/s Pavan Agro Power Tillers	Equipment Evaluation	1.10					1.10
58	M/s Phytotron Agro Products (India) Pvt. Ltd.	Performance Analysis	3.09			1.77		4.86
59	M/s PI Industries Ltd.	Bio-efficacy Studies			9.44	4.13		13.57

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					Grand Total
			2016-17	2017-18	2018-19	2019-20	2020-21	
60	M/s Pioneer Hi-Bred Pvt. Ltd.	Bio-efficacy Studies & Performance Analysis	1.91	7.05	11.87	3.21	1.07	25.11
61	M/s PNP & Associates Pvt. Ltd.	Bio-efficacy Studies			1.53			1.53
62	M/s Rainbow Agrosociences Pvt. Ltd.	Bio-efficacy Studies				6.61	6.02	12.63
63	M/s Raj Shakthi Agro Industries	Equipment Evaluation			1.96			1.96
64	M/s Rallis India Ltd.	Bio-efficacy Studies, Performance Analysis & Soil Water Analysis	7.67	12.32		13.10	1.42	34.50
65	M/s S.G. M. Technologies	Equipment Evaluation	1.73					1.73
66	M/s S.R. Agro Tech	Equipment Evaluation	4.38					4.38
67	M/s S.S. Agro Industries	Equipment Evaluation		1.12				1.12
68	M/s S.S. Machineries	Equipment Evaluation			1.06			1.06
69	M/s Sea Energy Pvt. Ltd.	Bio-efficacy Studies				1.77		1.77
70	M/s Semillas Fito India Pvt. Ltd.	Performance Analysis		1.23				1.23
71	M/s Shankara Farm Equipments	Equipment Evaluation	1.23					1.23
72	M/s Shanmukha Agritech Ltd.	Biofertilizer Analysis			1.42			1.42
73	M/s Shree Thulasi Agro Links	Equipment Evaluation	1.09					1.09
74	M/s Smart Chem Technologies Ltd.	Performance Analysis			4.46			4.46
75	M/s Solvay Specialities India Pvt. Ltd.	Bio-efficacy Studies					6.02	6.02
76	M/s Somanath Seeds Pvt. Ltd.	Performance Analysis	1.72	1.86	1.83			5.41
77	M/s Sri Lakshmi Narasimha Swamy Industries	Equipment Evaluation & Performance Analysis			7.87		1.18	9.05
78	M/s Sri Rama Industries	Equipment Evaluation		2.81				2.81
79	M/s Sri Ranganatha Industries	Equipment Evaluation	3.80					3.80
80	M/s Sri Shivanaradamuni Trailers	Equipment Evaluation			1.12			1.12

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					
			2016-17	2017-18	2018-19	2019-20	2020-21	Grand Total
81	M/s String Bio Pvt. Ltd.	Performance Analysis					2.36	2.36
82	M/s Suhas Agro Traders	Performance Analysis					1.42	1.42
83	M/s Sumitomo Chemical India Pvt. Ltd.	Bio-efficacy Studies & Biofertilizer Analysis	4.00	4.34				8.34
84	M/s Swarup Chemical (P) Ltd.	Bio-efficacy Studies		1.77				1.77
85	M/s T. Stanes & Company Ltd.	Bio-efficacy Studies		2.88				2.88
86	M/s Telluris Biotech India Pvt. Ltd.	Bio-efficacy Studies					2.66	2.66
87	M/s Thorat Agro Works	Equipment Evaluation			2.81	4.68		7.49
88	M/s Tropical Nano Sciences Pvt. Ltd.	Bio-efficacy Studies	1.43					1.43
89	M/s Ubale Engineering Works	Equipment Evaluation			2.94			2.94
90	M/s UPL-Advanta Ltd.	Bio-efficacy Studies & Performance Analysis	6.50		19.29	25.84	36.99	88.63
91	M/s V.S.T. Tillers Tractors Ltd.	Equipment Evaluation	1.64	1.11				2.75
92	M/s Vijetha Fab Engineering	Equipment Evaluation					2.59	2.59
93	M/s Vipul Square	Bio-efficacy Studies					16.40	16.40
94	M/s Yojan Engineering Care	Equipment Evaluation	1.98					1.98
95	M/s Yusuf Khan Engineering Works	Equipment Evaluation					2.59	2.59
96	The Assistant Director of Agriculture	Soil & Water Analysis	1.18					1.18
97	The Assistant President	Fertility Analysis				7.67		7.67
98	The Assistant Vice President	Fertility Analysis				8.26		8.26
99	The Proprietors of various firms	Bio-efficacy Studies & Equipment Evaluation		2.25		25.08	4.80	32.13
100	Dr. R.K. Walia	Bio-efficacy Studies	2.75					2.75
101	Dr. Smita Kaul Sharma	Performance Analysis					2.93	2.93
102	Mr. Anchal Agarwal	Bio-efficacy Studies					5.85	5.85

Sl. No.	Name of the Academic Industry Interface	Services Provided by the University	Benefits derived by University i.e., Resource generated (Rs. in Lakhs)					
			2016-17	2017-18	2018-19	2019-20	2020-21	Grand Total
103	Mr. C. Venkatesh Naik	Equipment Evaluation	2.19					2.19
104	Mr. Esther Vinita Kumar	Bio-efficacy Studies	3.44					3.44
105	Mr. G. K. Sateesha	Equipment Evaluation				1.15		1.15
106	Mr. Ghanshyam R. Raja	Performance Analysis				17.74		17.74
107	Mr. Gururaj	Performance Analysis					2.66	2.66
108	Mr. K. Devaraj	Performance Analysis					1.42	1.42
109	Mr. Ketan Shah	Bio-efficacy Studies				12.04		12.04
110	Mr. Ketan Shan	Bio-efficacy Studies				6.37		6.37
111	Mr. M. R. Ravikumar	Bio-efficacy Studies					8.85	8.85
112	Mr. M. Satish Kumar	Equipment Evaluation				2.04		2.04
113	Mr. M.Y. Shanawaz	Bio-efficacy Studies				17.35	17.35	34.69
114	Mr. P G K Dutt	Fertility Analysis				8.26		8.26
115	Mr. P. Sasidharan	Biofertilizer Analysis				3.00		3.00
116	Mr. Ravikumar C. Hunasikatti	Equipment Evaluation		1.64				1.64
117	Mr. Sunil Kumar	Bio-efficacy Studies	1.64					1.64
118	Mr. V. N. Ashok	Equipment Evaluation				1.96		1.96
Grand Total			160.93	137.96	413.32	365.00	391.32	1468.52

6.6.2.9. National Ranking (ICAR / MHRD)

University got 06th rank, 14th rank, 22nd rank and 18th rank in All India Agricultural Universities status for the year 2016 – 17, 2017 -18, 2018 -19 and 2019 -20, respectively.

Sl. No.	Name of the Ranking	Rank of the University				
		2016-17	2017-18	2018-19	2019-20	2020-21
1	ICAR	06 th	14 th	22 nd	18 th	-
2	UGC / ICAR	-	-	-	-	-
3	Any Other	-	-	-	-	-

6.6.3. Research Support

The research in UAS, Bangalore has a vision to generate cutting edge farm technologies to address the agrarian challenges of ten southern districts of Karnataka State. The University has reoriented its research mandates through practicing strategic, basic and applied research. Concerted incessant efforts are being made to evolve sustainable technologies to address location specific problems in agriculture and its allied fields. At present, research activities are focussed both on regional and zonal scale to address emerging issues to achieve sustainable development in food, nutrition and economic security.

The research at UAS, Bangalore has led to development of production technologies in array of crops grown its operational jurisdiction. These technologies have revolutionised farm production and spurred the overall growth in farming community. The University has contributed as much as 296 high yielding crop varieties/hybrids and also six animal breeds since its inception. The varieties released in finger millet are viewed as a landmark achievement in imparting food and economic security of the finger millet growers of southern India. The committed research in the field of crop improvement resulted in first ever hybrids in cotton, rice and sunflower. Besides developing elite cultivars UAS, Bangalore has also evolved several adoptive technologies that have revolutionised the production of cereals, pulses, oilseeds and commercial crops. Presently, the research focus is on targeted crop improvement and tailoring agro-techniques suitable to the changed climatic scenario and market driven secondary agriculture.

6.6.3.1. Research Council

The Research Council is the apex body for research activities in the University and is responsible for formulating research policy and guidelines. The Council consists of all the Directors of the University, Deans of constituent colleges, Associate Directors of Research / Extension, Heads of the Departments of the University, State level officers from Agriculture and allied developmental departments viz., Horticulture, Sericulture, Forestry, Agricultural Marketing, Women and Child Welfare, Watershed Management, Water Resource Development as its permanent members with the Vice-Chancellor as Chairperson and Director of Research as Member Secretary.

Besides these permanent members, one Scientist of Eminence from other State Agricultural University, one Agro-Industrialist and two progressive famers are nominated by the Vice Chancellor. All the members of the Research Council other than the ex-officio members shall hold office for a term of two years and shall not be eligible for re-nomination to any of the authorities of the University, as per the Government of Karnataka Act.No.10 of 2010. This council prioritizes the research programmes and projects undertaken or to be undertaken by different divisions with a view to promote effective coordination. It also acts as a governing body to review physical, fiscal and administrative facilities for implementing research projects. The Council has the responsibility

of orienting research to meet the needs of farmers and other stake holders, foster and coordinate public -private partnership in research. In a nutshell, the Research Council sets the research goals and gives an overall direction to the university research programme.

Present Composition of the Research Council

Sl. No.	Name	Designation	Chairman/ Member/ Convener
1	Dr. S. Rajendraprasad	The Vice-Chancellor, UAS, Bangalore	Chairman
2	Dr. G.N. Dhanapal	Registrar, UAS, Bangalore	Member
3	Mr. B. Y. Srinivas	The Director of Agriculture	Member
4	Mr. S. Z. Pasha	The Director of Agricultural Marketing	Member
5	Mrs. B. F. Taranum	The Director of Horticulture	Member
6	Dr. Arundathi	The Director of Women & Child Welfare	Member
7	Dr. C. P. Shylaja	The Director of Sericulture	Member
8	Dr. A. Padmaiah Naik	The Director of Watershed Management	Member
9	Dr. Sanjai Mohan	The Chief Conservator of Forest, Research & Training	Member
10	Sri. Mazhar Javeed	Chief Engineer – Water Resource Development Organization	Member
Directors of University			
1	Dr. S. Rajendraprasad	Director of Education (I/c), UAS, Bangalore	Member
2	Dr. Y. G. Shadakshari	Director of Research, UAS, Bangalore	Member Secretary
3	Dr. M. Byregowda	Director of Extension, UAS, Bangalore	Member
Deans of the Constituent Colleges			
1	Dr. D. L. Savithramma	Dean (Agri.), College of Agriculture, GKVK	Member
2	Dr. N. Srinivasa	Dean (PGS), UAS, Bangalore	Member
3	Dr. N. Deva Kumar	Dean (Agri.), College of Agriculture, Hassan	Member
4	Dr. P. Venkataravana	Dean (Seri.), College of Sericulture, Chintamani	Member
5	Dr. Venkatesh	Dean (Agri.), College of Agriculture, Mandya	Member
6	Dr. Ravikumar	Special Officer, College of Agricultural Engineering, Bangalore	Member
7	Dr. M. P. Rajanna	Special Officer, College of Agriculture, Chamarajanagar	Member
Associate Directors of Research			
1	Dr. Niranjana Murthy	Associate Director of Research (Hq.), ZARS, GKVK	Member
2	Dr. S.N. Vasudevan	Associate Director of Research, ZARS, VC Farm, Mandya	Member
Associate Directors of Extension			
1	Dr. K. Narayana Gowda	Associate Directors of Extension, UAS, GKVK	Member
2	Dr. D. Raghupathi	Associate Directors of Extension, V.C. Farm, Mandya	Member
Heads of the Departments of the University			
1	Dr. D.L. Savithramma	Professor & University Head, Dept. of Genetics & Plant Breeding	Member
2	Dr. G.N. Dhanapal	Professor & University Head, Dept. of Agronomy	Member
3	Dr. N. Srinivasa	Professor & University Head, Dept. of Agril. Entomology	Member
4	Dr. T. Narendrappa	Professor & University Head, Dept. of Plant Pathology	Member
5	Dr. G.K. Mukund	Professor & University Head, Dept. of Horticulture,	Member
6	Dr. K. Narayana	Professor & University Head, Dept. of Agril.	Member

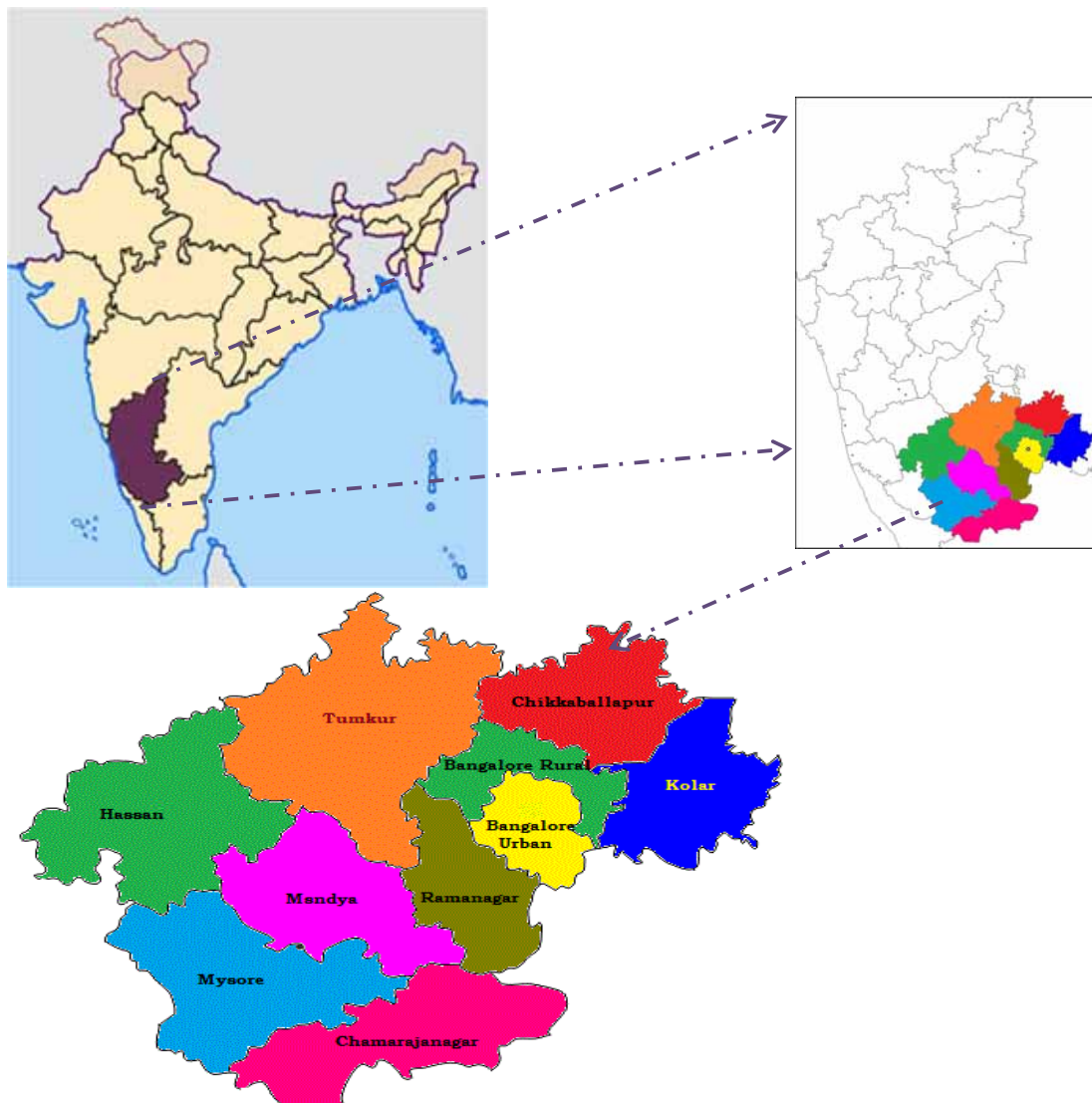
	Gowda	Extension	
7	Dr. K.B. Umesh	Professor & University Head, Dept. of Agril. Economics	Member
8	Dr. V. Palanimuthu	Professor & University Head, Dept. of Agril. Engg.,	Member
9	Dr. Y.N. Nanja Reddy	Professor & University Head, Dept. of Crop Physiology	Member
10	Dr. R.L. Ravikumar	Professor & University Head, Dept. of Plant Biotechnology	Member
11	Dr. K.S. Jagadish	Professor & University Head, Dept. of Apiculture.	Member
12	Dr. N. Eranna	Professor & University Head, Dept. of Agril. Micro.	Member
13	Dr. K.T. Prasanna	Professor & University Head, Dept. of Forestry & Env. Sc.,	Member
14	Dr. R.N. Bhaskar	Professor & University Head, Dept. of Sericulture	Member
15	Dr. P.J. Devaraju	Professor & University Head, Dept. of Seed Science & Tech.	Member
16	Dr. H.C. Prakash	Professor & University Head, Dept. of Soil Science & Agril. Chemistry	Member
17	Dr. K.N. Krishnamurthy	Professor & University Head, Dept. of Agril. Stats, Maths. & Computer Science	Member
18	Dr. J. Balakrishna	Professor & University Head, Dept. of Kannada Studies	Member
19	Dr. O.R. Nataraj	Professor & University Head, Dept. of Animal Science	Member
20	Dr. M.S. Ganapathy	Professor & University Head, Dept. of Agril. Marketing & Co-operation	Member
21	Dr. K. Geetha	Professor & University Head, Dept. of Food Science & Nutrition	Member
Progressive farmers (2 No.)			
1	Sri. K.A. Manje Gowda Since 2020	Manje Gowda S/O Andani Gowda, Kommanahalli, KR Pet Taluk, Mandya District	Member
2	Smt. Kamamma Since 2020	Kamamma W/O M K Nagarajaiah, Mayaganahalli, Ramanagara Taluk, Ramanagara District	
Scientist of eminence from outside the University			
1	Dr. Prabhakar (Since 2019)	Former Project Co-ordinator, AICRP on Small Millets, University of Agricultural Sciences, Bangalore	Member
Agro-Industrialist			
1	Sri. Yogananda Since 2020	Agro-industrialist, Shri. Siddalingeshwara Industries, # 31, Industrial area, 1 st phase, MC Road, Mandya	Member

Details of Research Council Meetings:

Research Council of UAS, Bangalore holds its meeting annually to discuss various aspects of the research. Deliberations taken place during the council meetings are prioritised and taken forward for their effective implementations. The details of issues discussed in the research council meeting held during last five years and their corresponding actions initiated by the university are presented in Annexure – 5.

6.6.3.2. Directorate of Research

The University is catering to the research needs of 10 districts of Southern Karnataka (Fig.) coming under the jurisdiction of UAS, Bangalore comprising Eastern dry zone (Zone 5), Southern dry zone (Zone 6) and parts of the Central dry zone (Zone 4) and Southern transition zones (Zone 7). The Director of Research is responsible for the due performance of the research stations as well as planning, coordinating and monitoring research in the University. A multi-tiered arrangement involving zonal stations, extension specialists and teaching departments within the University, linkages with other research institutions in the zone, line departments, progressive farmers and agri-entrepreneurs provides operational framework for formulating relevant research agenda.



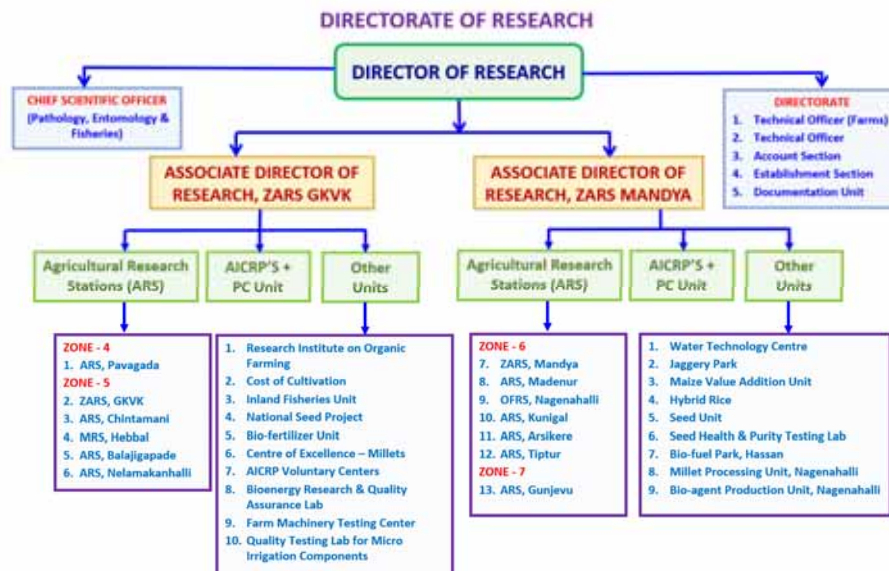
Research jurisdiction of UASB in 10 Southern districts of Karnataka

Directorate of Research is headed by Director of Research and who is in turn assisted by two Associate Directors of Research (ADRs) functioning at Directorate of Research, GKVK, Bengaluru and ZARS, VC Farm, Mandya. The Associate Directors of Research monitor the Agriculture Research Stations and research projects (AICRPs and externally funded) functioning in their operational jurisdiction.

ADRs of each zone facilitate Director of Research in coordinating regular on-going research activities of the university and establishing close linkage between line departments in identification and prioritization of location specific research needs, formulation and implementation of suitable technical programme and overall monitoring of research programme of the scientists working in the zone to achieve the identified mandates. In addition, the scientists will be motivated to develop collaborative research projects for external funding to meet the research gaps. Besides, performing location specific research activities, consultations and certification (Testing trials of varieties, equipment, agro-

chemicals, bioinoculants etc.), the Directorate of Research establishes linkages between university and other research institutions of national and international repute.

Each Agricultural Research Station is headed by a Senior Scientist / Farm Superintendent and All India Co-ordinated Research Projects (AICRP) are led by Scheme Heads. The Director of Research is technically assisted by Chief Scientific Officers, Technical Officers and Documentation unit. The detailed pictorial representation of operational setup of directorate is given in the Figure.



Research Faculty Strength – Permanent

Research faculty in the university consists of multi-disciplinary team of scientists working in Zonal Agricultural Research Stations (ZARS) / Agricultural Research Stations (ARS) and All India Co-ordinated Research Projects. Presently, a total of 114 scientists, in the cadre of Professor (7), Associate Professor (40), Assistant Professors (61) and Research Assistants (6) are working in the directorate and are being assisted by 314 technical and supporting staff in all research stations and AICRPs. The detailed regular research faculty strength is furnished in the below mentioned Table.

Details of sanctioned, filled and vacant positions in the Directorate of Research

Sl. No.	Cadre	Sanctioned scientists (No.)	Scientists in place (Appointed) (No.)	Vacant Position (No.)	Vacant Position (%)
1	Professor	11	9	2	18.18
2	Associate Professor	55	42	13	23.64
3	Assistant Professor	90	63	27	30.00
4	Others (Research Assistant/ Field Supervisor)	7	5	2	28.57
Total		163	119	44	26.99

Research Faculty Strength - Deputed

Sl. No.	Cadre	Teaching faculty	Extension faculty	Contractual faculty	Any other arrangements (Emeritus, etc.)
1	Professor	-	-	-	04 (2020-21 to 2022-23) 04 (2018-19 to 2020-21)
2	Others				

Teaching faculty operating research projects	66
Extension faculty operating research projects	08
Research Associates in AICRP / externally funded projects	53
SRFs in externally funded projects	82
JRFs in externally funded projects	34
Ramanujan Fellow / INSA / NPDF	02
Total	254
Non-teaching staff in externally funded projects	228

Position of the Technical and Supporting staff - Permanent

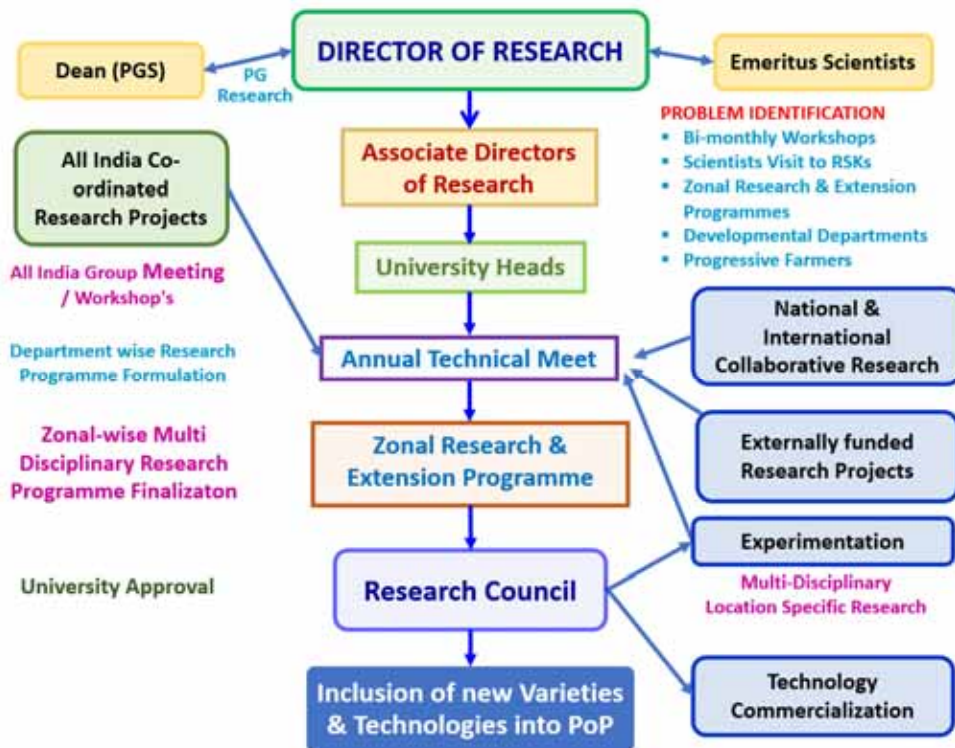
Sl. No.	Position	Sanctioned staff (No.)	Staff in place (Appointed) (No.)	Vacant Position (No.)	Vacant Position (%)
1	Sr. Tech. Asst. / Tech. Asst.	30	28	2	6.67
2	Supporting staff	568	474	94	16.55
Total		598	502	96	16.05

Research Co-ordination Mechanism

The Director of Research with the assistance of Zonal ADRs, Chief Scientific Officers, Technical Officers will coordinate, monitor and evaluate all the research activities including All India Coordinated Research Projects and all externally funded research projects. Teaching, research and extension faculties of the university who are involved in research are annually brought together through Zonal Research and Extension Programme (ZREP) Workshop. The results of the previous year's research programme viz., variety release proposal / new farm trials/ multi-location trials (MLT)/ technologies for inclusion in Package of Practices / patent / technologies for commercialisation and technical programmes (new, ongoing and concluded) conceptualized during the current year are discussed in the annual technical meets of all the disciplines conducted by respective University Heads are presented, discussed and recommended in the ZREP workshop. The Zonal workshops, conducted annually which is attended by Vice-Chancellor, Director of Research, Director of Extension, Deans, ADRs, ADEs, Heads of the departments / University, Officers of State Developmental Departments, all the scientists, representatives from other related institutions, progressive farmers and representatives of corporate sector engaged in agri-business / industry.

On approval of Research Council, the newly released varieties and other technologies approved in ZREP workshop will be recommended for inclusion in the Package of Practices of the University. New technical programmes and MLTs will be implemented at ZARS/ ARSs while Farm Trials will be conducted in the farmers' fields through KSDA and KVKs. Technologies recommended for patents / commercialization will be further processed through IPR Cell of the University.

The University has state of art research facilities supported with required infrastructures. The genomic facility, marker assisted selection, centre of excellence in dryland agriculture, small millets, water technology centre, advanced centre for bioenergy research, niche area of excellence for capacity building in taxonomy of insects and mites and integrated centre for drought research: genetic enhancement of crops by molecular approaches and phenotyping and central instrumentation facility are worth mentioning facilities in the University. Presently Directorate of Research is coordinating 32 All India Co-ordinated Research Projects, 165 externally funded projects from national and international agencies and 75 in house funded projects in various crops and subject domains of agriculture and allied subjects.



Flowchart of Research Co-ordination mechanism

Research and Seed Production Centres

Research in the university is organized both on Zonal and on thematic basis. Karnataka has ten agroclimatic zones, of which, UASB catering to the research needs of 10 southern districts spread over four agroclimatic zones viz., Eastern Dry Zone (Zone-5) and Southern Dry Zone (Zone-6) completely and a part of Central Dry zone (Zone-4) and Southern Transitional Zone (Zone-7). Location specific and problem oriented research in principal crops of cereals, pulses, oilseeds, mulberry, commercial and horticulture crops (Finger millet, rice, maize, sorghum, redgram, fieldbean, horsegram, cowpea, blackgram, greengram, groundnut, sunflower, castor, sesamum, sugarcane, jackfruit, tamarind etc.) to enhance the productivity, maximize the yield and in turn improve the livelihood status of farming community while ensuring food and nutritional security through precision and sustainable agricultural practices are being formulated by the scientists in 13 ARSs located in 4 agroclimatic zones (Fig).

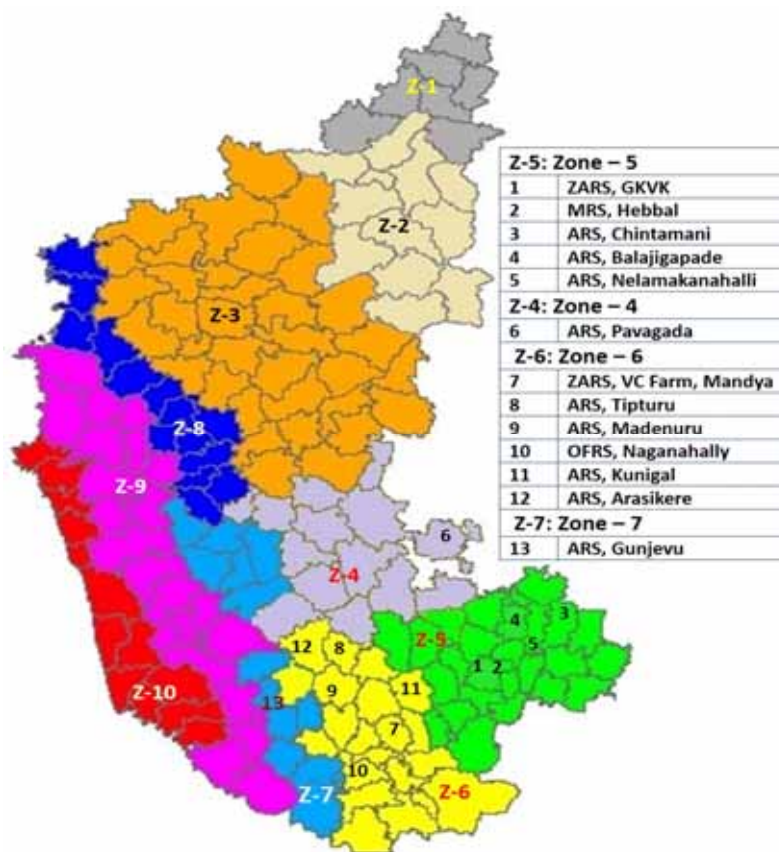
Research activities are monitored by respective ADRs, the admin heads of two ZARSs namely ZARS, GKVK comprising of five ARS [ARS Chintamani, ARS Balajigapade, ARS Nelamakanahalli, MRS Hebbal of Zone 5, ARS Pavagada of Zone - 4] and ZARS, Mandya with six ARS (ARS Arasikere, ARS Madenuru, ARS Kunigal, ARS Tiptur, OFRS Naganahalli of Zone - 6 and ARS, Gunjevuvu of Zone – 7] as detailed in the following table.

Research stations of UASB in different Agro-climatic zones

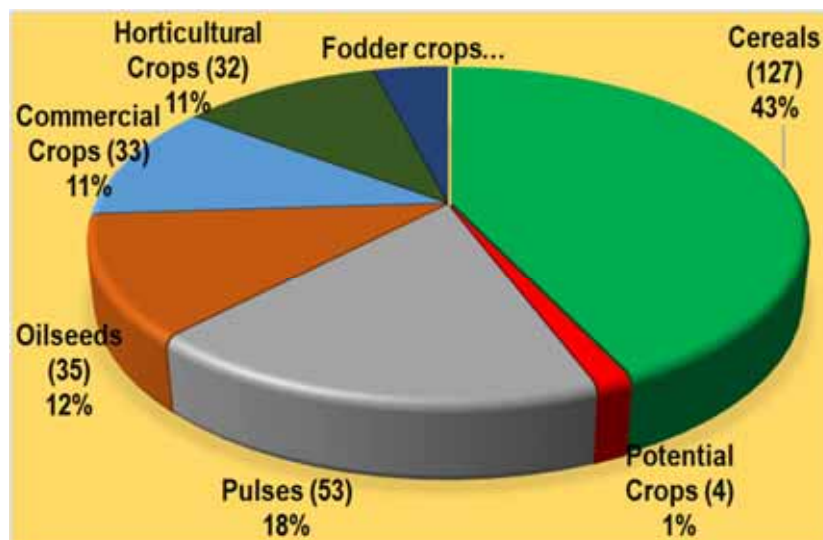
Zonal Head	Research Station
Associate Director of Research (Hq) GKVK, UAS (B)	<u>Zone – 5:</u>
	1. ZARS, GKVK, Bangalore
	2. MRS, Hebbal, Bangalore
	3. ARS, Chintamani, Kolar District
	4. ARS, Balajigapade, Chikkaballapur Dist.
Associate Director of Research,	<u>Zone – 4:</u>
	1. ARS, Pavagada, Tumkur District
	<u>Zone – 6:</u>

Zonal Head	Research Station
VC Farm, Mandya	1. ZARS, VC Farm, Mandya
	2. ARS, Tiptur, Tumkur District
	3. ARS, Madenur, Hassan District
	4. OFRS, Naganahally, Mysore District
	5. ARS, Kunigal, Tumkur District
	6. ARS, Arasikere, Hassan District
	Zone – 7:
1. ARS, Gunjevu, Hassan District	

Since inception, the University has released 296 high yielding crop varieties / hybrids in different crops (Fig) viz., Cereals (127), Potential Crops (4), Pulses (53), Oilseeds (35), Commercial crops (33), Horticultural Crops (32) and Fodder crops (12). The major flag bearers of these are unique varieties in finger millet (Indaf, MR and GPU series), pigeon pea (BRG series), fieldbean (HA series) and hybrids in Rice (KRH series), sunflower (KBSH series), maize (MAH & NAH series). During the last five years (2016-17 to 2020-21), UASB has released 26 varieties and 96 technologies in different crops / themes for inclusion in package of Practices.



Location of Research Stations of UAS, Bangalore



Varieties released by UASB since inception (1965-2020)

Breeder seed of all notified varieties/ hybrids is being produced as per the indent of Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW), GoI in all 13 Agricultural Research stations and supplied to public / private seed organizations for further multiplication in seed chain as foundation and certified seeds with required standards of seed certification. Seed production activities in the university are implemented and monitored by National Seed Project (NSP) which functions under the Directorate of Research.

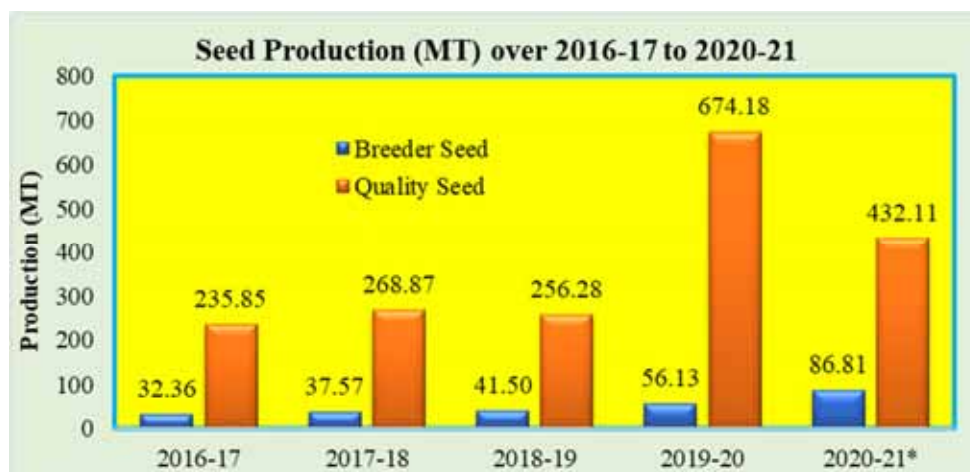
The NSP was established during the year 1979-80 with the financial assistance from World Bank of Rs.1.68 crores with a grant-in-aid of Rs.45 lakhs from GOI. The University has created very good infrastructure facilities for quality seed production, processing and storage. Two seed processing units, one at GKVK, Bengaluru and another at ZARS, Mandya with processing capacity of 2.0 tonnes /hr have been established. In addition, the storage facilities are established to accommodate around 60,000 quintals of quality seeds. NSP was strengthened under Mega Seed Project by providing additional seed processing plants, storage and production facilities with adequate manpower.

Seed production activities of the university are planned and executed in all the 13 agricultural research stations. Details of breeder and quality seeds produced by NSP during 2016-17 to 2020-21 are presented in the table and figure below. In order to strengthen and augment the quality seed requirement for spread and popularization of varieties, quality seeds are produced in large scale through Scientist-Farmer Participatory (SFPP) approach under Seed Village Programme (Table).

Breeder & quality Seed produced (MT) at research stations of UASB during 2016-17 to 2020-21

Crops	2016-17		2017-18		2018-19		2019-20		2020-21*	
	BS	QS	BS	QS	BS	QS	BS	QS	BS	QS
Cereals	13.37	213.63	9.30	241.86	16.34	219.06	7.24	614.43	11.78	344.17
Pulses	9.97	17.83	7.73	26.74	6.84	37.10	5.97	57.66	4.35	87.33
Oilseeds	9.01	4.39	20.54	0.28	18.32	0.13	42.93	2.10	70.67	0.61
Total	32.36	235.85	37.57	268.87	41.50	256.28	56.13	674.18	86.81	432.11

Note: BS - Breeder seed, QS – Quality seed, *Expected quantity



*Expected quantity

Breeder and quality Seed produced (MT) at UASB during 2016-17 to 2020-21

Quality Seed produced (MT) under SFPP during 2016-17 to 2020-21

Crops	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Cereals	1390.71	836.05	973.17	966.23	1474.05	5640.21
Pulses	107.83	116.72	80.10	50.25	204.80	559.69
Oilseeds	71.10	106.21	81.33	22.68	86.70	368.01
Total	1569.63	1058.98	1134.60	1039.15	1765.55	6567.92

The thrust areas of research and breeder and quality seeds seed produced (MTs) in 13 research stations / seed production centres of UASB are presented in table and figure below.

Breeder and quality seed produced in various research stations (2016-17 to 2020-21)

Sl. No.	Name of the Research / Seed Prodn. Centre	Thrust Areas of Research	Seed Production (MTs)									
			2016-17		2017-18		2018-19		2019-20		2020-21	
			B S	Q S	B S	Q S	B S	Q S	B S	Q S	B S	Q S
Zone-5												
1	ZARS, GKVK, Bengaluru	Research on dry farming techniques, horticultural crops, millets, pulses, oil seeds, sericulture, organic farming, zero budget natural farming, soil test with crop response, long-term fertilizer usage, control of pests and diseases, food science & nutrition, potential crops, seed production in cereals, millets, pulses, oil seeds, agro-forestry and fodder research programmes, precision farming, integrated farming systems, medicinal and aromatic plants, apiculture, post-harvest technology, agricultural engineering and seed technology and horticultural nursery.	8.91	8.88	12.35	22.13	21.17	25.26	37.36	34.34	31.78	20.38

2	MRS, Hebbal, Bengaluru	Seed multiplication programme, weed control and inland fisheries research & seed production.	1.20	0.00	1.93	0.00	2.21	0.00	2.28	0.00	1.59	0.00
3	ARS, Chintamani, Kolar District	Research on groundnut production technologies, seed multiplication programme, sericulture and multiplication of planting materials.	0.75	1.20	0.42	2.01	0.40	2.96	0.00	13.88	3.00	9.91
4	ARS, Balajigapade, Chikkaballapura District	Research on integrated farming systems, varietal development and seed production programme in pigeonpea, sunflower, pulses, millets and multiplication of planting materials and fodder slips.	2.06	4.59	0.54	12.83	0.51	6.22	0.41	9.52	2.09	11.68
5	ARS, Tiptur, Tumkur District	Research on varietal evaluation, integrated farming systems, conduct of multi-location trials, Seed production of millets and multiplication of planting materials including fodder slips and seeds.	0.00	5.46	2.58	22.83	0.55	2.61	0.07	10.23	1.70	40.77
6	ARS, Nelamakanahalli, Chikkaballapura District	Research on dry farming and seed production of millets, minor millets and pulses.	0.09	0.84	0.00	6.81	0.60	6.85	0.37	12.14	0.60	26.21
Zone-6												
7	ZARS, VC Farm, Mandya	Research on developing improved crop varieties viz., rice, maize, sugarcane, ragi, pulses and fodder crops etc., Research on water management and integrated farming systems. Seed production in rice, finger millet, maize etc., Production of quality planting material of fodder crops, sugarcane, coconut etc.	11.86	182.54	7.80	148.10	12.20	157.79	6.40	52.42	8.13	178.27
8	ARS, Madenur, Hassan District	Research on biofuel crops, varietal evaluation and seed production of pulses and oil seeds, production of elite planting material of Biofuel crops.	0.04	0.11	0.02	0.19	0.00	0.21	0.00	0.18	0.22	0.30
9	OFRS, Nagahalli, Mysore District	Research on organic farming / natural farming, integrated farming system and organic seed production.	0.00	0.11	0.00	0.37	0.17	1.02	1.13	0.21	1.50	24.37

10	ARS, Arasikere, Hassan District	Varietal evaluation, seed production and multiplication of planting material and coconut seedlings.	2.54	3.49	7.20	6.01	2.34	3.76	3.69	2.16	4.00	9.10
11	ARS, Kunigal, Tumkur District	Research on fodder crops, millets and pulses, conduct of multi-location trials and production of quality seeds and planting materials.	0.21	13.39	1.93	14.63	0.52	17.49	0.99	21.67	2.92	36.90
Zone-4												
12	ARS, Pavagada, Tumkur District	Groundnut based cropping system and identification of alternate crops to groundnut. Management of pest & diseases of groundnut with emphasis on red headed hairy caterpillar, Seed production of millets & multiplication of planting materials.	0.00	0.00	0.00	8.92	0.00	0.00	0.00	0.00	0.00	1.15
Zone-7												
13	ARS, Gunjevur, Hassan District	Research on biofuel crops and multiplication of planting materials in dryland horticultural crops and seed production.	1.22	4.26	0.84	5.42	0.54	11.81	2.75	31.97	7.34	33.18

Note: BS - Breeder seed; QS – Quality seed



Seed production centres of the University

Contribution of Directorate of Research in academic programmes

The expertise and man power available in research are also made available to teaching and extension in university. Scientists working under the Directorate of Research are offering courses, involved in curriculum development, guiding PG students without affecting original mandates of research. The details of land utilized for student research, courses offered, curriculum developed and students guided by research faculties are presented below.

Providing Research Plots for student learning

Research Scientists of the Directorate of Research serving as chairperson / advisory committee members are facilitating their PG students research work by providing the research plots, infrastructure and other facilities available at their respective AICRPs/ ZARS/ ARS. Annually, based on the availability a portion of land area is being devoted to students' research. The details of land spared to the various academic programmes are summarised below.

Year wise details of land provided to PG research work in Zone- 5 & Zone - 6

Sl. No.	Particulars	Land Allotted for Student Research (Area in ha)	
		Zone - 5	Zone - 6
1	2016-17	90.40	27.32
2	2017-18	90.41	27.32
3	2018-19	91.01	27.32
4	2019-20	97.50	27.32
5	2020-21	99.10	27.32

Contribution of researchers for teaching, curriculum development

The research faculties are actively involved in offering UG and PG courses and course curriculum development/revision by serving as members of Board of Studies (UG & PG). Research Scientists working under the Directorate of Research were involved in offering 136 Undergraduate, 81 Postgraduate and 3 Diploma courses in addition to guiding 1515 postgraduate students as chairman and 1686 postgraduate students as members of advisory committee during 2016-17 to 2020-21. The details of course offered and students guided by the research faculties are furnished below.

Year wise details of courses offered by researchers during 2016-17 to 2020-21

Sl. No.	Academic year	Semester wise courses offered (Nos.)					
		Undergraduate		Postgraduate		Diploma	Total Courses
		I	II	I	II		
1	2016-17	17	12	10	0	-	39
2	2017-18	14	11	0	6	-	31
3	2018-19	4	11	14	11	3	43
4	2019-20	7	27	18	13	-	65
5	2020-21	33	0	9	0	-	42
Total		75	61	51	30	3	220

Year wise details of abstract of PG students research guidance as Chairman and Member of Advisory Committee

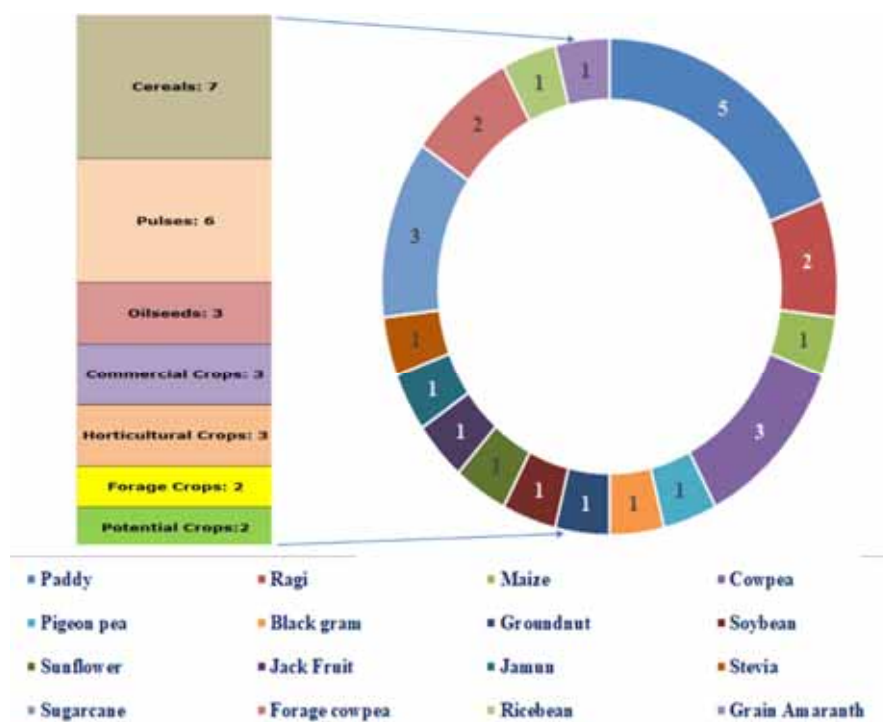
Year	PG students research guidance			
	As Chairman of Advisory Committee		As Member of Advisory Committee	
	M. Sc./M.Tech.	Ph. D	M. Sc./ M.Tech.	Ph. D.
2015-16	121	144	154	120
2016-17	129	159	122	137

2017-18	120	110	125	139
2018-19	129	117	124	147
2019-20	133	121	199	140
2020-21	118	114	157	122
Total	750	765	881	805

6.6.3.3. Technology Developed and its Adoption:

Development and release of new Crop Varieties/ Hybrids (2016-17 to 2020-21)

Over the last five years (2016-17 to 2020-21), UASB has developed several locally relevant production technologies that have substantially enhanced farm productivity in the State and beyond. In the last five years, UASB has released 26 varieties in different crops which are tailored to diverse agro-ecological conditions of the state. A basket of 96 sustainable farming technologies developed by the Scientists have transformed the landscape of the rainfed agriculture in Southern India by ensuring livelihood of farming community. Production technologies developed for dry land agriculture have helped in stabilizing farm productivity even in sparse rainfall years. University has also developed several low costs, eco-friendly technologies for managing pests and diseases. Most serious pests on rice, ragi, maize, have been tackled in the recent past. The adoption of new crop varieties/hybrids and technologies by farmers has resulted in increase of production and productivity of cereals, pulses, oilseeds and sugarcane.



Abstract of high yielding crop varieties/ hybrids released by University

The economic impact evaluation of UASB released varieties in ragi and redgram were analysed and quantified by the scientists of the department of Agricultural Economics using economic surplus, total factor productivity approach and partial budgeting approach. Studies conducted revealed that by releasing GPU-28, finger millet variety and BRG-2, redgram variety have given 27 and 15 per cent higher gross returns as compared to check variety Indaf-5 and TTB-7. Considering its area, the net value was Rs. 556.9 and Rs. 26.02 Crores with IRR (Internal rate of returns) of 79 and 44 per cent, respectively. Thus, the net economic benefit realized was 115.44 and 3.84 crores/year. The details of the adoption per cent of technologies and area coverage is presented in the table below.

List of crop varieties/ hybrids released and their adaption

Sl. No.	Year	List of Approved Technologies developed	Adoption of technologies (%)	Coverage of technology in UAS Jurisdiction (ha)		
1	2016-17	Varieties recommended for release				
		• Rice: Paustic-9 (High Protein)	5	110		
		• Rice: Paustic-1 (Zinc Rich)	5	110		
		• Rice: Paustic-7 (Iron Rich)	5	110		
		• Rice: KMP-175 (Short duration)	8	3500		
		• Ragi: KMR-340 (White Ragi)	10	5430		
		Technologies recommended for inclusion in Package of Practices				
		• Nutrient management practices for organic groundnut production: Application of Biodigested liquid manure or Enriched Biodigested liquid manure@ 25kg N equivalent per ha. + 3 sprays of 3% vermiwash or panchagavya to supplement nutrient demand of groundnut for realizing higher yield(14 q/ha) under organic cultivation.	3	500		
		• Nutrient management practices for organic production of dry chilli: Application of Biodigested liquid manure or Enriched Biodigested liquid manure@ 125kg N equivalent per ha+ 3 sprays of 3% vermiwash or panchagavya to supplement nutrient demand of dry chilli for higher yield (20.6 q/ha) under organic cultivation.	2	10		
		• Weed management in direct seeded dry rice: Spraying of pendimethlain 30 EC 1000 g ai/ha at 2 DAS followed by bispyribac sodium 10 SC 25 g ai/ha at 25 DAS (41q/ha) gives on par yield compared to three hand weeding (42q/ha) with a considerable saving in weeding cost (Rs.2744 / ha.). Combination of herbicides controls wide range of weeds and will reduce crop - weed competition and further reduces the dependence on manual labour under labour scarce conditions.	3	560		
		• Effect of herbicide mixture in transplanted rice: Application of pretilachlor 50 EC 750 g ai/ha at 3 DAP followed by ethoxysulfuron 15 WG 18.75 g ai/ha at 25 DAP recorded on par yield(5485 kg/ha) compared to two hand weeding (5539 kg/ha) with a considerable saving in weeding (Rs.3272 / ha.). Combination of herbicides will give broad spectrum control of weeds and will provide season long weed free situation.	5	2175		
• Pre – emergence herbicide evaluation in sunflower: Application of oxadiargyl 80 WP 240 g ai/ha at 3 DAS (22 q/ha) or pendimethalin 38.7 CS 562.5 g ai/ha at 3 DAS (20q/ha) gives similar yield compared to two hand weeding (22q/ha) with a considerable saving in weeding cost (Rs.4350 - 5300/ ha).	37	420				
• Management of Dendroporthe (Loranthus) in sapota: Cotton padding of 4 g copper	5	150				

	<p>sulphate + 0.5 g 2,4-D sodium salt 80% WP was found safer to sapota tree without any phytotoxicity symptoms and gives satisfactory control of the parasite <i>Dendrophthoe</i> (<i>Loranthus</i>).</p>		
	<ul style="list-style-type: none"> • Developed protocol for Standardization of agro-techniques for System of Rice Intensification (SRI): With this 24-30% increase in grain yield and economic returns can be achieved besides saving 39-40% water over conventional transplanting. 	3	1300
	<ul style="list-style-type: none"> • Developed protocol for Standardization of Agro –Techniques for Mechanized System of Rice Intensification (MSRI): Planting 15 days old seedlings through transplanter at wider row spacing (23X23 cm.) with seedlings raised under tray method @25 kg seed per ha resulted in better yield and returns. 	10	4340
	<ul style="list-style-type: none"> • Developed protocol for Standardization of nursery techniques for Mechanized System of Rice Intensification (SRI): Seedlings raised using tray method with vermicompost + soil (1:1) + DAP spray (2%) at 10 DAS resulted in vigorous seedlings. 	10	4340
	<ul style="list-style-type: none"> • Technology for Organically processed chemical free Jaggery preparation: Addition of organic materials such as lime @300 gram/1000 litres of juice and Bhandi mucilage @ 0.75 kg/ 1000 juice before boiling to get high sucrose, low reducing sugars and low Ash percentage for good quality Jaggery. 	30	350 Units
	<ul style="list-style-type: none"> • Sea weed sap (K sap) application in Maize: Application of recommended NPK together with spraying of 10% ‘K’ seaweed sap on 20th, 40th & 70th days after sowing of maize gives higher yields in and economic returns in zone-6. 	5	2000
	<ul style="list-style-type: none"> • Foliar spray of micronutrient mixture for Ginger: In ginger cultivation, spraying of micronutrients mixture @ 5g per litre of water after transplanting at 60th, 90th & 120th days 20% higher yields over farmers’ method & 8.18% higher yield compared to the existing recommendation of NPK in zone-6. 	9	240
	<ul style="list-style-type: none"> • Bio-management of sheath blight of Paddy: Dipping paddy seedlings with <i>Pseudomonas fluorescens</i>, for 30 minutes @ 10 ml. per lit. of water prior to transplanting and as foliar application 2.50 lit. per ha (5 ml/l of water) at 45 & 55 days after transplanting gives good control. 	40	7480
	<ul style="list-style-type: none"> • Integrated management of late blight in Potato: Soil application of <i>Trichoderma harzianum</i> and <i>Pseudomonas fluorescens</i> through farm yard manure (enrichment-1kg/100kg for 15days), tuber treatment with Mancozeb (2.0g / L). Prophylactic spray – Mancozeb (2.5 g/L)–5 weeks after planting followed by sprays of Fenamidone+Mancozeb (3.0 g/L), Iprovalicarb +Propineb (4.0 g/L) and 	90	860

		Dimethomorph (1.0 g/l) + Mancozeb (2.0 g/L) based on disease severity at 7 th , 9 th and 11 th week after planting is effective in the management of late blight disease in potato.										
		<ul style="list-style-type: none"> Management of foot rot disease in Finger Millet: Soil application of value-added compost prepared by addition of 500g of <i>Trichoderma viride</i> and 500 g of <i>pseudomonas fluorescens</i> in 25 kg FYM incubated for 15 days and applied over an acre before transplanting give good control of foot rot disease in finger millet in zone-6. 	10	4620								
		<ul style="list-style-type: none"> Use of Plant Trainers to realize Higher Yield and Economic Returns: Use of single row of GI wire mesh per row of plants is useful in the reduction of cost of cultivation due to less labour and training materials costs (<i>Eucalyptus</i> poles, plastic and jute thread). Yield per ha., is higher in GI wire mesh trained treatments due to long crop stand and healthiness of the crop. GI wire mesh staked plants are easier for cultivation viz., harvesting and plant protection operations. GI wire mesh can be used for training vegetables like Bitter Gourd, Yard Long Bean, Pole Bean & tomato and other creeper vegetables. GI wire mesh can be used for a minimum period of ten years (<i>Eucalyptus</i> sticks last for two years). Higher yields realized in different crops are as follows: <table border="1"> <tr> <td>Bitter Gourd</td> <td>14 t/ha</td> </tr> <tr> <td>Yard Long Bean</td> <td>23.18 t/ha</td> </tr> <tr> <td>Pole Bean</td> <td>28.67 t/ha</td> </tr> <tr> <td>Tomato</td> <td>70 t/ha</td> </tr> </table>	Bitter Gourd	14 t/ha	Yard Long Bean	23.18 t/ha	Pole Bean	28.67 t/ha	Tomato	70 t/ha	15	600
Bitter Gourd	14 t/ha											
Yard Long Bean	23.18 t/ha											
Pole Bean	28.67 t/ha											
Tomato	70 t/ha											
2	2017-18	Varieties recommended for release										
		<ul style="list-style-type: none"> Maize Hybrid: MAH-14-5 	15	3700								
		<ul style="list-style-type: none"> Pigeon pea: BRG-3 	30	820								
		<ul style="list-style-type: none"> Cowpea: KBC-9 	5	285								
		<ul style="list-style-type: none"> Grain Amaranth: KBGA-4 	20	50								
		<ul style="list-style-type: none"> Sugarcane: VCF 0517 	60	7270								
		<ul style="list-style-type: none"> Forage Cowpea: MFC-09-1 	5	350								
		<ul style="list-style-type: none"> Jamun: Chinthamani Selection-1 	45	50								
		<ul style="list-style-type: none"> Stevia: GKVK Stevia-1 	12	10								
		Technologies recommended for inclusion in Package of Practices										
		<ul style="list-style-type: none"> Storage of Groundnut Seeds: The groundnut pods packed and stored under modified storage atmosphere of 50% carbon dioxide (CO₂) treatment provide protection against insect pest of groundnut pod borer <i>Caryodon serratus</i> (Olivier) up to 12 months of storage under ambient conditions without affecting the seed quality parameters. 	25	--								
		<ul style="list-style-type: none"> Storage of Soybean Seeds: Soybean seeds stored in super grain bag under ambient conditions extend the storability up to 18 months without losing viability and vigour as it provides better protection against moisture absorption, pest and diseases. 	30	--								

	<ul style="list-style-type: none"> • Nipped castor + finger millet intercropping system: Intercropping finger millet with nipped castor in 2:1 row proportion improved the castor yield (18 q/ha) with B.C. Ratio of 3.41. 	5	20
	<ul style="list-style-type: none"> • Precision farming techniques in sugarcane: This technology saves water to the tune of 30-40 per cent with drip fertigation compared to surface irrigated crop. The mean water use efficiency was 102.76 kg/ ha mm under drip fertigation compared to 44.98 kg/ha mm with surface irrigated crop. The drip fertigation recorded an overall B:C ratio of 3.57 over surface irrigated sugarcane. 	5	2000
	<ul style="list-style-type: none"> • Precision farming techniques in maize: Precision farming comprising grid based nutrient management with LMH approach was found superior in Zone – 6 and gives 18 per cent higher yield with higher returns (Rs.25,000/ha.) compared to farmers practice. 	10	1400
	<ul style="list-style-type: none"> • Application of water soluble NPK fertilizers: Application of water soluble NPK fertilizers through drip irrigation at two days interval recorded 45.8 per cent higher sugarcane yield with 40 per cent saving of irrigation water in Zone - 6. 	5	5000
	<ul style="list-style-type: none"> • Foliar application of water-soluble complex fertilizer (19:19:19) on chickpea: Spraying of WSF 19:19:19 @1.5% at flowering and pod development stage in chickpea enhanced the seed yield (16 q/ha) of chickpea with B.C. Ratio of 2.84. 	10	20
	<ul style="list-style-type: none"> • Effect of agricultural lime to improve maize productivity and soil health: Application of 200 kg of agricultural lime to acid soils along with recommended dose of FYM + NPK improved maize grain and stover yield apart from maintaining sustained soil health. 	20	100
	<ul style="list-style-type: none"> • Nutrient management practices for organic production of onion: Application of biodigested liquid manure or Enriched Biodigested liquid manure@ 125kg N equivalent/ha + 3 sprays of 3% vermiwash can be applied to supplement nutrient demand of onion under organic cultivation. 	20	70
	<ul style="list-style-type: none"> • Nutrient management practices for organic production of hybrid chilli: Application of Biodigested liquid manure or Enriched Biodigested liquid manure@ 125kgN equivalent/ha+3 sprays of 3% panchagavya can be applied to supplement nutrient demand of hybrid chilli under organic cultivation. 	15	60
	<ul style="list-style-type: none"> • Organic management practices: Organic management practices for finger millet, paddy, maize, redgram and groundnut has been developed and included in Package of Practices 	10	5000
	<ul style="list-style-type: none"> • Post emergent application of herbicide mixture for weed control in maize: Application of Tembotrione 42 SC 105 g, a.i. 	70	9925

	<p>ha⁻¹ + Isoxadifen ethyl 21 SC 52 g a.i./ha + Safner Mero adjuvant @ 2.5 ml/litre at 15 days after sowing followed by one hand weeding gives broad spectrum control of weeds with a saving on labour cost of Rs. 3500/- as compared to hand weeding.</p>		
	<ul style="list-style-type: none"> • Post emergent application of Glyphosate to control Ambrosia weed: Glyphosate was very effective in controlling <i>Ambrosia</i> weed. 	25	100
	<ul style="list-style-type: none"> • Integrated farming system modules: IFS modules for one- and two-hectare area under rainfed and irrigated conditions have been developed. 	15	5000
	<ul style="list-style-type: none"> • <i>Melia dubia</i> based agroforestry system: <i>Melia dubia</i> based agroforestry system has been developed for sustainable farm income. 	5	500
	<ul style="list-style-type: none"> • Use of seaweed in paddy: Spraying 15% 'K' seaweed sap three times for paddy, one week prior to transplanting at 25 days and 60 days after transplanting along with RDF in Zone - 6 gives higher economic yield. 	2	920
	<ul style="list-style-type: none"> • Management of early shoot borer in Sugarcane: Soil application of Chlorantraniliprole 0.4 G @25 kg/ha or Fipronil 0.3G @22.5kg /ha at planting and 60days after planting controls early shoot borer in Sugarcane effectively at Mandya. 	10	1200
	<ul style="list-style-type: none"> • Management of fruit borer in tomato: Foliar application of Chlorantraniliprole 18.5 SC @ 0.3ml /l is effective in control of fruit borer in tomato. 	15	550
	<ul style="list-style-type: none"> • Management of whitefly in tomato: Spraying of Imidacloprid 17.8 SL @ 0.3 ml or Hostathion 40 EC @ 2 ml per litre of water effectively controls the whitefly in tomato. 	18	660
	<ul style="list-style-type: none"> • Effective seed treatment method for management of seed borne nursery disease of paddy: By soaking 25 kg of paddy seeds in 25 litre of fungicide solution (Carbendazim 50WP 4g/litre or Tricyclazole 75WP 3g/litre or Carbendazim 25% WS 4 g/ litre + Mancozeb 50%WS 4g/ litre) for 12 hours and incubating for 24-48 hours in wet gunny bag till seeds just started sprouting (Chitted seeds) before sowing for effective management of seed borne fungal diseases in nursery. 	20	6000
	<ul style="list-style-type: none"> • Management of seed borne nursery diseases through seed treatment: Seed treatment with Trifloxystrobin 25% + Tebuconazole 50% @ 0.5g/kg (fungicide suspension prepared in one litre of water) by following dry or wet methods for the effective management of blast and brown spot diseases in paddy nursery. 	15	5000
	<ul style="list-style-type: none"> • Use of <i>Trichoderma</i> for management for downey mildew disease in Cucumber: Soil application of <i>Trichoderma harzianum</i> through farm yard manure (enrichment- 1kg/ 100kg for 15days), seed treatment with Metalaxyl (2g/kg seed), prophylactic spray with Mancozeb (2.5 g/litre) 3weeks after 	5	30

		planting followed by sprays of Metalaxyl + Mancozeb (2.5 g/litre) and Dimethomorph (1g/litre)+ Mancozeb (2 g/litre) depending on disease severity at 5th and 7th week after planting effectively manages the downy mildew disease in cucumber.		
		<ul style="list-style-type: none"> • Management of leafspot disease in Groundnut: Seed treatment with Tebuconazole @ 2g/kg and spray with Chlorothalonil 2g/ litre effectively manages stem rot and leaf spot diseases respectively in groundnut. 	5	740
		<ul style="list-style-type: none"> • Management of Ganoderma wilt of coconut: Root feeding with Tebuconazole 25.9 % EC @ 1.5 ml in 100ml water/palm at quarterly interval + Soil application of 5kg Neem Cake enriched with Trichoderma viride + Pseudomonas fluorescens (talc formulated) @ 50 g/palm/ half yearly was effective in managing Ganoderma wilt of coconut. 	30	100
		<ul style="list-style-type: none"> • Package of Practices for Pole bean: Higher pod yield of 25 t/ha can be obtained under optimum fertilizer dose of 75:125:90 kg NPK/ha compared to the recommended dose of 64:100:75 kg NPK/ha (22 t/ha). 	35	90
		<ul style="list-style-type: none"> • Rapid multiplication technique for turmeric: A Rapid multiplication of turmeric has been developed, which reduce the seed requirement rate by 30%. With this only 200 kg seed rhizome is sufficient for one acre unit area instead of 800 to 1000 kg seed rhizome. 	2	10
		<ul style="list-style-type: none"> • Foliar spray of vegetable special: Foliar spray of vegetable special as micronutrient mixture @ 5 g/litre at 30 DAS and 45 DAS has increased the tuber of potato by 10% compared to RDF 	25	450
3	2018-19	Varieties recommended for Release		
		<ul style="list-style-type: none"> • Ragi: KMR-630 	15	7800
		<ul style="list-style-type: none"> • Soybean: KBS-23 	5	5
		<ul style="list-style-type: none"> • Ricebean: KBR-1 	5	5
		<ul style="list-style-type: none"> • Sunflower: KBSH-78 	15	200
		Technologies recommended for inclusion in Package of Practices		
		<ul style="list-style-type: none"> • Agro technique for hydroponic fodder production: This technique has been developed to realize higher fodder yield mainly to meet the fodder requirement during the critical period (dry months) to realize good milk yield in dairy animals. Cost of establishment of farmer friendly unit is Rs. 10 to 20 thousand. 4-7 kg of fodder can be harvested from 1 kg seeds with 4-6 times enhanced nutrient availability. 	25	--
		<ul style="list-style-type: none"> • Amla based agri-horti system involving cereals and pulses: Significantly higher amla equivalent yield was observed in intercropping with finger millet (1427 kg/ha) and was on par with that of cowpea (1355kg/ha). Finger millet proved to be better intercrop in amla and registered higher net 	10	20

	returns (Rs.2,90,446 /ha) and B:C ratio (2.07) than sole amla.		
	<ul style="list-style-type: none"> • Custard apple based agri-horti intercropping system: Significantly higher custard apple equivalent yield was observed in intercropping with fodder maize (2346 kg/ha), followed by finger millet (1628 kg/ha) compared to other intercrops in custard apple based agri-horti system. Higher net returns (Rs. 1,19,672 /ha), B:C ratio (6.67) and Rain Water Use Efficiency of 3.43 was recorded with fodder maize. 	5	15
	<ul style="list-style-type: none"> • Precision nutrient management in maize: Application of recommended N and K in 6 equal splits at 15 days interval from sowing under drip irrigation realized higher yield (15-20% more) and economics in maize. 	12	1500
	<ul style="list-style-type: none"> • Weed management in field bean: Application of Alachlor 50 EC as pre-emergent herbicide at 1000 g a.i./ha at 3 days after sowing followed by Imazethapyr as post-emergent herbicide 10 SL at 62.5 g a.i. /ha at 20 days after sowing recorded significantly higher field bean seed yield (1795 kg/ha). Or Application of Pendimethalin 30 EC as pre-emergent herbicide at 750 g a.i./ha at 3 days after sowing followed by Imazethapyr as post-emergent herbicide 10 SL at 62.5 g a.i./ha at 20 days after sowing recorded significantly higher field bean seed yield (1730 kg/ha) and controlled the weeds effectively with B:C ratio of 4.54 & 4.21, respectively. It reduces the dependence on manual labour for weeding under labour scarce conditions. 	23	560
	<ul style="list-style-type: none"> • Weed management in cowpea: Application of Alachlor 50 EC as pre-emergent herbicide at 1000 g a.i./ha at 3 days after sowing followed by Imazethapyr as post-emergent herbicide 10 SL at 62.5 g a.i./ha at 20 days after sowing recorded significantly higher cowpea seed yield (1357 kg/ha) or Application of Pendimethalin 30 EC as pre-emergent herbicide at 750 g a.i./ha at 3 days after sowing followed by Imazethapyr as post-emergent herbicide 10 SL at 62.5 g a.i./ha at 20 after sowing recorded significantly higher field bean seed yield (1305 kg/ha) and controlled the weeds effectively with B:C ratio of 3.3 & 3.0, respectively. It reduces the dependence on manual labour for weeding under labour scarce conditions. 	10	45
	<ul style="list-style-type: none"> • Sub-surface drip irrigation in Mulberry at 4 days interval has been recommended to realize 15-20% higher leaf yield (41280 kg/ha/year) compared to surface drip irrigation (35263 kg/ha/year) in eastern dry zone of Karnataka. This method of irrigation utilizes 20-25% lower quantity of water (115 litres) for higher water productivity (356 kg/ha cm) and to earn one of rupee of profit than 	10	100

	surface drip irrigation (307 kg/ha cm and 136 litres, respectively).		
	<ul style="list-style-type: none"> • Chemical control of red spider mite on frenchbean: Application of Buprofezin 25SC at 1ml/lit. or Propargite 57EC at 2ml/lit. between 30 and 45 days after sowing was effective in controlling spotted spider mite on French bean. This practice nullifies the pest incidence in 14 days with B:C ratio of 10.18. 	10	25
	<ul style="list-style-type: none"> • Management of giant African snail, <i>Achatina fulica</i> Bowd Bait: Mix 10 kg of wheat or rice bran and 2 to 4 kg of jaggery in 4 litre of water and leave the mixture for 18 to 36 hours. Technique: Mix bait with Thiodicarb 75WP. Spread or sprinkle the mixture after 6 pm in the border of the field, basin of the tree, around the plant or in the nursery lightly. This attracts & destroys all pests. 	15	--
	<ul style="list-style-type: none"> • Integrated management of Papaya Ring Spot Virus (PRSV) disease in papaya: Grow two rows of fodder sorghum Co-FS 29 as live barrier around the main field 60 days before planting. Plant 60 days old seedlings raised under insect proof 50X nylon mesh in the centre of silver reflective row mulch. Spray cultivated tropical red sea plant, <i>Kappa phycusalvarezii</i> extract@ 4ml/lit. @ 15 days after transplanting (DAT), Imidacloprid 17.8 % SL@ 0.5 ml/lit. at 20 DAT followed by spray of Neem oil 5000ppm @ 5ml/lit. @ 30 DAT. Repeat the above treatments every month. Apply fertilizers & micronutrients as per recommendation. This practice reduces disease incidence by 27 per cent and enhances yield by 85 per cent with B:C ratio of 4.18. 	15	100
	<ul style="list-style-type: none"> • Management of peanut bud necrosis virus: Grow 4 rows of pearl millet on bunds + use 10-15% more seed rate + seed treatment with Imidacloprid 600 FS at 1.0 ml/kg seed + use sticky traps at 8 Nos./ac + spray Dimethoate (1.7 ml/l) at 20-25 days after sowing + spray Lambda-Cyhalothrin (1.0 ml/l) at 40 days after sowing + spray Imidacloprid 17.8% SL (0.5 ml/l) at 60 days after sowing. This practice reduces thrips infestation to the extent of 200 per cent and 67 per cent lesser incidence of peanut bud necrosis virus. 	6	1000
	<ul style="list-style-type: none"> • Management of sorghum downy mildew in maize: Seed treatment with Azoxystrobin @ 2 g/kg of seeds could be used as an alternative chemical to manage downy mildew of maize. This practice enhances green fodder and grain yield by 85.3 per cent with B:C ratio of 2.03. Comparatively chemicals used in this practice are least. 	8	3100
	<ul style="list-style-type: none"> • Eco-friendly management of foot rot of finger millet: Seedling roots dipped in bio-agents (<i>Pseudomonas</i> and <i>Trichoderma</i> @ 5 g/l of water) followed by soil application of incubated (15 days) mixture of 1.25 kg talc of 	5	2250

		<p><i>Trichoderma</i> + 1.25 kg talc of <i>Pseudomonas</i> formulation with 50-60 kg of compost and applied over a hectare at the time of planting or sowing. This practice reduces disease incidence by 91.9 per cent and enhances grain yield by 45.3 per cent and straw yield by 41.8 per cent with B:C ratio of 3.39.</p>		
		<ul style="list-style-type: none"> • Management of sheath blight and neck blast in paddy: Spraying of Tricyclazole 45% + Hexaconazole 10% WG (Impression)@1g/l as soon as the sheath blight symptoms are noticed and at 5% panicle emergence to manage neck blast which reduces disease incidence by 84 per cent and enhances yield by 48.5 per cent with B:C ratio of 2.23. 	55	10000
		<ul style="list-style-type: none"> • Use of compost tea for control of late blight and higher yield in potato: Compost tea in combination with reduced fungicidal spray effectively controls late blight compared to the recommended fungicidal treatment. One spray of compost tea is recommended from 25 days of planting up to 5 weeks. One spray of fungicide is recommended (1 gm / lit. of Dimethomorph + 2 g/l of Mancozeb) when the late blight symptoms are noticed. This practice has dual benefit of being both eco-friendly and economical. When compared to the present recommended practice it decreases late blight disease severity by 45.6%. It enhances tuber yield (25.7 t/ha) by 25 per cent with B:C ratio of 4.41 against the check (20.5 t/ha and B:C ratio of 3.1). 	5	50
		<ul style="list-style-type: none"> • Animal drawn automatic seed drills for finger millet based inter cropping system: Animal drawn automatic seed drill for finger millet based cropping system has been developed. The implement weighs 23 kg with 5 coulters of 30 cm spacing with a provision of additional row for Pigeonpea sowing as an intercrop (8:2). The seed drill is useful for small and marginal land holding farmers. 	5	2600
4	2019-20	Varieties recommended for Release		
		<ul style="list-style-type: none"> • Paddy: Gangavathi Sona (IET-20594) 	10	5125
		<ul style="list-style-type: none"> • Cowpea: PGCP-6 	8	250
		<ul style="list-style-type: none"> • Blackgram: LBG-791 	15	170
		<ul style="list-style-type: none"> • Sugarcane: COVC-16061 	5	720
		<ul style="list-style-type: none"> • Sugarcane: COVC-16062 	5	720
		<ul style="list-style-type: none"> • Jack Fruit: Lalbagh Madhura 	10	200
		Technologies recommended for inclusion in Package of Practices		
		<ul style="list-style-type: none"> • Management of storage insect through botanicals and their influence on seed quality of cowpea during storage: Cowpea seeds treated with <i>Acorus calamus</i> formulation @10ml/kg of seeds and stored in gunny bag can prevent the storage insect pests of cowpea up to 12 months of storage and seed quality parameters were above minimum seed certification standards. This botanical seed treatment performs similar to that of 	15	--

	insecticidal seed treatment so the present technology is an alternative organic seed treatment.		
	<ul style="list-style-type: none"> • Patch budding technique in jackfruit: Latex of Jackfruit poses problems in soft wood grafting hence has low success rate. Patch budding is practically adoptable technique with 60 to 70 per cent success. The root stocks of 2 to 8 months old with a pencil thickness stem gives better success. The scions which are 6 months old and green are suitable for budding. The best season for higher success is February to September. 	25	--
	<ul style="list-style-type: none"> • Weed Management in Cotton: Spraying of tank mix which includes quizalofop-P-ethyl (5 EC) 50 g a.i.+ pyriithiobac sodium 10 EC @62.5 g a.i./ha at 2-4 leaf stage + one hand weeding was found effective in controlling weeds besides increasing yield and fibre content (7.14%, 101 kg) of the cotton crop. 	15	1500
	<ul style="list-style-type: none"> • Drip Fertigation in Groundnut: Application of 100 per cent recommended dose of Nitrogen and Potassium through drip irrigation in six equal splits at fortnightly intervals starting from sowing to 75days after sowing increases nutrient use efficiency apart from enhancing pod yield to the tune of 15 to 20 per cent. 	3	420
	<ul style="list-style-type: none"> • Weed Management in Groundnut: Application of 300 ml of quizalopop-p-ethyl 5 EC OR 625 ml of Sodium acifluorfen @16.5 % + Cladinofop-propargyl 8% EC (206.25 + 100g a.i./ ha) at 2-4 leaf stage (15-20 DAS) in 200 litres of water resulted in higher yield(1548Kgs/ha), B:C ratio (2.59) and lower weed index (3.4%). 	10	1390
	<ul style="list-style-type: none"> • Weed Management in Blackgram: Application of Sodium Acifluorfen 16.5 % + Clodinafop-Propargyl 8 % EC (206.25 + 100 g a.i./ha) as a post emergent herbicide at 20-25 DAS (2-3 leaf stage of weed) was found to be effective in managing the weeds in blackgram with lower index (8.6%), higher yield (1412 kg/ha) and B:C ratio (2.80). 	5	50
	<ul style="list-style-type: none"> • Weed Management in Cowpea: Post-emergence application of imazethapyr + imazamox @ 40 g a.i./ha was found effective in controlling weeds, improving seed yield (970-980 kg/ha) and profitability (save labour cost: Rs.2,788/ha) of the rainfed cowpea under labour scarce situations. 	3	15
	<ul style="list-style-type: none"> • Grain Amaranth Chapter for PoP: A chapter on “Agro-techniques for Grain Amaranth” was included in the supplementary book of POP (Pooraka Kaipidi). 	--	--
	<ul style="list-style-type: none"> • Use of diatomaceous earth and rice hull ash for sustainable development of rice: Along with the recommended dose of fertilizer as per package of practices application of 300 Kgs da/ha as silicon source enhance the fertility of 	5	100

	the soil and increases the yield (10190 kgs /ha straw and 6057/ha grain yield).																																
	<ul style="list-style-type: none"> • Use of Bio-K as an alternative to potassic fertilizers in hybrid maize: Application of recommended potassium (16kgs/ac) in the form of Bio K @140kgs/ac increases maize yield by 14.3 percent and straw yield by 17.1 per cent. 	3	300																														
	<ul style="list-style-type: none"> • Management of Diamond back moth in Cabbage: IPM package can be used for efficient management of DBM in cabbage. Schedule of insecticide application for the management of DBM and other lepidopteran pests in Cabbage <table border="1"> <thead> <tr> <th>Time of Application</th> <th>Chemical/ product</th> <th>Dosage</th> </tr> </thead> <tbody> <tr> <td>Transplanting time</td> <td>Mustard</td> <td>2 rows after 25 rows of cabbage</td> </tr> <tr> <td>7 Days after Transplanting</td> <td>WOTA-T traps (DBM traps)</td> <td>5 Nos./acre</td> </tr> <tr> <td>15 Days after Transplanting</td> <td>Neem Soap</td> <td>(10 gm/L)</td> </tr> <tr> <td>18 Days after Transplanting</td> <td>Spinosad 2.5 SC</td> <td>1.25 ml/L</td> </tr> <tr> <td>21 Days after Transplanting</td> <td>Emamectin benzoate 5 SG</td> <td>0.5 g/L</td> </tr> <tr> <td>35 Days after Transplanting</td> <td>Spray of <i>Bt</i> (Dipel)</td> <td>(1g/L)</td> </tr> <tr> <td>50 Days after Transplanting</td> <td>Chlorfenapyr 10 SC</td> <td>1.5 ml/L</td> </tr> <tr> <td>65 Days after Transplanting</td> <td>Spinosad 2.5 SC</td> <td>1.25 ml/L</td> </tr> <tr> <td>80 Days after Transplanting</td> <td>Emamectin benzoate 5 SG</td> <td>3.5 g/L</td> </tr> </tbody> </table>	Time of Application	Chemical/ product	Dosage	Transplanting time	Mustard	2 rows after 25 rows of cabbage	7 Days after Transplanting	WOTA-T traps (DBM traps)	5 Nos./acre	15 Days after Transplanting	Neem Soap	(10 gm/L)	18 Days after Transplanting	Spinosad 2.5 SC	1.25 ml/L	21 Days after Transplanting	Emamectin benzoate 5 SG	0.5 g/L	35 Days after Transplanting	Spray of <i>Bt</i> (Dipel)	(1g/L)	50 Days after Transplanting	Chlorfenapyr 10 SC	1.5 ml/L	65 Days after Transplanting	Spinosad 2.5 SC	1.25 ml/L	80 Days after Transplanting	Emamectin benzoate 5 SG	3.5 g/L	40	80
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80 Days after Transplanting	Emamectin benzoate 5 SG	3.5 g/L																															
	<ul style="list-style-type: none"> • Chemical control of thrips <i>Scirtothrips dorsalis</i> infesting chilli crop: Spray application of Spinosad 45SC (0.3 ml/lit. of water) at 10 to 14 days interval resulted in more than 80% reduction in the population of thrips and accounted for favourable B:C ratio of 15:1. 	20	45																														
	<ul style="list-style-type: none"> • Management of Serpentine leaf miner in tomato: Spraying of 1.8ml Cyantraniliprole 10.26 OD per litre of water (360 ml/acre) when the incidence of miner is noted effectively reduced the pest incidence by 95 per cent and increased the yield by 6 per cent when compared to present recommendation Imidacloprid-17.8SL and triazophos 40 EC. 	15	500																														
	<ul style="list-style-type: none"> • Management of shoot and fruit borer in brinjal: During vegetative stage (Incidence is observed on wilted shoots), spraying chlorantraniliprole 18.5SC@0.3ml/l (60-75ml/acre) and at fruit setting stage, spraying benzoate 5 – 0.4gm/l (80-100gm/acre) effectively controlled the borer to an extent of 95% and increases yield by 59% when 	35	75																														

		compared to presently recommended Malathion 50 EC.		
		<ul style="list-style-type: none"> • Management of Fusarium wilt in pigeon pea: seed treatment with <i>Trichoderma viridae</i> @10g/kg and soil application @ 1kg in 200kg of FYM applied in rows at the time of sowing manages wilt with an additional yield of 950kgs/ha and B:C ratio of (3.5). 	15	440
		<ul style="list-style-type: none"> • Management of mungbean yellow mosaic virus disease in green gram: Seed treatment with imidacloprid 48 FS @ 5ml/kg seed and one spray of imidacloprid 17.8 SL @0.50ml/l at 20 days after sowing reduces mung bean yellow mosaic virus infection. 	35	40
		<ul style="list-style-type: none"> • Local crop waste as substrate for oyster mushroom cultivation: Chopped maize stalk possess higher bio efficiency. It can be used as better alternate substrate for enhanced production of oyster mushroom. 	5	--
5	2020-21	Varieties recommended for release		
		• Groundnut: GKVK-27	1	100
		• Cowpea: KC 8 (KBC-11)	1	10
		• Forage cowpea: MFC-09-3	2	50
		Technologies recommended for inclusion in Package of Practices		
		<ul style="list-style-type: none"> • Fungicidal seed treatment in Finger millet to manage nursery blast disease: Seeds treatment with Tricyclazole 75%WP @ 3.0 g/kg or Tebuconazole 50% + Trifloxystrobin 25% WG @ 1.0 g/kg can be used for the control of nursery blast in finger millet crop, since the fungicide Carbendazim recommended in package of practices of UAS, Bangalore is not available in the market. 	2	50
		<ul style="list-style-type: none"> • Potassium management in little millet: Application of 20 kg ha-1 potassium in little millet increased the grain by 17.85 % and straw yield by 13.72 % of little millet with net return of Rs.22729/- per hectare and B:C ratio of 2.01. 	2	10
		<ul style="list-style-type: none"> • Potassium management in Foxtail millet: Application of 20 kg ha-1 potassium in foxtail millet increased the grain by 15 % and straw yield by 10.3 % of foxtail millet with net return of Rs. 30495 /- per hectare and B:C ratio of 2.33. 	2	20
		<ul style="list-style-type: none"> • Weed Management in Transplanted finger millet: Application of bensulfuron methyl + pretilachlor 6.6 %G @ 1.20 kg per acre in 300 litres of water on the day of planting or within three days of planting effectively controls the weeds with higher B:C ratio of 2.56. 	2	500
		<ul style="list-style-type: none"> • Intercropping in Maize: Intercropping of 2 rows of greengram / blackgram in between 45/75 cm spaced paired row of maize resulted in improvement in maize equivalent yield 	2	100

	(18%), net returns (Rs. 62,000/ha) and B:C ratio (1.95) in addition to improvement in soil fertility.		
	<ul style="list-style-type: none"> • Alternate wetting and drying method of water management for enhancing water use efficiency in transplanted paddy: Alternate wetting and drying method of water management viz., 5 cm irrigation at 3 days after disappearance of ponded water up to panicle initiation (PI) and 3 ± 2 cm standing water after PI recorded average 6.0 to 11.0 % higher paddy grain yield and 37% water saving as compared to flooding throughout crop growth (3 ± 2cm). Further, lower total water used for irrigation (1165 mm) and higher water use efficiency (4.92 kg/ha-mm) were recorded with alternate wetting and drying method of water management as compared to flooding throughout crop growth (1852 mm and 2.90 kg/ha-mm, respectively) or saturation maintenance up to PI (1395 mm and 4.18 kg/ha-mm, respectively) 	2	100
	<ul style="list-style-type: none"> • Hydroponic fodder maize and Cowpea production system: <ul style="list-style-type: none"> ➤ Fodder maize seeds sown @ 2.5 Kg/Sq. ft. in hydroponic system yielded 4 to 7 Kgs green fodder/Kg of seed at 10th to 14th days after sowing. ➤ Fodder cowpea seeds sown @ 2.5Kg/Sq. ft. in hydroponic system yielded 5.0 to 5.5 Kgs green fodder/Kg of seed at 11th to 13th days after sowing 	10	--
	<ul style="list-style-type: none"> • Agase (<i>Sesbania grandiflora</i>) based intercropping system: Intercropping of Bajra Napier hybrid in agase in 2:1 ratio recorded higher green forage yield (602q/ha), net returns of Rs.52975/ha and B:C ratio 2.23. 	3	20
	<ul style="list-style-type: none"> • Use of Diatomaceous earth for increased yield in potato: Application of diatomaceous earth @ 150 kg/ha along with 25 t/ha FYM and 50 % of recommended dose of fertilizer as per package of practice increases potato tuber yield (16.80 t/ha) by 24.90 % and B:C ratio of 2.03. 	1	20
	<ul style="list-style-type: none"> • Chemical control of fall Army worm, <i>Spodoptera frugiperda</i> in maize- Application of spinetoram 11.7 SC @ 0.5 ml/ chlorantraniliprole 18.5 SC @ 0.4 ml or emamectin benzoate 5 SG @ 0.4 grams per litre water 	70	500
	<ul style="list-style-type: none"> • Eco-friendly control of bruchid beetle in stored cowpea – cowpea seed treated with Azadirachtin 10,000 ppm @ 7.5 ml /kg of cowpea seeds can prevent the bruchid attack in cowpea up to 12 months, maintaining the viability and vigour of seed. The seeds treated with Azadirachtin has no residual effect, enhances seed viability, safer to soil micro and macro fauna 	15	-
	<ul style="list-style-type: none"> • Management of rodents in groundnut system: For management of rodents in 	10	-

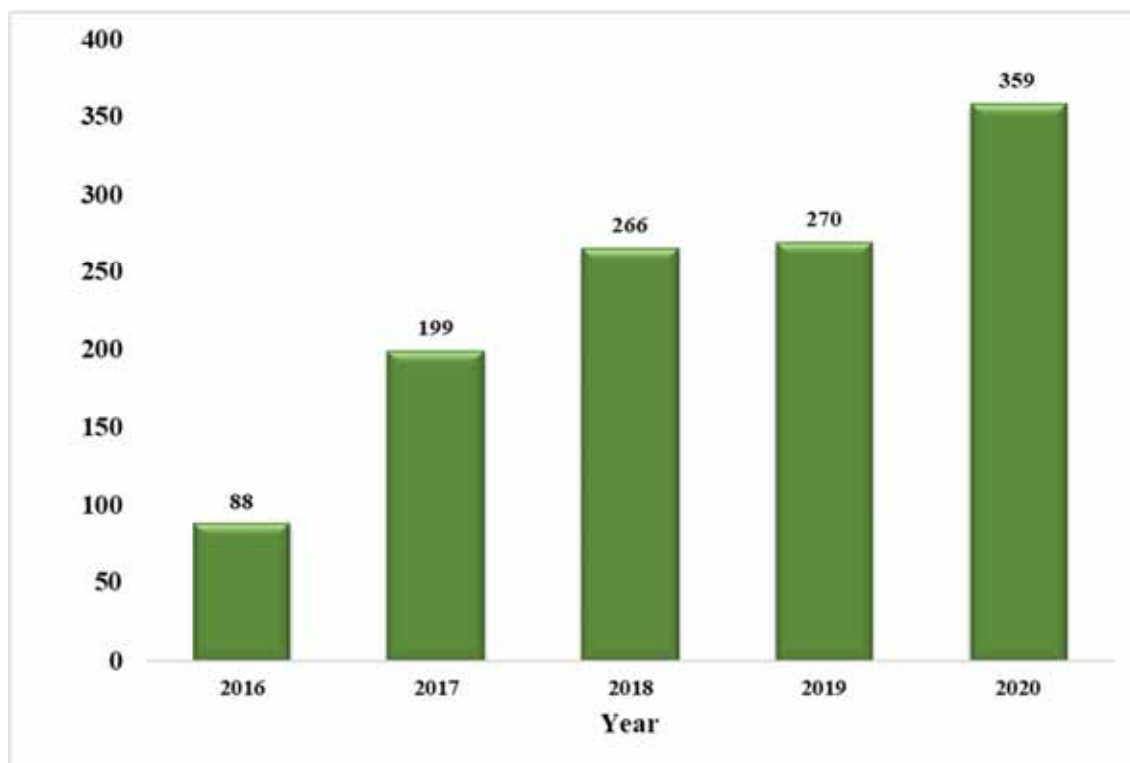
	<p>groundnut apply 2% Zinc phosphide bait (@ one kg/ha) during germination stage followed by inserting one aluminium phosphide(12g) tablet in to the burrow (50 tablets/ha) during peg formation stage of the crop. OR Fix the snap trap @ 50 traps/ha continuously for 3 days during germination stage followed by application of 2% zinc phosphide bait (@1 kg/ha) during peg formation stage of the crop. (When the live burrow counts are more than 50/ha)</p> <p>(Note: For preparation of 1.0kg poison bait, add 450g rice, 450g ragi, 40g groundnut kernels, 40g groundnut oil and mix thoroughly with 20g of zinc phosphide powder. Prepare 50 paper pockets containing 20g poison bait).</p>		
	<ul style="list-style-type: none"> • Integrated Management of yellow mosaic virus in pole beans: Before sowing: sowing of 2 rows of African tall maize all-round the field 30 days before sowing the main crop, Mulching with black silver mulch, Soil application of <i>Pseudomonas fluorescens</i> along with neem cake (1kg/100kg neem cake). At the time of sowing: Seed treatment with Thiomethaxam 25 WG – 5g/kg seeds and sowing, Installation of yellow sticky trap @ 10 no/acre. After sowing: Spraying of seaweed extract (1.5ml/L) 20 days after sowing, Spraying of Thiamethoxam 25 WG (0.5 g/L) and Imidacloprid 17.8 SL (0.5ml/L) 30 and 45 days after sowing respectively. 	15	20
	<ul style="list-style-type: none"> • Management of brown spot disease in Rice: Spraying of fungicide Hexaconazole 5 SC @ 2ml /litre as soon as the symptoms are observed and if necessary at 15 days interval manage the brown spot disease of paddy by reducing the disease by 48.59% and increasing the yield by 29.93% with benefit cost ratio of 1.69. 	5	300
	<ul style="list-style-type: none"> • Management of blast disease in paddy using Tricyclazole 75WP + Sea weed extract LBD1 (0.4g+2ml/l): Spraying of Tricyclazole 75WP+Sea weed extract LBD1 (0.4g+2ml/l) as soon as the blast symptoms are seen and if necessary, at 15 days interval manage the blast disease of paddy with benefit cost ratio 1:1.41. 	10	500
	<ul style="list-style-type: none"> • Management of maize downy mildew: Seed treatment with Mancozeb + Metalaxyl@3 g/kg of seed before sowing and foliar spray of Azoxystrobin + Difenconazole @ 1ml/l at 30 DAS. 	5	1500

6.6.3.4 Research Publications

The faculty, scientists and extension personnel have published 88, 199, 266, 270 and 359 research papers in peer review journals having NAAS rating of more than five (**Annexure – 6**).

Number of research paper published with their NAAS score by the faculties of UAS Bangalore.

Sl. No.	Year	NAAS Score			Total	Less than 5.00
		Above 9.00	6.00 to 9.00	5.00 to 6.00		
1.	2016	17	42	29	88	273
2.	2017	18	48	133	199	197
3.	2018	11	43	212	266	194
4.	2019	15	44	211	270	115
5.	2020	8	59	292	359	27
Total		69	236	877	1182	806
Total (%)		5.84	19.97	74.20	100.00	-



Year-wise details of scientific publication (More than 5 NAAS rating)

6.6.3.5. Innovation and Best Practices

UAS Bangalore is in the forefront of adoption and innovative and practice to achieve research excellence in chosen areas. The major mission of Directorate of Research is to evolve cutting-edge technologies in the area of biotechnology, land resource inventory, crop advisory through ICT applications, molecular diagnosis of diseases and forecasting pest and diseases, molecular markers for testing genetic purity of crop varieties, precision input management using sensor-based technologies, application of non-conventional energy. The success is mainly because of strong and synergistic research collaboration through mutual MoUs with leading and reputed research organization such as ICRISAT, CIMMYT, IRRI, IISc, ISRO, NCBS etc., and industries such as Bayer Crop Science, Carteva Agri, TATA steel, Mahyco, Infosys Technologies, WIPRO etc.,

Sl. No.	Innovation Type	Innovative Efforts / Best Practices		
1.	Furthering Excellence in Research	A	Break Through Research	
			1	Whole genome sequencing of <ol style="list-style-type: none"> Finger millet varieties Dolichos bean Finger millet Associated Metagenome revealing the endophytes Rice blast <i>Sarocladium Oryza</i> <i>Polyphagotarsonemus latus</i> Magnoportha species infections in Millets, Rice & Grass Acarine molecular systematic
			2	Land resource inventory in watershed and Atlas generation
			3	Agroclimatic Atlas of Karnataka
			4	Redefined the Drought Declaration Criteria
			5	Slag based Gypsum and its Utilization in Agriculture
			6	Silicon in Soil and Plant Nutrition
			7	Alternate wetting and drying method of water management for enhancing water use efficiency in transplanted Paddy
			8	Sugarcane Trash Management Using Microbial Consortium
			9	Chemical Free/ Organic Jaggery Preparation
			10	Medicinal and aromatic plants
			11	Biofuel park
			12	Bioenergy Research Information and Demonstration Centre
			13	Bioenergy Research and Quality Assurance Laboratory
			14	Karnataka's Maiden Fish Nile Tilapia/GIFT seed hatchery
15	Freshwater Pearl Culture			
		B	Websites developed <ol style="list-style-type: none"> Seed inventory management software Online fertilizer recommendation software – Krishiganaka Next Generation Technology (NGT) Forecasting Pests and Diseases (www.ngtforewarningpd.com) 	
		C	Mobile Apps Developed <ol style="list-style-type: none"> Beej Aadhar Farm Calculator Agricultural Pest Prediction and Advisory (APPA) Next Generation Technology (NGT) Expert System 	

		D	Innovative production practices 1 Sensor based automated irrigation techniques in important agricultural crops 2 Reduced Runoff Farming 3 Solid State Cooling Module for Raw Milk Cooling
		E	ICT in Extension Service 1 ESAP for real-time pest management 2 Agromet Advisories (AAS) dispersed through websites, Apps, and websites

BREAKTHROUGH RESEARCH

A. GENOME SEQUENCING OF CROPS/ PATHHOGENS/ INSECTS/ MICROBES

The recent advances in next generation sequencing (NGS), provide opportunities to develop millions of novel markers in non-model crop species as well as identification of genes of agronomic importance. Identification of all genes within a species permit understanding of how important agronomic traits are controlled, knowledge of which can be directly translated into crop improvement. Reference genome sequences when available, permit both rapid identification of candidate genes through bioinformatics analysis, and single nucleotide polymorphism (SNP) discovery through comparison of the reference genome with sequence data from different cultivars. The increasing availability of DNA sequence information enables the discovery of genes and molecular markers associated with diverse agronomic traits creating new opportunities for crop improvement. UASB has the credit and pioneering in sequencing both crop plants and pathogens/Microbes which are available for the Scientific community to improve the traits and thereby increase the production.

A1a. Whole genome sequencing of finger millet varieties:

Whole genome sequencing of Finger millet varieties ML-365 and PR 202 was done for the first time in the world which can be used for improving the biotic and abiotic stress resistance.

ML 365

- Drought tolerant genes (4859 genes) have been identified
- 20000 SSR markers were identified which can be deployed for marker assisted selection
- Genome analysis showed the presence of 85, 243 genes
- Several resistant and calcium transport genes were identified

PR202

- The size of genome is estimated as 1.2 Gb (118.8 crore base)
- Predicted 62,348 genes in total.

A1b. Whole genome sequencing of Dolichos bean (*Lablab purpureus* L. Sweet)

- The size of the genome is estimated as 350 Mb.
- 29000 genes have been predicted and 27000 of them were annotated
- A large number of Simple Sequence Repeat (SSR) markers have been identified.
- The genome sequence of Dolichos bean has good synteny with other legumes such as mung bean and soybean.

A1c. Fingermillet Associated Metagenome revealing the endophytes

- Whole genome metagenome sequencing of GPU 28 and 'Uduru Mallige' local variety helped to identify 1029 species (includes obligate endophytes) of microbiota. Among them 385 and 357 species were unique to GPU 28 and 'Uduru Mallige', respectively.

A1d. Whole genome Sequencing of *Indica* Rice for blast

- Combination of both second and third generation sequencing technologies were used to decode the indica rice genome variety HR -12
- Several defence related genes, SSR and SNPs have been identified which can be deployed for marker assisted resistance breeding

A1e. Whole Genome Sequencing of *Sarocladium oryza* causing sheath rot disease of rice

- Identified 10526 protein coding genes
- Large set of pathogenicity and putative genes involved in helvolic acid and cerulenin biosynthesis have been identified
- These genes help in breeding resistant varieties

A1f. Genome wide comparison of Magnaporthe species infections in Millets, Rice & Grass

- Sequenced the whole genome of the Magnaporthe isolates, infecting rice (leaf and neck), finger millet (leaf and neck), foxtail millet (leaf) and buffel grass (leaf)
- The distributions of repeat elements, secretory proteins, CAZymes and SNPs showed significant variation across host-specific lineages of Magnaporthe indicating an independent genome evolution orchestrated by multiple genomic factors.

A1g. Whole genome sequencing of Yellow mite (*Polyphagotarsonemus latus*)

Whole genome sequencing of yellow mite was attempted **for the first time** with good qualitative & quantitative genomic DNA and necessary genomic libraries of appropriate size have been created. *Polyphagotarsonemus latus* (Banks), commonly known as chilli mite, is a cosmopolitan agricultural pest with a very wide host range and with a high record of pesticide resistance. It belongs to Chelicerata group, a largest group of terrestrial animals under Phylum Arthropoda, Class Arachnida, Sub-class Acari (ticks & mites), Order Trombidiformes and Family Tarsonemidae. A notable traditional serious pest of chillies and potato and more recently a newer severe pest of mulberry in South India.

- Around 57.36 million paired end reads from Illumina and around 2.9GB of long reads generated
- The raw reads (95.9% & 83.28%, respectively) were used for de novo hybrid assembly using Masurca <https://github.com/alekseyzimin/masurca>.
- The assembled genome is 50.2MB in size with 29.2MB N50 value, GC% of 20.57% and 84 Contigs. Pyscaf tool used to scaffold the assembled genome and after scaffolding the genome size is 41.2 mb with 38.4 MB N50, GC% of 20.70% & 74 contigs.
- The mitochondrial genome is assembled using the Novoplasty tool. The assembled mtGenome size is 12906 bases with single contig.
- The annotation of the mtGenome will be carried out using Mitoz tool.

The quantitative analysis of the genome, gene prediction, annotation and pathway genes will be analysed using appropriate software available for genome analysis.

A1h. Acarine molecular systematic: During 2017, more than 60 DNA sequences (COI–23 & ITS2–37) of eight mite species and two insect species were accessioned in NCBI-GenBank public database. Eight mite species have been DNA barcoded from UAS, Bangalore. Also, BIN (BOLD Index Number) and DOI (Digital Object Identifier) have been provided to eight species of mites by BOLD (Barcode of Life Data system).

DNA barcoding of Plant feeding mites in India (13 species)

Sl. No.	Species	No. Species
1	Spider mites (Tetranychidae)	8 species
2	False spider mites (Tenuipalpidae)	2 species
3	Coconut eriophyid mite (Eriophyidae)	1 species
4	Broad mites (Tarsonemidae)	2 species

A2. Land resource inventory and Atlas generation: Sujala-III project was started by Watershed Development Department under the World Bank funded KWDP-II, to generate the Land Resources Inventory of 2.23 lakh hectares at micro-watershed level on soil depth, texture, slope, erosion, gravelliness and stoniness, land use/land cover, soil profile, profile location data, location of wells, hydrology and socio-economic data. At present survey number wise details data on said aspects is available for 423 micro watersheds allotted to

UAS Bangalore. The data is available under watershed development department portal in Atlas format.

Land Resource Inventory (LRI) data generated and documented in the form of Atlas contains comprehensive information in the form of soil maps, fertility maps, land capability maps, proposed crop plans, survey number wise for each micro watershed with summary for advisory services at Raitha Samparka Kendras (RSKs) level.

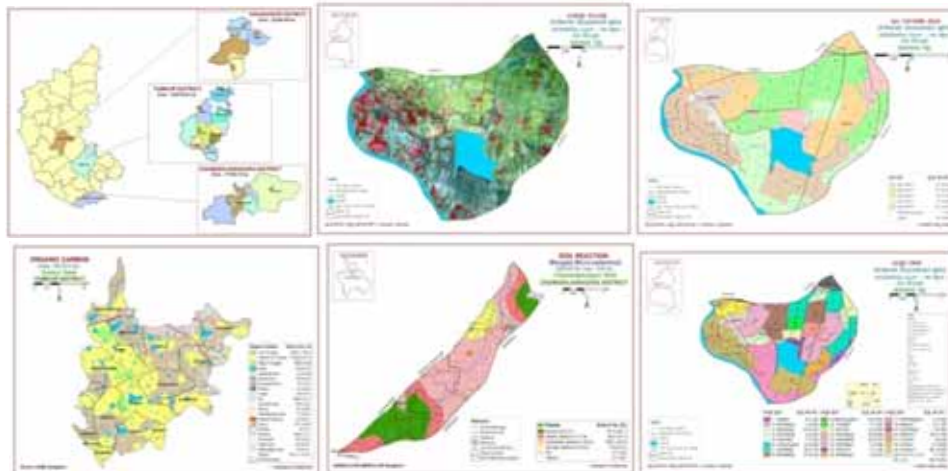
The Atlas is disseminated to all the line departments such as Agriculture and Horticulture department to help the farmers of rainfed areas in the concerned districts for farm level planning and better crop production. Planners, Researchers and Policy makers can make effective use of technological tools such as Land Resource Inventory, Hydrological and Meteorological information in addition to Socio-economic data for providing farmer friendly scientific and parcel level information to the farmers. DSS portal is also available to the stakeholders and farmers. During the process of the LRI tools like Satellite Remote Sensing, Geographical Information System, are used for providing the locations specific advisory to the farmers. In addition, six training programmes and workshops were conducted for the benefit of students and scientists. Staff of the Sujala Project attended as resource persons in 19 LRI trainings conducted at district, taluk, hobli and village levels.

The noteworthy outputs for in form of documentation, reports and papers were prepared and submitted to Watershed Development Department for use of farmers.

- LRI was conducted in 423 micro watersheds covered in 76 Sub watersheds. Micro watershed and Sub watershed LRI atlases (both in Kannada & English) have been generated
- Hydrological stations were established at three pilot micro-watersheds viz., Halayapura micro-watershed of Tumkur taluk, Devanayakanahalli micro-watershed of Turuvekere Taluk and Yarehalli micro-watershed, Channagiri taluk.
- 76 sub watershed and 3 pilot micro watershed hydrology atlases (in English)
- Socio-economic Studies have been completed in 428 micro watersheds and concerned and respective reports
- Nearly 81,550 LRI cards were generated and sent to the respective districts for distribution to the farmers.
- Sixteen (16) different case studies covering LRI, Hydrology and Socio-economic studies and (11 taluk wise) technical papers showing OC and Micronutrient status were prepared
- Twenty (20) research papers on different aspects of LRI, Hydrology and Socio-economics; Forty-Six (46) abstracts on different aspects of LRI, Hydrology and Socio-economics were presented in different conferences.
- One video document on "The pilot management plan preparation of Hosahalli" was documented. One training manual in "Kaipidi" in Kannada language
- One "Harve sub watershed" report of Chamarajanagar district and one booklet on "Launching of Sujala project" at UAS Bangalore.
- Noteworthy Publications: 'Scientific Planning for watershed development - A case study of Hosahalli micro-watershed, Harve Hobli, Chamarajanagar' and 'Implementation manual for Sujala-III project- Guidelines for integrating land resource information for Watershed Planning & Development' in 2016; 'Sagas of Sujala-III, Success Stories & Case Studies' in 2019 and Sujala Poem published in the newsletter of Watershed Development Department in Kannada & English in 2018



LRI card and cover of JISSS Journal 2020 Edition with Map prepared by Sujala-III Project UASB



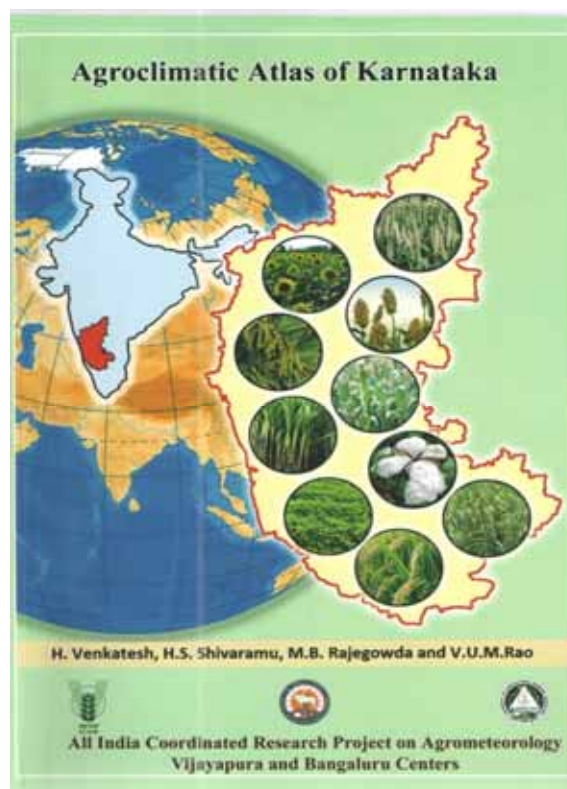
Maps prepared by Sujala-III Project

Physical Progress with respect to reports prepared during 2015-2019

Sl. No	Activities undertaken	Numbers
Land Resource Inventory		
1	No of micro watersheds - LRI completed	423
2	Area covered (in Lakh) ha.	2.23
3	Profile studied (15/MWS)	6345
4	Profile sample collected and analyzed (25/MWS)	10575
5	Fertility samples collected and analyzed (50/MWS)	21150
6	Water samples collected and analyzed (6/MWS)	2538
7	No of soil maps generated	423
8	No of LRI Atlases (MWS) submitted (English)	423
9	No of LRI Atlases (MWS) submitted (Kannada)	423
10	No of LRI Reports (MWS) submitted (English)	423
11	No of LRI & Hydrology Atlas (SWS) submitted (English)	76
12	No of LRI Atlas (SWS) submitted (Kannada)	76
13	No of LRI Reports (SWS) submitted (English)	76
14	No of Pilot Hydrology Atlas (MWS) submitted English	03
Hydrology		
1	No of well yield Monitored	1269

2	No of profile soil Moisture Measurements	5314
3	No of surface soil Moisture measurements	5402
4	No of Gravimetric Soil Moisture Analyzed	479
5	No of LAI Monitored	4812
6	No of water Samples Collected & Analyzed	1484
7	No of wells monitored for water level	7713
8	No of Infiltration Test conducted (Annual 108)	149
9	Sub watershed Hydrology Atlas prepared	79
Socio-economics		
1	No of micro-watersheds covered: Non-Saturation	428
2	No of revenue villages: Non-Saturation	589
3	No of households: Non-Saturation	15418
4	No of micro-watersheds reports: Non-Saturation	428
5	No of micro-watersheds covered (Saturation-100%)	31
6	No of revenue villages (Saturation-100%)	85
7	No of households (Saturation-100%)	12823
8	No of micro-watersheds reports (Saturation-100%)	31

A3. Agroclimatic Atlas of Karnataka: Agroclimatic Atlas of Karnataka was developed based on the weather and crop data collected from Indian Meteorological Department (IMD), Department of Economics and Statistics (GoK) and Karnataka State Natural Disaster Monitoring Centre (KSNDMC) Bengaluru. The data was combined and analysis of the data was done using the software provided by the Project Coordinator, AICRP on Agrometeorology, Hyderabad. Atlas serves as baseline and presents climatic information relevant to agriculture in the state at micro and meso scale which is made available to all the stakeholders including state government officials, agricultural producers, entrepreneurs and researchers through UASB website. Atlas contains detailed information on agricultural scenario (Area, production productivity status and constraints of major crops); soil (texture, slope, drainage, depth and available water capacity), climate (rainfall, atmospheric temperature and humidity) at micro and meso scale (176 taluks of Karnataka), which is required towards evolving effective agricultural practices and to develop tailor made genotypes suitable to the climate.



A4. Redefined the drought declaration criteria: Karnataka State has been facing drought very often. In the last 18 years, Karnataka experienced drought for 14 years in one or the other part of the State. In this regard, long term crop - weather and moisture depletion pattern in finger millet, pigeon pea and groundnut shown that the Percent Available Soil Moisture (PASM) should not go below 50 per cent for normal crop growth. If PASM goes below 50 per cent, then the taluk has to be declared drought prone. This criterion developed by Agrometeorology centre of UAS, Bangalore was included and modified at the National level guidelines of Drought Manual of Ministry of Agriculture and Farmers Welfare, Government of India.

Further research of Agrometeorology centre led to modify the other criteria like decrease in percent area sown due to drought, crop loss percent due to drought. Moisture Adequacy Index (MAI) has been redefined in the drought manual and amended accordingly. These modified criteria apply not only to our state but also for all the states in the country.

Using the revised criteria, state government declared 100 taluks in *kharif* and 156 taluks in *rabi* in Karnataka as drought prone in 2018. Thus, lakhs of farmers of drought prone taluks in the country will get the cash compensation directly to their bank accounts online. With the intervention of Agrometeorology section of UAS, Bangalore another amendment in the Manual for Drought Management was inclusion of the role of SAUs of the country in research, monitoring and declaration of drought.

Previous Impact Indicators		Revised Impact Indicators
1. Rainfall deviation	2. SPI	No change
3. Crop Sown Area	If the area <50% of the normal by the end of July / August	The sown area <75% of the normal also to be considered as Severe Drought
4. PASM / MAI	Agricultural Drought based on PASM (%) and MAI (%): <25% Severe Drought	PASM (%) and MAI (%): <50% Severe Drought
5. Category of drought	3 of the 4 Indicators are severe to declare "Severe Drought"	If 2 of the 4 Indicators are severe to declare "Severe Drought"

Note: SPI: Soil Precipitation Index, PASM: Per cent Available Soil Moisture & MAI: Moisture Adequacy Index

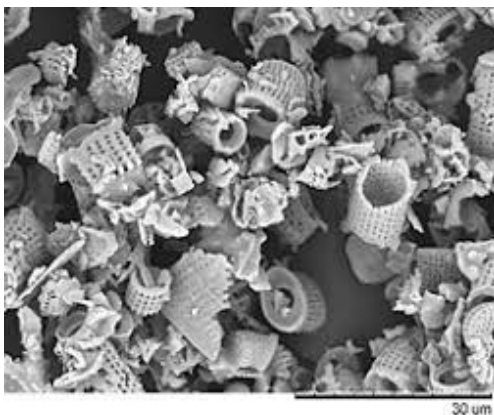
A5. Slag based gypsum and its utilization in agriculture: Natural or mined gypsum is a good source of calcium, magnesium and sulphur. It is being used as an amendment for alkali soils. However, slag-based gypsum (SBG) is first kind of gypsum produced from steel industry slag by acid treatment which is also a rich source of calcium, magnesium, sulphur in addition to silicon and other micronutrients. Having limited sulphur resources in India and other countries, sulphur fertilizers would become more and more expensive in the future.

Application of 300-750 kg SBG ha⁻¹ significantly increased the yield of different crops over commercially available gypsum. The properties of the material make it to act as a soil conditioner besides increasing the nutrient uptake and nutrient use efficiency of paddy, maize and groundnut. The results of these field experiments are compiled and filed in the form of a patent "A SOIL CONDITIONER AND APPLICATIONS RELATED THERETO" (Indian Complete Patent Application No. 202131002666) along with the scientists of Tata Steel Limited, Jamshedpur.

A6. Silicon in soil and plant nutrition: A decade long extensive research studies conducted at the University of Agricultural Sciences, Bangalore was able to establish crop response to external application of Si; beneficial effects of Si in enhancing biotic and abiotic tolerance in crops and most importantly, in increasing crop yield. Potential silicon deficient

area under major cropping systems were identified and characterized by calibrating plant available Si in these soils. Various potential Si sources such as calcium silicate, diatomite, foliar silicic acid, crop residues and biochar were evaluated on different crops under different climatic conditions and several silicon-based technologies were developed.

Beneficial effects of Si application through sources like rice husk ash/ biochar, diatomaceous earth and foliar silicic acid have been recognized and included in the package of practices of the University of Agricultural Sciences, Bangalore. The promising and inspiring results of extensive research at the University and the extension activities generated basic information on Si nutrition in plants and different sources of silicon. Accordingly, the Central Fertilizer Committee (CFC) government of India, included Silicon fertilizer (Diatomite Amorphous Silica) in Fertilizer Control Order (S. O. 1446 (E)) dated 2017 in clause 20 A (The FCO, 2019a) and orthosilicic acid (2.0% WSL) was added in the beneficial element fertilizer in schedule I, part A (S. O. 5887 (E)) of Fertilizer Control Order 1985 dated 2018 (The FCO, 2019b), which enabled as many as 50 or more companies in India to produce and make silicon products for suitable Indian agriculture.



Foliar spraying of orthosilicic acid



Diatomite Amorphous Silica

A7. Alternate wetting and drying irrigation in transplanted paddy: Paddy is one of the important food crops grown by transplanting and allowing standing water in canal irrigated area. The transplanted rice requires 180 to 200 cm of total water and it accounts more than 300% of aerobic food crops water requirement. The irrigation with 2 to 3 inches of continuous standing water in transplanted paddy results in deep percolation and seepage losses of water and nutrients from root zone in addition to emission of greenhouse gases (CH_4 and N_2O) as due to anaerobic soil condition.

However, successfully transplanted paddy can also be grown by without allowing standing water during its part of growth period. Therefore, Alternate Wetting and Drying (AWD) irrigation (5 cm irrigation at 3 days after disappearance of ponded water) up to panicle initiation (PI) and allowing 3 ± 2 cm standing water after panicle initiation can save water, nutrients and limit greenhouse gas emission from transplanted paddy field.

Performance: Alternate Wetting and Drying irrigation up to panicle initiation in transplanted paddy recorded higher average paddy grain (5.74 t/ha) and water use efficiency (4.92 kg/ha-mm) than the flooding throughout crop growth with 3 ± 2 cm standing water (5.37 t/ha and 2.90 kg/ha-mm, respectively). AWD irrigation uses 1165 mm of total water for irrigation as against 1852 mm in conventional standing water irrigation.

Cost of Technology: No additional cost involved, but save labour for irrigation

Benefit and impact: Saves 37% total water used as compared to conventional irrigation, enhanced tiller production/hill, 70% higher water use efficiency and Reduces 25% greenhouse gas emission in transplanted paddy.

A8. Sugarcane Trash Management Using Microbial Consortium: In India approximately 6.5 million tonnes of sugar cane trash are being produced every year, whereas 3-4 tonnes of trash produced per acre of sugarcane cane first crop and most of the residues are usually burnt in the field due to improper composting techniques. Besides the loss of organic matter and plant nutrients, burning of crop residues also causes atmospheric pollution due to the emission of toxic gasses methane carbon di-oxide that poses threat to human and ecosystem, In-situ composting of cane trash is a good alternate to mitigate these problems.

This trash contains 28.6% organic carbon, 0.35 to 0.42% nitrogen, 0.04 to 0.15% phosphorus, 0.50 to 0.42% potassium. The sugarcane trash incorporation in the soil influences physical, chemical and biological properties of the soil. There is a reduction in soil EC, improvement in the water holding capacity, better soil aggregation and thereby improves porosity in the soil. Sugarcane trash incorporation reduces the bulk density of the soil and there is an increase in infiltration rate and decrease in penetration resistance. The direct incorporation of chopped trash increases the availability of nutrients leading to soil fertility. Sugarcane trash can be easily composted by using the fungi like *Phanerochete*, *cellulomonas*, *Aspergillus*, *Pseudomonas*, *Bacillus*, *Penicillium* and *Trichoderma*. Addition of rock phosphate and gypsum facilitates for quicker decomposition.

Trash management is easy in ratoon crop which helps in maintaining soil fertility and also intercropping improves economic status of farmers which also reduces dependency on chemical fertilizers to some extent. In addition to this, ratoon crop saves expenses on seeds, land preparation and transplantation. This saves about 30% of total expenses. In addition to following improved technologies better to adapt microbial consortium for better management of trash in sugarcane.

Points to be followed in trash management

- In wider row spacing there is provision of good aeration and irrigation and also it avoids incidence of insects and pests.
- In between two rows irrigation has to be done before application of 2-4kgs of trash decomposing microbial consortium and 10kg of cow dung in 400-500lits of water, mix thoroughly and sprinkle over trash. Later spread soil or farm yard manure over that mixture.
- After 30 days of treatment of turn the trash and apply the trash decomposing microbial consortium along with cow dung as explained earlier.
- After two treatments of trash with trash decomposing microbial consortium which also contains growth promoting substances where in it helps in complete decomposition of trash within 75-90 days and provides nutrients to ratoon crops which reduces dependency on chemical fertilizers there by higher yields can be realized.

A9. Chemical Free Jaggery Preparation: The technology for preparation of chemical free/ organic jaggery was developed at the Jaggery Park unit located at the Zonal Agricultural Research Station at Mandya. The technology includes harvesting of the cane when it attains peak maturity *i.e.*, when the juice sucrose is highest and extraction of juice from the cane should be done immediately after harvest and in any case not later than 24 hours after harvest to prevent inversion of sucrose into glucose and fructose and formation of other harmful substances. Before boiling the juice pH has to be adjusted to 6.4-6.6 with the addition of a clear solution of lime (CaOH) using a narrow range of indicator paper/pH meter. After clarification and removal of the scum completely, the juice is boiled vigorously till most of the water is evaporated and juice gets concentrated as syrup. The temperature starts raising steadily and at 106 to 108⁰ C coconut oil is added to the syrup at the rate of 0.2 ml per litre of juice so as to prevent charring of syrup, to promote

development of sugar crystallization and good colour. When the temperature of the syrup raises to 115 to 1180 C (strike temperature), the syrup is ready for transferring to the moulds. Moulds which give shapes like ball is most preferable as it gives least surface area for absorption of moisture during storage. The jaggery can be made into powder form also by rubbing the cooling magma by a wooden scrapper against the wall of the pan containing the transferred mass.

To disseminate the technology, 10 training programs (within the district, Inter-state and international Australian scientists and farmers) were organised and representatives from 300 jaggery units located in Mandya, Mysore, Chamarajanagara Districts and also from other states visited the centre. Also, two Start-ups were started during 2020.

A10. Medicinal, spice and Aromatic plants Centre:

- The centre has collected more than 200 endangered and rare species of Medicinal, Spice and Aromatic Plants which are maintained and conserved in the Herbal Garden.
- Regional Analytical Laboratory (RAL) established under Central Sector Scheme of the Government of India, Ministry of Agriculture and Family Welfare has been very useful in analysing the samples of various Medicinal and Aromatic crops.
- The centre also has made progress in linking the pharmaceutical industries with farmers with Memorandum of Understanding (MoU) between the University and Himalaya Drug Company Pvt. Ltd., Bangalore.

A11. Biofuel park: Biofuel Park is supported by Government of Karnataka to promote cultivation of tree born oil seeds and to use biofuel as energy source. Under this programme 472 farmers associations were formed, 23 oil expellers were provided, 2500 training programs were conducted, 123972 farmers were trained, 270 biogas units were established and 17.0 lakh seedlings were distributed to farmers in Hassan district. Also, three villages namely Kinnarahalli, Hoovinahalli, Haenahalli have been recognized as smokeless villages.

A12. Bioenergy Research Information and Demonstration Centre

- Collection and conservation of tree born oil seeds, Processing and value addition
- Nearly 30 training programmes per month conducted for farmers and entrepreneurs.
- Currently producing around 200 litres of biodiesel per month.

A13. Bioenergy Research and Quality Assurance Laboratory

- Testing of quality parameters of biodiesel as per ASTM/BIS standards. Quality analysis of nearly 350 samples performed.

A14. Karnataka's Maiden Fish Nile Tilapia/ GIFT seed hatchery: Nile Tilapia (*Oreochromis niloticus*) is the most farmed fish in the world, after carps. It is called as a global fish, as it can be farmed almost everywhere in the world. It is also called as Aquatic Chicken/Food Fish of the 21st century/Tiger Jilebi. It is an omnivore, hardy, can be cultured at five times the stocking density of carps, has white filletable meat and can be cultured in shallow seasonal water bodies. It is the most preferred fish in methods of intensive fish culture viz., Recirculatory Aquaculture System (RAS), Aquaponics and Biofloc Technology.

The Inland Fisheries Unit, Main Research Station, University of Agricultural Sciences Bangalore, obtained permission, for production of all-male GIFT, from the National Steering Committee in 2016 and the seeds produced are being used for research and for providing them to the farmers permitted by the State Department of Fisheries for its culture. As of now, this GIFT hatchery is the maiden and the only one of its kind in

Website: Online Fertilizer Recommendation
<http://www.krishiganaka.sit.ac.in>



Scan Me



Scan Me

Google Play Store: Krishiganaka

B3. Next Generation Technology (NGT) forecasting pests and diseases: Information and Communication Technology (ICT) and internet of thinking (IoT) based intelligent pest and disease forewarning system for rice, pigeonpea and grape is an innovative system for providing forewarning on pests and diseases. It aims at improving farm productivity through better crop management (www.ngtforewarningpd.com). In this web portal, aims to predict the occurrence of pests and diseases based on microclimatic parameters generated by automated weather station (AWS) data. This pest and disease forewarning information and appropriate crop management practices will be disseminated to the farmers using electronic media through short message service (SMS) and mobile application. In this way, both livelihood security and environmental security are achieved.

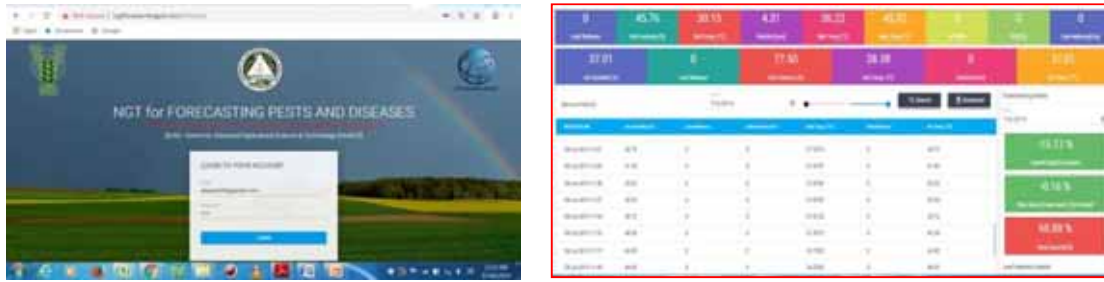
- AWS system monitors all the critical parameters 365 days 24 hrs a day from the farm and opting data to cloud server and later saved in UAS, Bangalore local server.
- The data is used for analysis by the scientists and research team at UAS, Bangalore, to develop statistical and mathematical predictive models for agricultural pest prediction.
- The system would calculate various parameters using a defined model developed by the scientists on the data received.
- The build-in threshold for each pest of rice, pigeonpea and grape provides mobile alerts about the pest occurrence based on weather parameters and advisory to manage.
- The registered farmer will be notified through a short message service (SMS) in the local and English language.

Advantages:

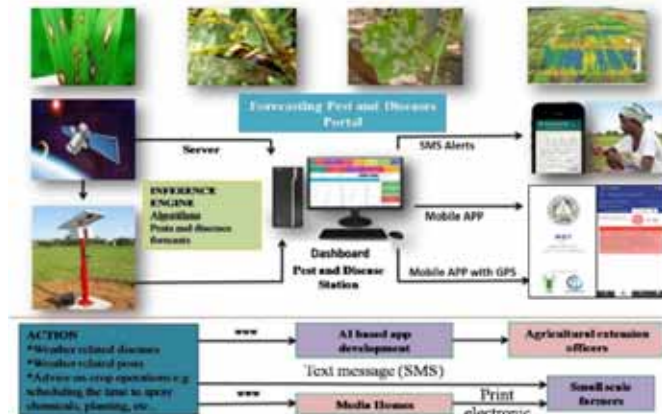
- Monitor farms on a real-time basis and identifies problem proactively
- Reduce production losses due to pest and human error
- Increase productivity and environmentally safe
- High-end analysis for optimizing environment parameters
- Alert mechanism – During any deviation in environmental parameters
- Forecasting models for rice, pigeonpea and grape pest and advisory to manage.



Integrated agricultural pest and disease forewarning web portal (www.ngtforewarningpd.com) and mobile applications



The web portal of agricultural pest & disease forecasting and issuing an advisory to the farming community through SMS alerts (Dashboard)



The architecture of NGT- forewarning pests and diseases web portal

C. Mobile Apps developed

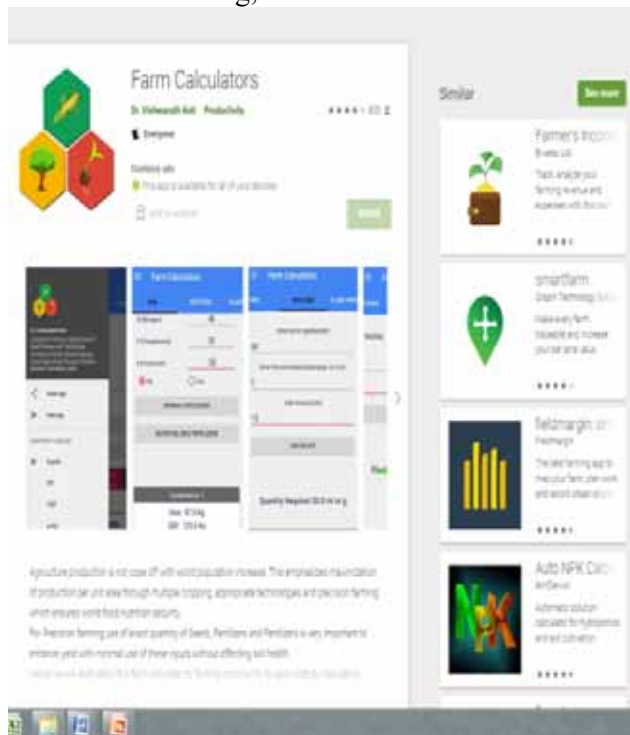
C1. Developed BEEJ AADHAR App. as a seed platform where in both public and private seed industry personnel can upload the latest technologies related to seeds.

- “Beej Aadhar” mobile app and webpage has been developed to create common platform for the seed producers, consumers and seed stakeholders for furtherance of the sustainable agro production system.
- It provides information on all hybrids/varieties developed, Land races, etc., field tested and being distributed from all type of seed producers to the farmers or farmer’s organizations, availability, cost of seeds, also establishes organic linkages between seed producers and growers besides providing information of package of practice and advanced technologies.
- The data have been collected from 30 seed companies, 104 dealers, 500 seed producing framers and all public seed producing organization regarding the seed availability of different crops of different varieties have been updated in our Beej Aadhar App.
- Downloads of the app has increased to 15000 compared to initial launching of the app to trainings followed by krishimela and workshop.



C2. Developed Farm Calculator App which is ready calculator for fertilizers calculation, seed rate and plant population calculation instantly.

- Fertilizers (NPK) Calculator: Calculate exact quantity of NPK fertilizers required per unit area based on recommendation or soil testing, which saves costs and avoids excess use of fertilizers and degradation of soil health.
- Pesticides/ Fungicides/ Herbicides Calculator: Apply exact quantity of Pesticides/ Fungicides/ Herbicides of different company pesticides with different active ingredients (*a.i*) to manage your pests/diseases/weeds at your farm and minimize excess use of these agriculture inputs
- Plant Population Calculator: Calculate exact number of seeds for your field crops or plats required for unit area for your horticulture crops.
- Seed Rate Calculator: Calculate exact quantity of seeds required for your farm based on seed test weight and germination of the seeds.
- Seed Blending Calculator: Calculate blending of seeds of marginal lots with high germination lots to avoid wastage of marginal seed lots according to Karl Pearson square method. This could be also used as wine blending calculator.



C3. Agricultural Pest Prediction and Advisory (APPA): Among ICTs there has been increasing use of mobile phones with number of services provided by various agencies. Mobile phones have penetrated rural India bringing by the digital education. In this background, an android based mobile app has been developed for disseminating the technologies. This mobile application is in continuation with the web portal (www.ngtforewarningpd.com) NGT forecasting pests and diseases. The additional features provided in the APPA are as follows

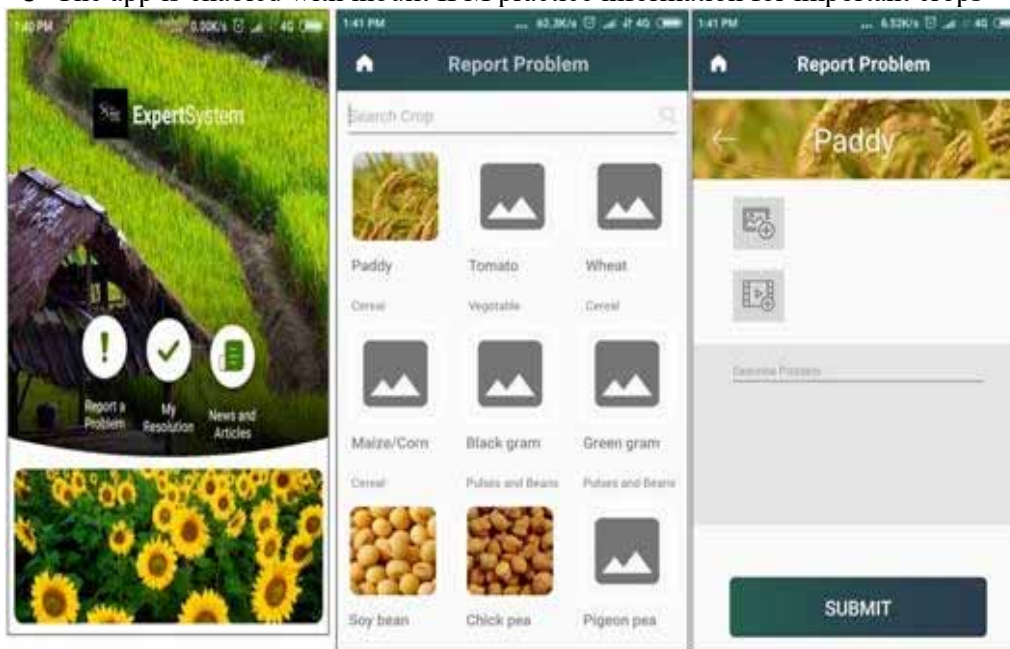
- Farmers can view the forecast and advisory whenever it needs.
- It is enabled to gather the open-source weather data of current location by GPS (mobile GPS should be on).
- Model incorporated will predict the pest severity based on the local weather condition
- Advisory will be issue based on the pest severity.
- This mobile application increases the accuracy and is user friendly
- Increases the accuracy and user friendly
- The prediction is Need and location based



Android mobile application for pest and disease forecasting and advisory issuing to farmers

C4. NGT Expert System: NGT expert system is an android mobile app for managing pests and diseases on field by experts which would be reported by individual farmers or pest monitors on behalf of farmer. Farmers report the problem on field by using android app which is transferred to designated expert. Experts then provides advisory to the farmer through text SMS or voice SMS. The following quires submitted by farmers or pest monitors will be available on web application for expert to issue advisory.

- Farmer or Pest monitor records the problem on field using android mobile app
- The details along with GPS location are transferred to server in real time
- Expert picks the problem based on the location or crop and issues advisory to farmer
- The app is enabled with inbuilt IPM practice information for important crops



D. Field automation/ precision crop practices

D1. Sensor based automated irrigation techniques in important agricultural crops: Conventional surface irrigation is water expensive and costlier. Precision production system through time / volume-based automation require human intervention and interpretation, emphasizes for sensor-based automation for efficiency and effectiveness. This system provides complete precision irrigation solution considering crop, soil and weather information using AI and IoT. It consisted of Gateway, Soil moisture sensor, Field controller, Solenoid valve, IoT pump controller.



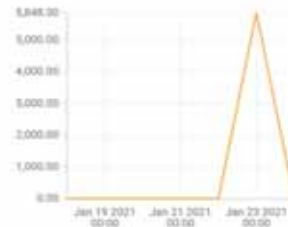
Soil Moisture sensor



Field controller



IoT pump controller



Solenoid valve

- Laser Spray / Rain Hose Method of Irrigation could enhance uniform germination of agricultural and vegetable crop seeds.



- Drip irrigation in aerobic rice saved water to the tune of 45-55 percent apart from reducing methane emission (18-20 Kgs/ha) almost 5 times less over surface flooded irrigation.
- Drip Irrigation with application of N & K fertilizers through fertigation in different splits at fortnightly intervals up to flowering enhanced N and K use efficiency up to 65 and 80 percent respectively

D2. Reduced runoff farming: Conceptualizing drylands with rainfall above 750 mm as irrigated ecosystem, a water and energy secured polyhouse based rainwater harvesting and sustainable production system is generated under NAHEP. The components of the system include complete rain water harvested polyhouse, storage sump having a capacity of 50% harvestable water, solar green energy system and precision protected cultivation viz., sensor-based automation, fertigation, weather control. The module supports commercial crop under protected cultivation for 220-250 days annually with only harvested rain water.





Reduced Runoff Farming

D3. Solid state cooling module for raw milk cooling: India is the leading producer and consumer of dairy products worldwide with 130-million-ton annual milk production, yet a significant proportion is spoiled due to microorganism activity and lack of transportation facilities in rural areas of India. Proper cleaning and rapid cooling at 4°C or less temperature is essential to avoid spoilage. TEC or SSRS is an alternative for the conventional cooling systems. This technology works on the principle of Peltier effect which states that when voltage is applied between two ends of electrode, which is connected to semiconducting material creates the temperature difference which will cause material to diffuse from hot side to cold side. Thermoelectric solid-state systems are compact, reliable, noiseless, flexible, eco-friendly and green technology. The present refrigeration system provides more cooling effect by using refrigerants but is has some disadvantages like emission of GHC's. Considering these demerits of conventional refrigerator system, the solid-state refrigerator was designed and developed.

It is fabricated with food grade stainless steel material with 52 W/mK. The inner vessel (water jacket) has 3 litre capacity and outer cooling cabinet has 6.5 litre capacity, having 45 cm height and 15 cm diameter and the insulation has been provided to the unit with thickness the of 1 cm to reduce the heat loss to the surrounding. Components of solid-state refrigerator include, Thermoelectric module/cooler, Extended fins with exhaust fan (heat sink), Switch mode power supply



Outer and inner view solid state cooling module

E. Use of ICT in dispersing agro-met advisories

E1. ESAP for real-time pest management

ESAP is a digitized tool to empower extension officers of Dept. of Horticulture and Rural youth for real-time pest management through ICT platform -ESAP

- Extension officer of Dept. of Horticulture (Ramanagera and Chikkaballapura districts) and rural youth @ 1 per taluk were trained and empowered with tablets containing pest diagnosis and management contents for providing on-spot consultation to farmers
- During the period of 10 months Extension officer and rural youth diagnosed and suggested management options for 16,813 pest problems
- Problems that were unable to diagnose using tablets were referred to subject experts located at KVK and other stations. Totally 1389 such problems were resolved by the experts using smartphones/ computer within 24 hours
- Based on the success of the pilot project implemented at UAS, Bangalore, the Dept. of Horticulture, Govt. of Karnataka has expanded and adopted the same in the entire state of Karnataka.



Extension officers educating farmers to use app-based support system in farmers' field

E2. Weather Advisory services: Weather based bulletins are prepared by including the information on realized weather and weather forecast on rainfall, temperature, relative humidity, wind speed and direction for the next five days received from IMD, Bangalore. Agromet Advisories (AAS) are prepared by taking the guidance from experts viz., Agronomist, Horticulturist and Entomologist, Plant Pathologist, Animal, Fishery and Poultry Scientists. Apps like Meghdoot, Damini, Mausam and Sidilu are being used to update the farmers about past weather, forecasted weather, extreme weather along with agromet advisories. These AAS are dispersed every Tuesday and Friday through different channels listed below:

No.	Extension Service	Number of farmers
E1	AAS through e-mails: Line department officials (KSDA & IMD)	150 mails
E2	Uploading AAS in UASB website (biweekly)	108/ year
E3	Mobile apps: Meghdoot, Damini and Sidilu	108/ year



AAS through e-mails: Line department officials (KSDA & IMD)



Uploading AAS in UAS website (biweekly)



Mobile Apps used to upload agromet advisories

Integrated Farming System: Models

Farmers concentrate mainly on crop production which is subjected to a high degree of uncertainty in income and their employment. In this contest, it is imperative to evolve suitable strategy for augmenting the income of a farm. Integration of various agricultural enterprises *viz.*, cropping, animal husbandry, fishery, forestry etc. have great potentialities in the agricultural economy. These enterprises not only supplement the income of the farmers but also help in increasing the family labor employment. UASB has developed 60 (sixty) Integrated Farming system (IFS) models that suits to the farmers (17322 stake holders: 17219 general stake holders + 103 model stake holders) of agro-ecological conditions in 10 districts (Bangalore Urban, Bangalore Rural, Ramanagara, Chikkaballapura, Kolar, Mandya, Mysore, Chamarajanagara, Hassan and Tumkur) coming under the jurisdiction of UASB. All the stake holders have realized on an average **Rs.4.60** net income per rupee investment and higher B:C ratio even during the drought years through integrated farming system interventions.



Turmeric crop (Allapy supreme)



Banana crop (Yelakki)



Coconut crop



Fodder crop (CO-4)



Dairy unit



Vermicompost unit

IFS components existing in the farm of Shri. H. Ravikumar S/o Hanumaiah. H, Chamarajanagar district

6.6.3.6. IPR Cell/ ITMU.

Is the University currently having functional Intellectual Property Right Cell: Yes.

UASB has IP cell and Technology commercialisation committee. In order to protect the IP generated in the University, Intellectual Property Management Cell (IPMC) is functioning, while Commercialization of the technologies developed in the University is delt by Technology Evaluation & Commercialization Committee (TECC) & Technology Commercialization Committee (TCC). All these units are functioning under the Directorate of Research, UAS, Bangalore. Intellectual Property Management Cell (IPMC) came into existence in the University during 2016. It takes protection of all IP forms generated in the University. Many programmes were conducted to create awareness among the Teachers and PG students on IP related issues such as patents, plant variety protection, traditional knowledge etc. The abstract of the patents granted, patent applications filed, varieties registered with PPV&FRA, New Delhi and applications submitted but awaiting registration and technologies commercialized during 2016-2020 are detailed below

Abstract of Patents, variety registration and technology commercialisation

Particulars	Numbers
Patents Granted	4
Patents application filed (Pending)	10
Varieties registered with PPV&FRA, New-Delhi	6
Varieties registration applications submitted but awaiting registration	5
Technologies commercialized	22

Details of Patents Granted

Sl. No.	Title	Scientist Involved	Patent no.	Date of issue of Certificate
1.	Composition for amelioration of peri- and post-menopausal symptoms and a process for producing the same	1. Shamshad Begum. S. 2. Geetha.K. 3. Vasundhara. M. 4.Dr. Suresha, S.V.	US Patent: 9,855,308 B2	02-01-2018
2.	Nata-de-coco production from microbial formation of coconut water through enrichment techniques	Dr. Narayanaswamy B	303710	29-11-2018
3.	Aloe Vera Gel Filleting Machine and a Method for Filleting	Dr. P. Srinivas Rao Dr. Ramachandra C T	310723	02-04-2019
4.	Selectable Marker system for transgenic programme	Dept. of Crop Physiology	334157	06-03-2020

Details of Patent application Filed

Sl. No.	Title	Scientist Involved	Application details	Date of filing
1.	Tomato Bread	Dr. H.B. Shivaleela	No.457/CHE/2010	22-02-2010
2.	A Method for inducing early and rapid bud break in mulberry plants	Dr. Nataraja Karaba	202041024544 E-filing Docket No. 50628 E-1/217174/2020- CHE	11.06.2020

3.	Rapid and accurate point of care LAMP colorimetric based diagnostic dip stick	Dr. M. K. Prasannakumar	202041051925 E-2/500/2021-CHE	12.02.2021
4.	Yellow gypsums a source of Sulphur, Silicon and other micro nutrients in agriculture	Dr. N.B.Prakash	202131002666	20.01.2021
5.	Solar – Powered rooftop aquaponics food production system	Dr. B.V. Krishnamurthy	202141011449 E-12/1017/2021- CHE TEMP/E- 1/13012/2021-CHE	18.03.2021
6.	Novel visual markers to identify haploids in rice at very early stage	Dr. B. Mohanraj	Under processes	DR approval 20.01.2021
7.	Development of Biosensor for detection of PRSV infecting Carica Papaya	Dr. Anitha Peter	Under processes	DR approval 12.02.2021
8.	Development of low-cost strata / platform from recyclable plastic waste for the rapid detection of plant virus (colorimetric)	Dr. Anitha Peter	Under processes	DR approval 25.02.2021
9.	Development of an alternative and simple in planta method of plant genetic transformation using a cationic lipid	Dr. Anitha Peter	Under processes	DR approval 25.02.2021
10.	Sub-Basic storage system	Dr. S. Rajendra Prasad Dr. Ramachandra Dr. H. G. Ashoka Dr. Shivanna, B. Dr. Mahesh Kumar Mr. Babu Ram Ray	202141006200 A	14.02.2021

List of varieties registered and application submitted with PPV & FRA, New Delhi

Sl. No.	Crop	Variety name	Registration	Date of issue	Date for renewal
1	Rice	MAS 946-1	200/2018	28.03.2018 (6)	26.08.2024
2		MAS 26	201/2018	28.03.2018 (6)	26.08.2024
3	Finger millet	GPU 48	349/2016	22.10.2016 (6)	11.02.2024
4		GPU 67	424/2016	29.12.2016 (6)	31.03.2025
5		ML 365	115/2017	31.03.2017 (6)	26.08.2024
6		MR 6	116/2017	31.03.2017 (6)	15.10.2023
7	Maize	MAH-14-5	Applied Under Process		
8	Rice	Daksha (KMP-175)			
9	Cowpea	PKB-4			
10		PKB-6			
11		KBC-9 (AV6)			
12	Grain Amaranth	KBGA-1			
13		KBGA-4			

A. Details of Intellectual Property Management Cell (IPMC) of UAS Bangalore during 2016 to 2020.

Dates of IPMC meeting held during the last five years

SI. No	Meeting Date
1	14 th September, 2016
2	22 th January, 2018
3	19 th May, 2019
4	08 th June, 2020
5	18 th December 2020

Meeting details of IPMC of UAS Bangalore during 2016 to 2020

SI. No.	Year	Date of Meeting of TMU	Major Recommendations	Actions Taken up
1	2016-17	14/09/2016	<ul style="list-style-type: none"> To organize a greater number of awareness programmes to the farmers with regard to protection of local varieties through PPVFRA, New Delhi 	<ul style="list-style-type: none"> Awareness programmes were conducted through KVKs
			<ul style="list-style-type: none"> The standard procedures and guidelines to provide/ sharing the revenue earned by the commercialization of IP components/ technologies in line with the guidelines already in practice in ICAR Institutions 	<ul style="list-style-type: none"> Committee was constituted for this purpose. This process is under the final stage of implementation
2	2017-18	22/01/2018	<ul style="list-style-type: none"> All the Department Heads to submit the applications for Patent through the Director of Research & Chairman, IPMC, so that the information can be updated at one source. 	<ul style="list-style-type: none"> It is being done
			<ul style="list-style-type: none"> There should be a suitable programme to identify farmer's varieties and to characterize these varieties both on morphological and molecular basis for which the project proposals can be submitted to PPV&FR Authority, New Delhi or Directorate of Research under funding support for Varietal Development programme. 	<ul style="list-style-type: none"> Recommendations are being practised
			<ul style="list-style-type: none"> To submit applications for Variety Registration wherever the varieties are notified and called for registration by PPV&FR Authority. 	<ul style="list-style-type: none"> Recommendations are being practised and the details on the applications for registration of variety is listed (Table)

3	2020-21	19/05/2020	<ul style="list-style-type: none"> • All the concerned breeders to submit the filled-up applications in respect of all eligible varieties pending for registration. 	<ul style="list-style-type: none"> • Recommendations are being practised and the details on the applications for registration of variety is listed
			<ul style="list-style-type: none"> • In crops like Rice & Maize the time limit is up to 27.07.2020 & hence the concerned breeders should act immediately without further delay & submit the applications before 30.05.2020 	<ul style="list-style-type: none"> • Suggestion was given to breeders and necessary compliance was made by the respective breeders.
			<ul style="list-style-type: none"> • The breeders can also file the applications under the new Variety category where varieties are pending for notification. 	<ul style="list-style-type: none"> • Recommendations are being practised
4	2020-21	08/06/2020	<ul style="list-style-type: none"> • The breeders presented the filled-up forms in different crops. 	<ul style="list-style-type: none"> • The breeders filled-up forms are submitted in respect of eligible crop varieties and submitted to PPV&FRA, New-Delhi
			<ul style="list-style-type: none"> • To correct/revise the contents as per the latest guidelines of PPV&FR Authority to submit the applications. 	<ul style="list-style-type: none"> • Recommendations adopted
			<ul style="list-style-type: none"> • It was suggested to submit the soft copy of the application to Dr. Niranjana Murthy, Co-ordinator, IPMC before 20.06.2020 	<ul style="list-style-type: none"> • Yes, it was done
5	2020-21	18/12/2020	<ul style="list-style-type: none"> • Whenever New Technologies are developed and approved by the authorized University bodies, wide publicity about the importance of the technologies must be uploaded in the University Website. 	<ul style="list-style-type: none"> • Recommendations are being practised
			<ul style="list-style-type: none"> • In case of Commercialization of Varietal Technologies, advanced breeding lines may also be auctioned to the private or any other needy agencies for amount bided by the technology seekers. While doing so, the IP issues related to the breeding material used to develop new breeding lines are to be complied. 	<ul style="list-style-type: none"> • It is under process
			<ul style="list-style-type: none"> • Whenever net revenue generated through Commercialization, the benefit sharing to the scientists and team responsible for the technology development has to be given for 10 years from the 	<ul style="list-style-type: none"> • It is under process

			date of Commercialization or till the expiry of protection period whichever is earlier.	
			<ul style="list-style-type: none"> • While listing the persons to whom the benefit has to be shared, the names of the beneficiaries are to be presented and approved in Annual Technical Meet (ATM) of the respective discipline and later approved by the University. 	<ul style="list-style-type: none"> • It is under process

B. Details of the Technology Commercialization Committee (TCC) meeting held during the period 2015-16 to 2020-21

SI. No.	Year	Date of Meeting of TCC	Major Recommendations	Actions Taken up
1	2015-16	03/09/2015 (date of commercialization)	The Sunflower Hybrid KBSH 41. The licence fee fixed for Rs 7.5 lakh + 14% ST.	Technology Commercialized - University licence granted to East African seed (u) Ltd, Po box,3678 Kampala, Uganda.
2		17/01/2015	The Rice hybrids KRH-2 and KRH-4 were recommended for commercialization. The licence fee for KRH-2 is for Rs 15 lakh + 5% royalty and KRH-4 for Rs 25 lakh + 3% royalty as non-exclusive for 5 years was recommended.	Technology Commercialized through NRDC.
3	2015-16	17/01/2015	The Rice Variety MAS-946 and MAS-26 and Finger Millet-ML365 were recommended for commercialization. The licence fee recommended for MAS-946 & MAS-26 is for Rs 1 lakh + ST and Finger Millet-ML365 for Rs 0.5 lakh + ST as non-exclusive for 5 years	Technology Commercialized through NRDC
4	2015-16	17/01/2015	The Drum Composting Equipment was recommended to commercialize with the licence fee of Rs 1 lakh + 1 % royalty as Non-Exclusive for 10 years.	Technology Commercialized through NRDC.
5	2015-16	17/01/2015	The following technological products recommended to commercialize as non- exclusive for the period of 10 years <ul style="list-style-type: none"> • Tender jack fruit used as vegetables. • Ready to serve juice (RTS). • Squash. • Bulb flour & it's products. • Seed flour & it's products. 	Technology Commercialized through NRDC

			<ul style="list-style-type: none"> • Jack fruit Peda. • Jackfruit Ice-cream. • Jack fruit Chips. • Jack fruit shrikand. • Jack fruit Jam. <p>The Licence fee of Rs 1 lakh for any five technology/ Rs 2 lakh for all ten technologies and the royalty fixed for 3 % on sales</p>	
2)	2015-16	04/07/2015	Ready to eat Honey Pan beeda was recommended for commercialization after patenting.	Technology Commercialized through NRDC – (3 licences were issued.)
3)	2015-16	27/7/2015	The 22 gadgets / equipment's as a single package was recommended to commercialize with the licence fee of Rs 1 lakh +3 % royalty as non-exclusive for 10 years.	Technology Commercialized through NRDC.
			The Rice Variety ARB-6 and ARB-8 were recommended for commercialization. The licence fee fixed for Rs 2.5lakh + 5% royalty for the individual variety as non-exclusive for 10 years.	Technology Commercialized through NRDC
			The technology Nata-de-coco was recommended for commercialization with the licence fee of Rs 50000 + 1.5 % royalty as non-exclusive for 10 years.	Technology Commercialized through NRDC
4)	2018-19	22/05/2018	<p>The following technologies are recommended for commercialization with the licence fee of Rs 8000 per formula or Rs 30000 + 5000 training cost as a package on non-exclusive basis.</p> <ul style="list-style-type: none"> • Instant Bisibelebath mixes. • Ready- to-prepare mixes (5 technologies) 	Steps will be taken to commercialize.
		22/05/2018	<ul style="list-style-type: none"> • High capacity tamarind fruit dehuller- the licence fee fixed for Rs 1.5 lakh for 10 years as non-exclusive with 3 % royalty on sales. Also recommended to fix for UAS(B) in house manufacturer sale cost of Rs 1 lakh along with motor. 	Technology Commercialized through NRDC.

		22/05/2018	<ul style="list-style-type: none"> Pongamia Decorticator was proposed for Rs 1 lakh to Commercialize with NRDC with 3% royalty on sales and for inhouse UAS(B) manufacturer to sell @ Rs 70000/- with motor. 	
		22/05/2018	<ul style="list-style-type: none"> Sunflower Hybrids KBSH-44 and KBSH-79 KBSH-44 Mahgco -500000 + 4.5% royalty/5 years, KBSH-79 to Mahgco-600000 + 4.5% royalty/5 years. 	Technology Commercialized - The licence given to Maharashtra Hybrid Seeds Company Pvt. Ltd, Mumbai.
5)		24/07/2019	<ul style="list-style-type: none"> High fibre nutri mix food product recommended to commercialize with licence fee of Rs 20000/- + 2000 training cost as non-exclusive. 	Technology Commercialized through NRDC
		24/07/2019	Sunflower dehuller Equipment was recommended to commercialize with the licence fee of Rs 0.5 lakh + 3% royalty as Non-Exclusive for 10 years.	Technology Commercialized through NRDC
		24/07/2019	The technology products Coconut flour-based convenience foods namely., Cookies/ Masala biscuits / Cake / Rusk were recommended to commercialize. The licence fee fixed for four products was Rs 50000 + 4000 training cost or Rs 15000 + 1000 training cost for the single product as non-exclusive for 5 years with 3 % royalty on sales.	Technology Commercialized - The licence given to Mahesh Devaraju Bangalore.
		24/07/2019	The Rice hybrids KRH-4 was recommended for commercialization with the licence fee of 7.5 lakh + 3% royalty for 5 years as non-exclusive.	Technology Commercialized through NRDC
		18/11/2019	The Maize hybrid-MAH-14-5 was recommended for commercialization with the licence fee of 5 lakh lumpsum as non-exclusive.	Technology Commercialized - The licence given to Delta Agri genetics Pvt, Ltd Hyderabad.
6)	2020-21	01/02/2020	<p>The following technological products recommended to commercialize as non- exclusive for the period of 5 years</p> <ul style="list-style-type: none"> Enriched Finger millet Vermicelli (FMV). 	Steps will be taken to commercialize.

		<ul style="list-style-type: none"> • FMV with Ashwagandha root powder. • FMV with Amruthballi leaves powder. • FMV with germinated fenugreek seeds powder, • FMV with madhunasini leaves powder. • FMV with jamun fruit seeds powder. • Each – 8000 (Licence fee) + 1000 (Training fee) or as package for all the products - 30000 (Licence fee) + 2000 (Training fee) 	
	18/05/2020	<p>The following technological products recommended to commercialize</p> <p>Moringa (drum stick) dark Chocolate,</p> <ul style="list-style-type: none"> • Moringa (drum stick) green Chocolate, • Morinaga (drum stick) rosemary tea, • Moringa (drum stick) tulsi green tea. – the licence fee fixed as a package for Rs 30000 + 4000 training cost non- exclusive for the period of 5 years. 	<p>Technology Commercialized -</p> <p>The licence given to Smt. Vijayalakshmi M/s millet Home, Syno 151/1, Gokerethotagalu, Yeliyur Road, Devanahalli Taluk, Bengaluru.</p>
	18/05/2020	<p>The Proso millet snack bar – licence fee for Rs 15000+2000 training cost and the Little millet snack bar for Rs 10000 + 1000 training cost.</p>	<p>Steps will be taken to commercialize.</p>
	18/05/2020	<ul style="list-style-type: none"> • Coconut flour sweet and salt biscuit, • Coconut flour salt biscuit, • Coconut flour nutri-strips, • Coconut flour ladoo – <p>The licence fee fixed for four products for Rs.30000 + 4000 training cost or Rs 10000 + 1000 training cost for the single product as non-exclusive for 5 years.</p>	<p>Steps will be taken to commercialize.</p>
	18/05/2020	<p>The following Ready- to -prepare Maize based Products were recommended to commercialize</p> <ul style="list-style-type: none"> • Sweet Pongal mix, • Savoury Pongal mix, • Bisibelebath mix. <p>The licence fee fixed for Three products was Rs 25000 + 3000</p>	<p>Technology Commercialized -</p> <p>The licence given to M. Aradhya, Aradhya's Agro Food & Beverages, Food</p>

		training cost or Rs 10000 + 1000 training cost for the single product as non-exclusive for 5 years.	Processing unit, VC farm Mandya.
	18/05/2020	The Sunflower Hybrid KBSH – 53 seeds- 2500 kg, Female breeding line – 100 kg, Male breeding line – 50 kg, was recommended to commercialize with the licence fee fixed for Rs 5 lakh + 4.5 % royalty as non-exclusive.	Technology Commercialized - The licence given to M/s Invicta Agritech India Private Limited, Hyderabad.
	18/05/2020	The following Process technology was recommended to commercialize with the training fee of Rs 25000 + 3000 Training cost as non-exclusive for 5 years. <ul style="list-style-type: none"> • Ready – to – cook foxtail vangi bath mix • Ready – to – cook foxtail bisibele bath mix • Ready – to – cook dosa mix 	Technology Commercialized - The licence given to Monia Sultana M/s Serefresh LLP Bangalore.
	15/9/2020	The following technological products recommended to commercialize Finger millet Malt and Ragi Huri hittu. The licence fee fixed for each product was Rs 20000 + 2000 training cost as non-exclusive for 5 years.	Steps will be taken to commercialize.
	15/9/2020	The High Fibre Food mix was recommended to commercialize for Rs 20000 + 2000 training cost as non -exclusive for 5 years.	Steps will be taken to commercialize.
	15/9/2020	The Nutritional laddu was recommended to commercialize for Rs 50000 + 5000 training cost as non -exclusive for 5 years.	Steps will be taken to commercialize.

C. Other Committees

- Institute Biosafety Committee (IBSC):** As per the guidelines of RCGM of DBT, GOI, it is mandatory to have IBSC to carry out Research on GMOs and GM Crops. hence IBSC of UAS Bangalore is functioning under Directorate of Research.

Dates of IBSC meeting held during the last five years

Sl. No	Meeting Date
1	15 th July, 2016
2	07 th March, 2017
3	22 th January, 2018

Meeting Details of IBSC of UAS Bangalore, during 2016 to 2020

Sl. No.	Year	Date of IBSC meetings	Major Recommendations	Actions Taken up
1	2016-17	15/07/2016	<ul style="list-style-type: none"> • Dr. M. Udayakumar, Professor, has presented the revision of application for Confined event identification field trials in Ground nut transgenics. 	<ul style="list-style-type: none"> • IBSC Committee had approved request for submitting the detailed application in the prescribed format to RCGM to carry out Confined Event Identification Field Trails.
			<ul style="list-style-type: none"> • Dr. Vijendra S. Sangam DGM and Head, VRDC, KSSC, Dharwad has presented Bt cotton hybrid trial proposed by the Karnataka State Seeds Corporation Ltd. (KSSC) to be conducted at KVK Chamarajanagar. 	<ul style="list-style-type: none"> • IBSC Committee has asked to submit the detailed IBSC proposal approved by the IBSC UAS, Dharwad and material transfer agreement letter for the BG-II gene from Mahyco Monsanto.
			<ul style="list-style-type: none"> • Dr. Bhavani.P has presented the research project on “Screening rice (Oryza sativa indica) germplasm for γ-oryzanol content and expression profiling and characterization of phytosterol biosynthetic pathway genes cycloartenol synthase, sterol acyltransferase and cycloartenol methyltransferase”. 	<ul style="list-style-type: none"> • IBSC Committee has approved the research project.
2	2017-18	07/03/2017	<ul style="list-style-type: none"> • Director of Research has briefed about the rDNA projects conducted the by different Departments in the University. 	<ul style="list-style-type: none"> • Members appreciated the efforts made by the IBSC for smooth conducting of the projects
			<ul style="list-style-type: none"> • Member secretary, IBSC, UAS, Bangalore requested the Principal Investigators to present the results of the ongoing projects, new projects and termination of the projects if any. 	<ul style="list-style-type: none"> • IBSC Committee suggested that the new project proposals should be presented only by Principal Investigators. • IBSC Committee members gave suggestion regarding ongoing projects, new projects and also projects which do not require IBSC approval
3	2018-19	22/01/2018	<ul style="list-style-type: none"> • The New proposals have been approved by the RCGM. 	<ul style="list-style-type: none"> • IBSC Committee suggested to update status of the ongoing projects which were approved in earlier IBSCs.

		<ul style="list-style-type: none"> • Dr. Udayakumar, Professor (Retd.), Dept. of Crop Physiology presented and updated the brief summary and highlights of the r-DNA projects operated by the Dept. of Crop Physiology by various Scientists. He highlighted the significant outcome in Rice, Groundnut and Mulberry transgenic programmes. 	<ul style="list-style-type: none"> • IBSC Committee suggested to the use of CRISPR-Cas9 technology to remove selection markers from the transgenic plant systems and also suggested to use well adopted popular crop varieties in transgenic programmes.
		<ul style="list-style-type: none"> • Multi-disciplinary approach in the r-DNA projects involving other Scientists from the other disciplines are recommended. 	<ul style="list-style-type: none"> • Multi-disciplinary approach in the r-DNA projects involving other Scientists from the disciplines of Genetics and Plant Breeding, Agronomy, Plant Protection, Soil Science etc., has been approved.

2. **State level Committee on GM Crops:** As per the direction of Secretary Agriculture, GOK, a State level Committee was constituted to review the applications seeking NOC from GOK to conduct Confined Field Trails (CFTs) on GM Crops.

Dates of Committee meeting held during the last five years

SI. No	Meeting Date
1	01 th December, 2016
2	27 th March, 2018
3	15 th June, 2019

Meeting Details of the GM crops Committee during 2016 to 2021

Year	GM Crops Meetings dates	Major Recommendations	Actions Taken up
2016-17	1/12/2016	<ul style="list-style-type: none"> • The issues of GM crops being debated at various levels. 	<ul style="list-style-type: none"> • Consultative meeting of all the stake holders of GM crops in the state and to arrive at a suitable mechanism while dealing GM crops in the state and to arrive at a suitable mechanism while dealing GM crops in the state.
2016-17	1/12/2016	<ul style="list-style-type: none"> • The issue of NOC by the GOK and other states which have their own mechanism to issue NOC. 	<ul style="list-style-type: none"> • The IBSC Committee suggestions was given.
2016-17	1/12/2016	<ul style="list-style-type: none"> • The issue of GM crops, conducting and monitoring the CFTs, issue of NOC by the GOK. 	<ul style="list-style-type: none"> • The detailed report prepared and submitted to the Government of Karnataka
2017-18	27/03/2018	<ul style="list-style-type: none"> • The status and details of the applications received 	<ul style="list-style-type: none"> • The review of application submitted by Dow AgroSciences

		by the two companies was discussed.	India Pvt. Ltd. was taken up by the committee and technical suggestions was given by the committee.
2019-20	15/06/2019	<ul style="list-style-type: none"> The technical details of the proposal were presented in the meeting. 	<ul style="list-style-type: none"> Technical suggestions were given by the Committee members.
2019-20	15/06/2019	<ul style="list-style-type: none"> Required NOC to conduct Confined Field Trials (CFTs) and to submit the recommendations of the committee to the GOK based on the merit and content of the application. 	<ul style="list-style-type: none"> Technical suggestions were given by the Committee members

6.6.3.7. Central Instrumentation Unit

Is there a Central Instrumentation Unit in place: **Yes**

The University established a central instrumentation facility with state of art high end instruments at GKVK, Campus under the financial support of ICAR. This facility has three major equipment namely, Laser Confocal Microscope, Scanning Electron Microscope and GC/LC MS-MS. In addition to this, a national facility on stable Isotope Mass Spectrometry (IRMS) has also been established in university. The university also has common laboratory facility housing common instruments such as PCR machines, multi-mode reader, DNA fragment analyser and pyro sequencer. These facilities are being used by students and staff for both research and teaching.

Details of Central Instrumentation facility

Sl. No.	Facilities Available	Number
1	Scanning Electron Microscope	1
2	Laser Confocal Microscope	1
3	GC/LC	1
4	Applied biosystems PCR Machine	2
5	DNA fragment Analyser (Qiagen)	1
6	Pyro -sequencer	1
7	Analytical Electronic Weighing Balance	1
8	Multimode reader	1
9	Digital Handheld pocket refract Meter	1
10	pH Meter	2
11	Water Purification system (Biocheome company)	1



Pellet Driver Incubated Mixer



Vortex Mixer for Central



Bench Top Refrigerator Centrifuge



Gel doc Unit



Ultra Low Temperature - 86 Deep Freezer



Refrigerated Stackable Shaker



FKIG4 Celfrost Westfrost and Deg chamber

Central Instrumentation Laboratory

6.6.3.8. Global Support

University is regularly undertaken different initiatives serve to impart global support to the faculty and students. The University has MoU with many Agricultural Universities/Institutes abroad as listed elsewhere. The alumni of the university are spread around the globe and coordinate with UASB through our Alumni cell in forging ties with top Agricultural Universities and Institutes of the world. A faculty member is designated for coordinating corporate and international affairs. UASB maintains a corpus fund for sponsoring faculty and students' trainings of different time period ranging from one week to one year in advance research centres and laboratories abroad.

List of International MoUs / Agreements for global support

Sl. No.	MoU / Agreements	Institutions	Type of Collaboration
1	Inter Institutional Agreement for exchange of students and Faculty, (NAMASTE & CeMIS-IN/DE)	Gottingen University, Germany	Academic
2	Cooperation Agreement to promote international academic, cultural and scientific exchange of Faculty of Bioscience Engineering -Consortia Agreement for M.Sc. Programme in IMRD	Ghent University, Belgium	Academic
3	Cooperation Agreement to promote international academic, cultural and scientific exchange by student & staff programme ASEM DUO -Belgium / Flanders	Ghent University, Belgium	Academic
4	To promote international academic cultural and scientific exchange of student and staff programme- License Agreement for use of Parental line of KBSH-41 sunflower hybrid	ICAR- Indian Institute of Oilseeds Research Hyderabad and East African Seed (U) Ltd, Uganda	Academic
5	To strengthen and expand the mutual contacts between the two universities by faculty & student change, collaborative research and discovery, learning, and engagement	Purdue University, College of Agriculture, West Lafayette, Indiana, USA	Academic
6	To establish mutually beneficial relationship built on academic cooperation regarding the Higher Education Development Project (HEDP) related bounded scholarships.	Govt. of Islamic Republic of Afghanistan, Ministry of Higher Education	Academic
7	For exchange of scientists and technologists through planned programs and scientific literature, information and methodology	Western Sydney university, Australia	Academic
8	Exchange of students agreement	Graduate School of Horticulture & Faculty of Horticulture, Chiba University, Japan	Academic
9	Partnership agreement	Movetia Zurich University of Applied Sciences & Institute of National Resource Science, Gruental, Waednswil	Academic
10	Sponsorship Research Agreement on project – understanding the bio-chemical composition of seed coat in different crops	M/s TRu CapSol LLC Bethlehem, Pennsylviaia-18015, USA	

	to develop biodegradable membrane for encapsulation		
11	Partnership Agreement for Dual award and higher degree research candidature	Western Sydney University, Australia	
12	Research and development	Georg-August-University, Göttingen Stiftung, Wilhelmsplatz, Germany University of Kassel & Göttingen, Germany	Research
13	Internship Agreement for 5-6 students under NAHEP- CAAST project	Food and Agriculture Organization of the United Nations, (FAO)	Academic
14	Research and development	Georg-August-University, Göttingen Stiftung, Wilhelmsplatz, Germany University of Kassel & Göttingen, Germany	Research
15	Research Project – The Rural Urban interface of Bangalore: A space of Transitions Agriculture, Economics and Society parenting with the German FOR2432	The Deutsche Forschungsgemeinschaft (DFG), Germany & Dept. of Biotechnology, GoI - University of Kassel & Göttingen, Germany	Research
16	Development of Sustainable Rural energy Options through Native Biofuel Crops	International Centre for Research in Agroforestry, Nairobi, Kenya	Research
17	For collaborative Research work	CIMMYT, Carretera México-Veracruz, Km. 45, El Batán, 56237 Texcoco, MÉXICO	Research
18	Bioavailability of dietary proteins from plant-based foods	International Atomic Energy Agency (IAEA) Vienna.	Research
19	Grant Agreement to provide support to the Genetic enhancement of Dolochos bean through integration of conventional breeding and molecular approaches and farmers participatory plant breeding	Kirkhouse Trust, SCIO, Long Hanborough, Oxfordshire, UK	Research
20	Sponsorship Research Agreement on project – understanding the bio-chemical composition of seed coat in different crops to develop biodegradable membrane for encapsulation	M/s TRu CapSol LLC Bethlehem, Pennsylvania-18015, USA	Research



UNIVERSITY OF AGRICULTURAL SCIENCES BANGALORE (UASB)
Center for Next Generation Technologies (NGT) in Adaptive Agriculture (AA) supported
by ICAR-NAHEP under
Centre for Advanced Agricultural Science & Technology (CAAST) Program
(F.No./NAHEP/CAAST/2018-19)

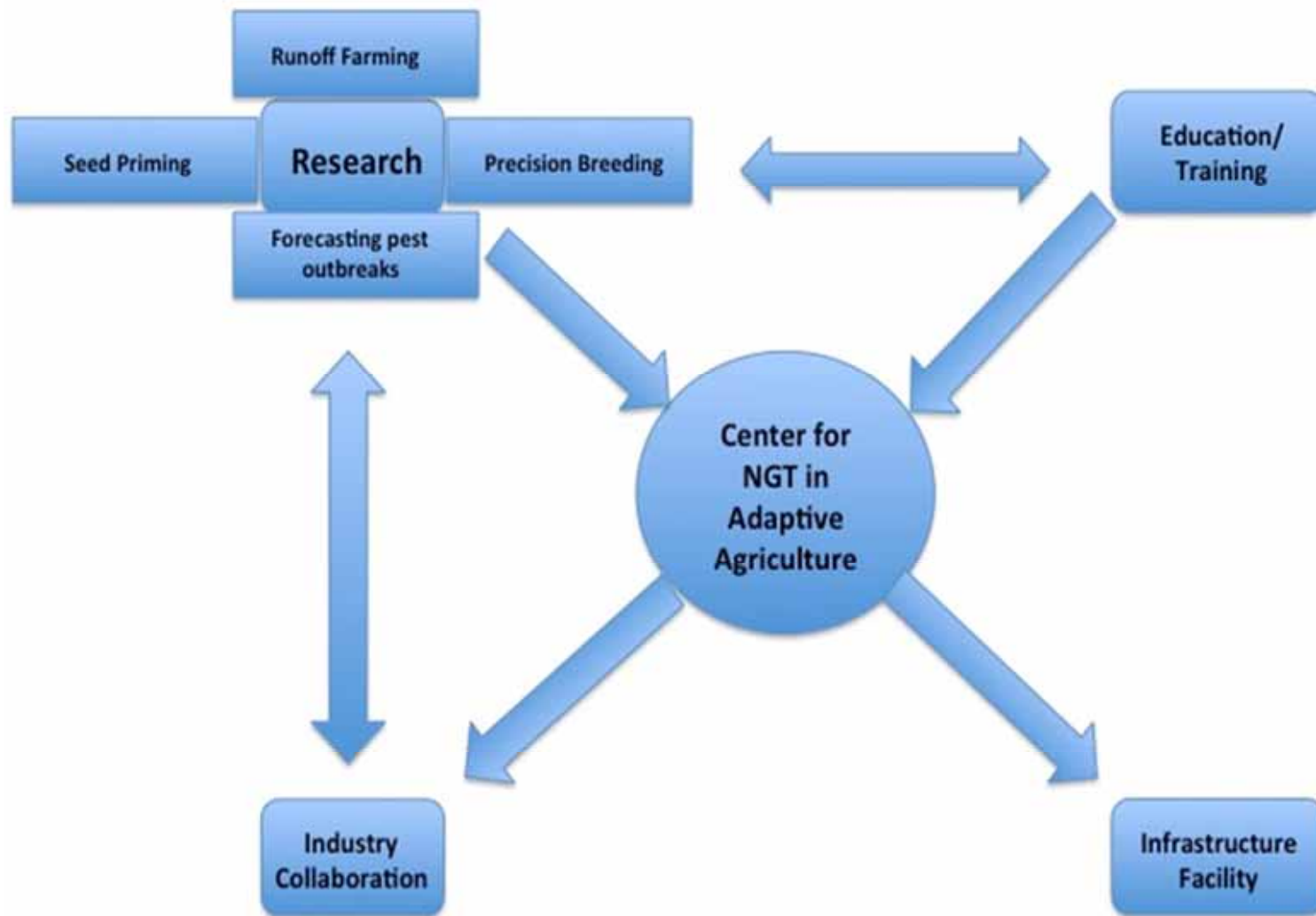
India may be at a fork in the road in terms of food and nutrition security following the green revolution. This can be attributed to a growing population, diminishing arable land resources, and production restrictions caused by climate change. As a result, modern tools and techniques are required to increase agricultural production. Rapid progress has been made in the development of a wide range of technologies in the last few decades, ranging from biotechnological tools (that can help grow higher-yielding crops) to biosensor tools (that can attend to an effective cultivation of crops). To maintain yield levels in major crops, precision breeding tools for trait improvement, models to forecast pest and disease outbreaks for effective management, seed micro-biome enrichment technologies for mitigating biotic and abiotic stresses, biosensors for efficient crop cultivation, and judicious natural resource management, among other things, are required. This program supported by the Indian Council of Agricultural Research (ICAR)-National Higher Education Project (NAHEP) is addressing some of these major issues in a comprehensive interdisciplinary manner. Judicious application of modern tools and techniques, could help in overcoming the current yield ceiling in many crops and in combating the challenges of increasing yield under stressful environments.

Based on the existing strengths and research leads, a program on Next Generation Technologies (NGT) in Adaptive Agriculture (AA) in specific areas has been initiated at the University of Agricultural Sciences, Bangalore under the Centres for Advance Agriculture Science and Technology (CAAST) of the National Agricultural Higher Education Project (NAHEP) of ICAR. There are four objectives in the *NGT in AA* program of UASB. Objective 1 which includes research component is divided into four activities. Further, objectives 2, 3 and 4 involve skill development, training and demonstrations including strengthening ongoing post-graduate programmes of the UASB. The project has been approved with total outlay of 20.00 crores for three years (2017-18 to 2020-21)

Aim of the Next Generation Technologies in Adaptive Agriculture

- Human Resource Development (HRD) in four different chosen areas of agricultural technologies
- Strengthening infrastructure for post graduate teaching and research
- Research on the chosen areas of agricultural technologies

Brief Progress Report: As per the mandate research in four different areas have been conducted with the help of postgraduate students, and many PG students and faculty have been trained through focused workshops and exposure visits in the chosen areas. Modern infrastructure (such as reduced run-off framing, models for forecasting pest diseases, central instrumentation facility, common laboratory facility) required for crop management, students' research and training have been strengthened. Over the last three years, we've hosted 60 training programmes that have benefited over 6000 students and faculty from all over the world. One patent (solid state colling module) has been filed and many research papers published in peer reviewed journals.



Overview of the activities under *Center for Next Generation Technologies (NGT) in Adaptive Agriculture (AA)*

6.6.4. Extension Support

In agricultural-dependent economies, extension outreach programmes have been the main conduit for disseminating information on farm technologies, support rural youth learning and assist farmers in developing their farm technical and managerial skills. Extension programmes will help increase farm productivity, farm revenue, reduce poverty, improve socio economic status and minimize food insecurity. Agricultural extension is the application of scientific research and new knowledge to agricultural practices through farmer education. The field of 'extension' now encompasses a wider range of communication and learning activities organized for rural people by extension personnel from different disciplines of the University of Agricultural Sciences, Bangalore.

6.6.4.1. Extension Council

The Act 18 (Karnataka Act No.10 of 2010) of University of Agricultural Sciences, Bangalore, the Extension Education Council is the advisory body to support all policy matters and this council meets once in a year to consider and make recommendations in respect of the following.

- a) Extension Education programmes and projects of the University
- b) Co-ordination of Extension Education activities for improvement of Agriculture and allied branches and for the development of Rural Communities
- c) Development of farmers Education and Training and Advisory services
- d) Identification and resolution of field problems and transmission of information
- e) Methodology of Extension Education
- f) Evaluation of the Krishi Vigyan Kendra functions

Present Composition of Extension Education Council

Sl. No.	Name / Designation	Chairman / Member/ Convener
1.	The Vice-Chancellor, UAS, GKVK, Bangalore	Chairman
2.	The Director of Education, UAS, GKVK, Bangalore	Member
3.	The Director of Research, UAS, GKVK, Bangalore	Member
4.	The Registrar, UAS, GKVK, Bangalore	Member
5.	The Dean (Post Graduate Studies), UAS, Bangalore	Member
6.	The Dean (Agri.), College of Agriculture, GKVK, Bangalore	Member
7.	The Dean (Agri.), College of Agriculture, V.C. Farm, Mandya	Member
8.	The Dean (Agri.), College of Agriculture, Hassan	Member
9.	The Dean (Agri.), Sericulture College, Chinthamani	Member
10.	The Dean (Students Welfare), UAS, GKVK, Bangalore	Member
11.	The Commissioner, Sericulture Department, GoK	Member
12.	The Director, Dept. of Agriculture, GoK	Member
13.	The Director, Dept. of Agricultural Marketing, GoK	Member
14.	The Director, Dept. of Horticulture, GoK	Member
15.	The Director, Dept. of Women & Child Welfare, GoK	Member
16.	The Director, Watershed Development, GoK	Member
17.	The Chief Conservator of Forest, Social Forestry, GoK	Member
18.	The Assoc. Director of Research (Hq.), Bangalore	Member
19.	The Assoc. Director of Research, V.C.Farm, Mandya	Member
20.	The Assoc. Director of Extension (Hq.), Bangalore	Member
21.	The Assoc. Director of Extension, V.C.Farm, Mandya	Member
22.	The University Head, Department of Agronomy, UAS(B)	Member
23.	The University Head, Department of Agricultural Engineering, UAS(B)	Member
24.	The University Head, Department of Soil Science & Agricultural Chemistry, UAS(B)	Member
25.	The University Head, Department of Agricultural Extension, UAS(B)	Member

26.	The University Head, Department of Agricultural Marketing & Cooperation, UAS(B)	Member
27.	The University Head, Department of Agricultural Microbiology, UAS(B)	Member
28.	The University Head, Department of Seed Science & Technology, UAS(B)	Member
29.	The University Head, Department of Genetics and Plant Breeding, UAS(B)	Member
30.	The University Head, Department of Crop Physiology, UAS(B)	Member
31.	The University Head, Department of Plant Pathology, UAS(B)	Member
32.	The University Head, Department of Agricultural Entomology, UAS(B)	Member
33.	The University Head, Department of Horticulture, UAS(B)	Member
34.	The University Head, Department of Sericulture, UAS(B)	Member
35.	The University Head, Department of Food Science & Nutrition, UAS(B)	Member
36.	The University Head, Department of Agricultural Economics, UAS(B)	Member
37.	The University Head, Department of Plant Biotechnology, Bio-chemistry and Basic Microbiology, UAS(B)	Member
38.	The University Head, Department of Forestry, Environmental Science & Botany, UAS(B)	Member
39.	The University Head, Department of Apiculture, UAS(B)	Member
40.	The University Head, Applied Mathematics, Statistics & Computer Science, UAS(B)	Member
41.	The University Head, Department of Animal Science, UAS(B)	Member
42.	<u>Two Progressive Farmers</u>	Member
43.	i. Smt. Manjula, Husakuru Village, Doddaballapura Tq, Bangalore Rural ii. Mr. K.C. Boregowda, Kattedoddi Village, Mandya Tq& district	Member
44.	<u>One Extension Educationist</u> Dr. H. N. Byrareddy, Former Director of Extension, APAU (ANGRAU)	Member
45.	<u>One Agro Industrialist</u> Mr. R. Prakash, Vidyagiri Layout, Nagarabhavi, Bangalore	Member
46.	<u>Five Organizations nominated by Chairman</u>	Member
47.	i. Department of Rural Development and Panchayat Raj, GoK	Member
48.	ii. Department of Cooperation, GoK	Member
49.	iii. Water Resource Department, GoK	Member
40.	iv. <u>Agro Industrialist/Agro-Service Organization</u> Mr. H. Nischil Ananthapurushotham, Naren Machine (I) Pvt. Ltd., Bengaluru	Member
50.	v. <u>NGO related to Agriculture and Rural Development</u> The Executive Director, AME Foundation, Bangalore	Member
51.	The Director of Extension, UAS, GKVK, Bangalore	Member Secretary
52.	Training Coordinator, Staff Training Unit, GKVK	Invitee
53.	Chief Instructor, Farmers Training Institute, GKVK	Invitee
54.	Manager & Head, Agril. Tech. Information Centre, GKVK	Invitee
55.	Head, Distance Education Unit, GKVK	Invitee
56.	Coordinator, Bakery Training Unit, Hebbal	Invitee
57.	Sr. Information Specialist, Farm Information Unit, GKVK	Invitee
58.	Head, Agricultural Sciences Museum, GKVK	Invitee
59.	Extension Leader, EEU, Nagenahalli, Mysuru	Invitee
60.	Extension Leader, EEU, Kolar	Invitee
61.	Senior Scientist & Head, KVK, Bengaluru Rural	Invitee

62.	Senior Scientist & Head, KVK, Ramanagara	Invitee
63.	Senior Scientist & Head, KVK, Chikkaballapur	Invitee
64.	Senior Scientist & Head, KVK, Mandya	Invitee
65.	Senior Scientist & Head, KVK, Chamarajanagara	Invitee
66.	Senior Scientist & Head, KVK, Hassan	Invitee
67.	Senior Scientist & Head, KVK, Tumkur	Invitee

Details of Extension Council Meetings

Sl. No.	Year: 2016-17 Date of EEC Meeting: 15-06-2016 (55 th EEC)	
1.	Major Recommendations	Action Taken
	<ul style="list-style-type: none"> Implement the decision of 22nd Coordination Committee meeting to revise the soil and water samples charges 	<ul style="list-style-type: none"> Revised Soil and water samples testing charges to Rs.150/- per sample w.e.f. 09-05-2017.
	<ul style="list-style-type: none"> Develop DVDs on different crops/technologies of agriculture and allied 	<ul style="list-style-type: none"> Developed 54 DVDs about Agriculture and allied subjects.
	<ul style="list-style-type: none"> Give publicity to increase the admissions of certificate and Diploma courses in distance education. 	<ul style="list-style-type: none"> Wide publicity on certificate/Diploma courses under Distance Education mode for increasing the admission.
	<ul style="list-style-type: none"> Linkage of all the available websites related to agriculture and allied to the e-krishi portal of the University. 	<ul style="list-style-type: none"> Linked the Agriculture related e-Portals, e-SAP and Agro Meteorological Apps developed by state Government/Universities/Departments to e-krishiuasb portal for easy accessibility.
	<ul style="list-style-type: none"> Awareness on technical information available in the UAS(B) e-krishi portal during Bi-monthly workshops. 	<ul style="list-style-type: none"> Awareness on e-krishiuasb portal during Bi-monthly workshops to the line department officials for effective utilization.
	<ul style="list-style-type: none"> Increase in sending mobile SMSs. 	<ul style="list-style-type: none"> Delivering weekly three short messages on agriculture/horticulture/weather forecasting and other related information through mobile SMSs to 128550 registered farmers.
	<ul style="list-style-type: none"> Complete within 3-4 months on installation of digital display regarding agriculture related information at MPCs under RKVY project. 	<ul style="list-style-type: none"> Providing Agriculture related information at 31 'Milk Producers Cooperative Societies' of Bengaluru Rural Districts under RKVY project.
	<ul style="list-style-type: none"> Make provision in UASB e-krishi portal for asking queries by farmers. 	<ul style="list-style-type: none"> Created provision to raise the questions by farmers at e-krishiuasb portal and subsequently providing solutions.
	<ul style="list-style-type: none"> Implement the technologies developed by KSSRDI through KVKs and also link the e-learning portal with UAS(B) e-krishi portal 	<ul style="list-style-type: none"> Implemented technologies developed by Karnataka State Sericulture Research and Development Institute (KSSRDI), Bangalore in adopted villages of KVKs. Linked the sericulture e-learning portal to e-krishiuasb portal.
	<ul style="list-style-type: none"> All the KVKs/Units to conduct training programmes by including water management and skill development topics. 	<ul style="list-style-type: none"> Water Management and Skill Development topics included in the training programmes organized by KVK/Units.

	<ul style="list-style-type: none"> ▪ Take-up 80-100 acres on production of pulses for celebration of 2016 as Pulses' year 	<ul style="list-style-type: none"> ▪ Taken-up demonstrations on pulses in 232 acres by EEU/KVKs in farmers' fields in connection with International pulses year 2016.
	<ul style="list-style-type: none"> ▪ Complete the display/depiction work of Agricultural Sciences Museum with in Feb 2017 	<ul style="list-style-type: none"> ▪ Inaugurated Agricultural Sciences Museum at GKVK on 31-3-2017 for the benefit of farmers and general public.
	<ul style="list-style-type: none"> ▪ Publish success stories on awardee farmers 	<ul style="list-style-type: none"> ▪ Published success stories in Kannada News Papers about state (4), district (14) and taluk level (10) awardee farmers on their agriculture practices.
2.	Year: 2017-18 Date of EEC meeting: 27-06-2017 (56th EEC)	
	Major Recommendations	Action Taken
	<ul style="list-style-type: none"> ● Release booklet on farmers' FAQs with solutions 	<ul style="list-style-type: none"> ● Released extension bulletin on "Answers to Farmer's Questions".
	<ul style="list-style-type: none"> ● Exhibit the technologies/important activities of KVKs/Units during RAWEP, Krishimela and Training programmes 	<ul style="list-style-type: none"> ▪ Organized exhibitions on technologies/important programmes of KVKs/EEUs and Units of Directorate of Extension during RAWEP and Farmers Training Programme.
	<ul style="list-style-type: none"> ● Implement the new technologies/ varieties developed by UAS, Bangalore 	<ul style="list-style-type: none"> ▪ Conducted 27 Front Line Demonstrations on varieties/ technologies released by UAS, Bangalore by KVKs and crop museum of commercial value are developed at demonstration farm of KVKs.
	<ul style="list-style-type: none"> ● Conduct impact studies on the various programmes implemented by STU/FTI/ KVKs 	<ul style="list-style-type: none"> ▪ Conducted impact studies on the following aspects by Staff Training Unit, Farmers Training Institute and KVKs. <ul style="list-style-type: none"> ◆ Pre-kharif crop production technology ◆ Soil analysis ◆ Inter cropping systems ◆ Adoption of new crop varieties ◆ Horticulture technologies ◆ Integrated nutrient management ◆ Production of fodder crops ◆ Animal husbandry technologies ◆ Use of agricultural implements/ machineries ◆ Value addition technology in food
	<ul style="list-style-type: none"> ● Organize farmers' required forest plants/species distribution programme in collaboration with Forest Dept., GOK 	<ul style="list-style-type: none"> ▪ Distributed 15000 different forest plants/species to farmers in collaboration with Department of Forest, GoK.
	<ul style="list-style-type: none"> ● Conduct training programme to Forest Department staff on their demand 	<ul style="list-style-type: none"> ▪ Conducted training programs to Forest Department Officials under ATMA.

	<ul style="list-style-type: none"> Organize skill development training programmes of Skill Council of India, Government of Karnataka and MANAGE, Hyderabad 	<ul style="list-style-type: none"> The following ‘Skill Development Training’ programmes were organized at KVKs. <table border="1" data-bbox="837 205 1334 1016"> <thead> <tr> <th>Sponsored / Organized</th> <th>Title</th> <th>Farmers (No.)</th> <th>Days</th> </tr> </thead> <tbody> <tr> <td colspan="4">Skill Council of India</td> </tr> <tr> <td>KVK, Ramanagara</td> <td>Tractor management</td> <td>20</td> <td>25</td> </tr> <tr> <td>KVK, Chamarajanagara</td> <td>Sericulture</td> <td>20</td> <td>25</td> </tr> <tr> <td colspan="4">MANAGE, Hyderabad</td> </tr> <tr> <td>KVK, Ramanagara</td> <td>Processing and Value Addition</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Chikkaballapur</td> <td>Apiculture</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Chikkaballapur</td> <td>Nursery management</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Mandya</td> <td>Integrated Cropping System</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Mandya</td> <td>Sericulture</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Chamarajanagara</td> <td>Value addition and market linkage</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Hassan</td> <td>Mushroom cultivation</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Tumkur</td> <td>Coconut climbing machine</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Bangalore Rural</td> <td>Integrated Cropping System</td> <td>15</td> <td>06</td> </tr> <tr> <td>KVK, Bangalore Rural</td> <td>Value addition on millets</td> <td>15</td> <td>06</td> </tr> <tr> <td colspan="4">Government of Karnataka</td> </tr> <tr> <td>KVK, Ramanagara</td> <td>Mushroom production</td> <td>108</td> <td>15</td> </tr> <tr> <td>KVK, Chikkaballapur</td> <td>Mushroom production</td> <td>143</td> <td>15</td> </tr> </tbody> </table>	Sponsored / Organized	Title	Farmers (No.)	Days	Skill Council of India				KVK, Ramanagara	Tractor management	20	25	KVK, Chamarajanagara	Sericulture	20	25	MANAGE, Hyderabad				KVK, Ramanagara	Processing and Value Addition	15	06	KVK, Chikkaballapur	Apiculture	15	06	KVK, Chikkaballapur	Nursery management	15	06	KVK, Mandya	Integrated Cropping System	15	06	KVK, Mandya	Sericulture	15	06	KVK, Chamarajanagara	Value addition and market linkage	15	06	KVK, Hassan	Mushroom cultivation	15	06	KVK, Tumkur	Coconut climbing machine	15	06	KVK, Bangalore Rural	Integrated Cropping System	15	06	KVK, Bangalore Rural	Value addition on millets	15	06	Government of Karnataka				KVK, Ramanagara	Mushroom production	108	15	KVK, Chikkaballapur	Mushroom production	143	15
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	<ul style="list-style-type: none"> Organize training programmes on GST and Double Entry System on accounts for staff of UASB. 	<ul style="list-style-type: none"> Conducted 6 days training programme on GST and Double Entry System to the Staff of UAS, Bangalore. 																																																																								
3. Year: 2018-19 Date of EEC meeting: 29-06-2018 (57th EEC)																																																																										
	<ul style="list-style-type: none"> Implement the following High-level committee’s recommendations <ul style="list-style-type: none"> ➤ Establish consultancy cell in ATIC ➤ Short video films on agriculture ➤ Video conferencing facility ➤ Agricultural Sciences Museum ➤ Model instructional demo plots at KVKs ➤ Sales on inputs at KVKs 	<ul style="list-style-type: none"> Implemented the following recommendations of the high-level committee to improve extension educational activities in the University <ul style="list-style-type: none"> ▪ Established consultancy cell in ATIC and provided information related to agriculture, horticulture, plant protection and animal husbandry by the scientists ▪ Developed short video films on agriculture ▪ Established Video conferencing facilities at nine centers. Organized 67 meetings, eight training programmes and three Prime Minister’s Interaction meetings through video conferencing ▪ Establishment of Agricultural Sciences Museum is under progress ▪ Established 119 model instructional demo plots on different crops/technologies in all the KVKs ▪ Arrangements made for sale of inputs at KVKs 																																																																								

	<ul style="list-style-type: none"> Update the e-krishiuasb portal with relevant latest information on agriculture & allied 	<ul style="list-style-type: none"> Consolidated information on agriculture and allied subjects included in the existing e-krishiuasb portal (http://e-krishiuasb.karnataka.gov.in) and linked to various ICAR Institutes in the website.
	<ul style="list-style-type: none"> Take-up more quality seed production programmes in farmers' fields in collaboration with NSP, GKVK 	<ul style="list-style-type: none"> Produced 312.33 qtl. of quality seeds in collaboration with NSP, UAS(B) and produced 1.10 lakhs of quality horticulture plants/saplings by KVKs/EEUs.
	<ul style="list-style-type: none"> Develop book/leaflet on progressive and awardee farmers and same information upload to e-krishi portal 	<ul style="list-style-type: none"> Released Books, leaflets and brochures on success stories of progressive farmers and awardee farmers and uploaded these documents in the e-krishiuasb portal.
	<ul style="list-style-type: none"> Organize training programmes on water management and IFS with the financial support of line departments 	<ul style="list-style-type: none"> Organized 64 training programmes, eight abhiyanas and six melas on scientific water management and Integrated Farming System by the KVKs/EEUs in association with Dept. of Agriculture, Horticulture and Animal Husbandry.
	<ul style="list-style-type: none"> Awareness on agricultural marketing system during training programmes 	<ul style="list-style-type: none"> Provided information to farmers and SHGs on Agricultural Marketing system during training programmes conducted by KVKs/Units
	<ul style="list-style-type: none"> Conduct training programme on 'how to write the research project proposals' 	<ul style="list-style-type: none"> Conducted three days training programme for scientists on 'How to write the Research Project Proposals' technically supported by NAARM, Hyderabad.
4.	Year: 2019-20 Date of EEC meeting: 20-05-2019 (58th EEC)	
	<ul style="list-style-type: none"> Details to be presented on sale of seeds, planting materials and other inputs with net profit. 	<ul style="list-style-type: none"> Presented the details on sale of seeds, plants, books, nutrient mixtures, implements and other inputs with net profit during the period.
	<ul style="list-style-type: none"> Implement the family farming extension programmes 	<ul style="list-style-type: none"> Organized programmes on Integrated farming system, backyard poultry rearing, kitchen gardening, organic manure and animal health camps at adopted villages by KVKs. 15000 farmers were benefited through m-kissan on family farming system.
	<ul style="list-style-type: none"> More programmes on quality seed production at farmers' fields 	<ul style="list-style-type: none"> Taken up quality seed production on ragi, redgram and paddy in farmers' fields through Front Line Demonstrations in cluster / adopted villages.
	<ul style="list-style-type: none"> Send weekly three mobile SMSs and initiate to register more famers' mobile numbers 	<ul style="list-style-type: none"> Mobile numbers were collected from farmers during training programmes, their visits to centers and DAESI candidates. Totally 260978 mobile numbers were registered and sent 683 SMSs.
	<ul style="list-style-type: none"> Start new certificate courses under distance education which is advantageable to farmers 	<ul style="list-style-type: none"> Started Certificate Course on "Beekeeping" through Distance Education
	<ul style="list-style-type: none"> Policy Items related to Bakery course <ul style="list-style-type: none"> 14-week bakery technology certificate course fee revision 	<ul style="list-style-type: none"> Notification was issued related to the following. <ol style="list-style-type: none"> 14-week Bakery Technology certificate course fee from Rs.5000 to Rs.7500.

	<ul style="list-style-type: none"> ▪ Four-week bakery training programme fee revision ▪ Short time Bakery Training Programme ▪ Charges for visitors ▪ Eligibility for 14-week bakery technology certificate course 	<ol style="list-style-type: none"> 2. 4-week Bakery Training programme fee from Rs.1500 to Rs.2000 3. Training fee of short time (2, 3 and 5 days) Bakery Training Programme 4. Charges for visitors on enquiry about bakery courses 5. Admission eligibility for 14-week Bakery Technology Certificate Course
	<ul style="list-style-type: none"> ● Policy item for revision of Soil and Water analysis charges 	<p>Revised the Soil and Water testing charges:</p> <ol style="list-style-type: none"> 1) NPK, pH, EC only – Rs. 200 per sample 2) NPK, pH, EC + Micronutrients – Rs. 300 per sample
	<ul style="list-style-type: none"> ● Invite progressive farmers as resource persons during various training programmes 	<ul style="list-style-type: none"> ● Invited progressive farmers as resource persons during farmers training programmes and other extension programmes.
5.	Year: 2020-21 Date of EEC meeting: 06-05-2020 (59th EEC)	
	<ul style="list-style-type: none"> ● Awareness on newly released technologies/varieties of UAS, Bangalore through conducting a greater number of front-line demonstrations 	<ul style="list-style-type: none"> ● Introduced newly released crop varieties/technologies of UAS, Bangalore to farmers through 102 Front Line Demonstrations in 1697 farmers' fields by KVKs/EEUs.
	<ul style="list-style-type: none"> ● To implement ARYA programmes at KVKs, a proposal submitted to ATARI, Bengaluru 	<ul style="list-style-type: none"> ● Submitted project proposal on "Attracting Rural Youth in Agriculture (ARYA)" to ICAR-ATARI, Bangalore
	<ul style="list-style-type: none"> ● Conduct impact studies on various extension programmes 	<ul style="list-style-type: none"> ● Initiated impact studies of various extension programmes on adoption of new technologies, increase in yield, number of farmers benefited, changes in socio economic status.
	<ul style="list-style-type: none"> ● Prepare detailed report on starting of Agri-Tourism at Bangalore and Mysuru districts 	<ul style="list-style-type: none"> ● Proposal was prepared to start Agri Tourism at Bangalore and Mysore districts for the benefit of farmers, general public and school children.
	<ul style="list-style-type: none"> ● Publish consolidated brief report on various extension activities and achievements 	<ul style="list-style-type: none"> ● Published 'Extension Highlights' for the year 2019-20 of the Directorate of Extension.
	<ul style="list-style-type: none"> ● Initiate suitable new bakery training programmes for rural youth 	<ul style="list-style-type: none"> ● Conducted Bakery training programmes suitable to Rural candidates.
	<ul style="list-style-type: none"> ● By using ICTs, organize training programmes on water usage, online marketing and organic farming system 	<ul style="list-style-type: none"> ● Conducted training programmes on organic farming, water management and online marketing by using information technologies.
	<ul style="list-style-type: none"> ● Help to farmers in adopted villages for effective utilization of facilities/schemes of central and state governments 	<ul style="list-style-type: none"> ● Facilitated on Central/State Government's available schemes/facilities/subsidies at the adopted villages with the help of line departments.

6.6.4.2. Directorate of Extension Education

The Directorate of Extension is vested with the responsibility to carry out the extension services in 10 southern districts of Karnataka namely Bengaluru Rural, Bengaluru Urban, Chikkaballapur, Kolar, Ramanagara, Hassan, Tumkur, Mandya, Mysuru and Chamarajanagara under its jurisdiction. The Directorate has given more emphasis for ICT enabled extension for accelerated agricultural growth, improved better access to information, development of knowledge resource, cost effective extension delivery, mechanism for efficient feedback system, ensure gender equality, empowerment of small and marginal farmers and stake holders. The technology transfer includes rural development, access to biotechnology, environmental awareness, health, employment and government entities.

Mandates

The Extension Education programmes shall ensure technology assessment and refinement and facilitate adoption of technology based on research findings to farmers and others for accelerated agricultural growth. It shall conduct demonstrations and training programmes for the benefit of various stake holders. Extension shall be coordinated with various units of the University and other appropriate agencies of the centre and the state. The University shall be responsible for developing models of agricultural extension in the state.

Objectives

The prime objectives of Directorate of Extension are as follow

- To provide new, dependable, profitable, socially acceptable, ecologically sustainable and timely information to the clients.
- To provide feedback on adoption of new technologies by the farmers to research system to examine the problems in adoption and modify/re-orient the technologies, if any
- To device ways and means for improving the quality and effectiveness of extension work.

Functions

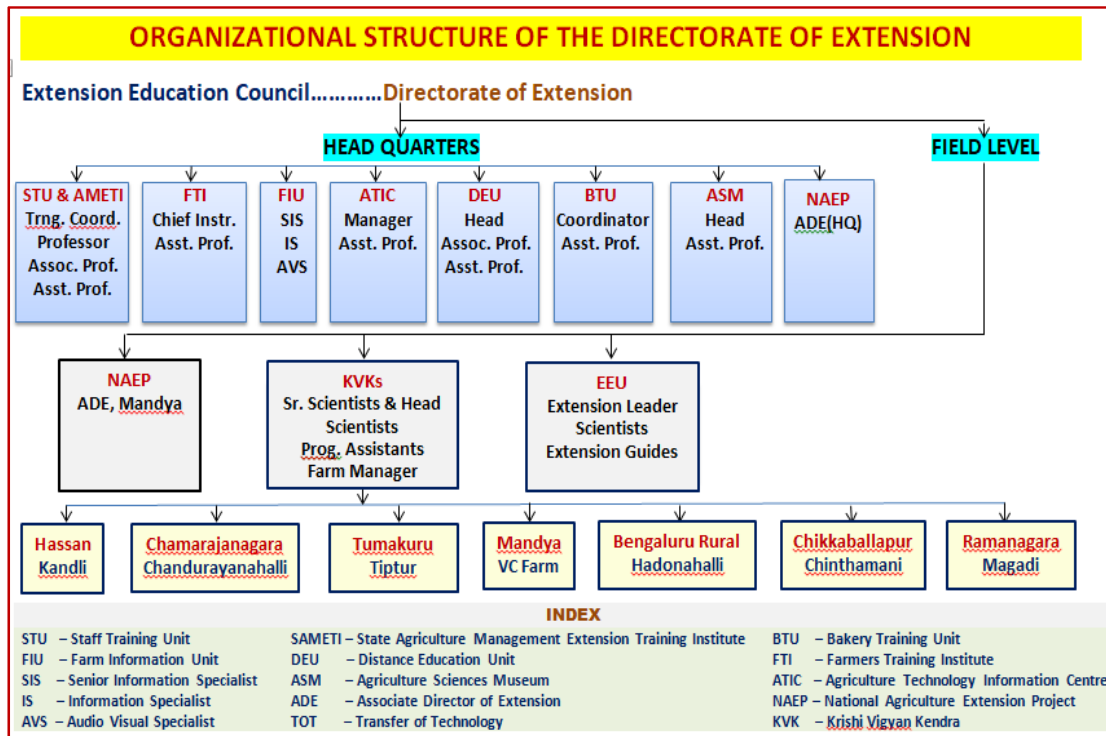
In order to accomplish the above stated objectives, the Directorate of Extension is carrying out the following functions.

- Serving advisory services to field extension functionaries and farming community
- Conducting farm trials on new research findings as well as establish front line demonstrations
- Organizing training programmes to extension professional as well as farmers on latest farm technologies
- To stimulate research and impart teaching

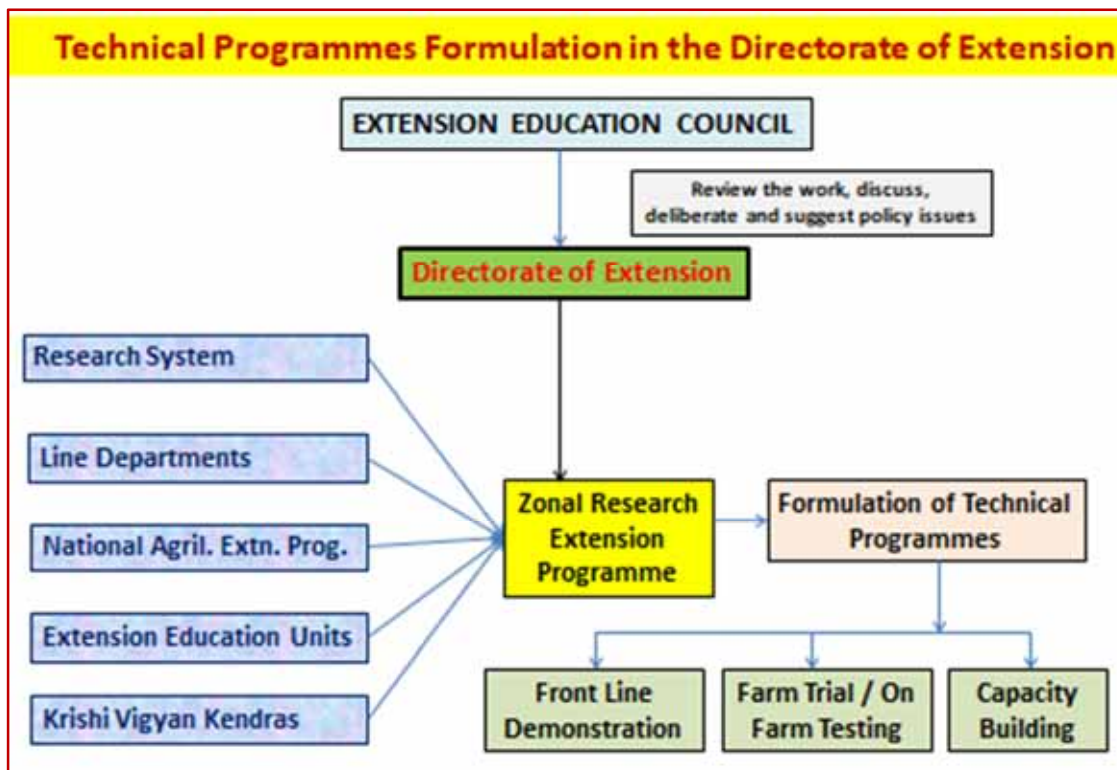
To fulfil the above objectives, the Directorate has the following Extension Units:

1. Staff Training Unit (STU) at GKVK, Bengaluru.
2. Farmers Training Institute (FTI) at GKVK, Bengaluru.
3. Farm Information Unit (FIU) at GKVK, Bengaluru.
4. Agricultural Technology Information Centre (ATIC) at GKVK, Bengaluru.
5. Bakery Training Unit (BTU) at Hebbal, Bengaluru.
6. National Agricultural Extension Project (NAEP) at GKVK, Bengaluru and Mandya
7. Distance Education Unit (DEU) at GKVK, Bengaluru.
8. State Agriculture Management and Extension Training Institute (SAMETI) at GKVK, Bengaluru.
9. Agricultural Sciences Museum (ASM) at GKVK, Bengaluru.
10. Krishi Vigyan Kendras (KVK) at Hassan, Bengaluru Rural, Chikkaballapura, Ramanagara, Tumakuru-1, Chamarajanagara and Mandya.
11. Extension Education Units (EEU) at Mysuru and Kolar.

Organisational Structure of the Directorate of Extension: The flow chart provides the organisational set up of the Directorate of Extension at the University level.



A well-defined mechanism is followed involving the Directorate of Extension and the line departments, Krishi Vigyan Kendras and extension education units while formulating technical programme for different units of the Directorate of Extension.



Staff Training Unit (STU)

The Staff Training Unit was established during 1974 with the responsibility of building professional competence in to the staff of various organisations within and outside the State. The objectives of the unit are as follows:

- Organize institutional and field-oriented training programmes for personnel of development departments, quasi government institutions, private organization and newly recruited University employees.
- Coordinate between sponsoring agencies and the University.
- Monitor the effectiveness and redesign the training programmes.

Farmers' Training Institute (FTI)

The Farmers' Training Institute was established in the year 1967 with the following objectives.

- Institutional training programmes for farming community on agriculture and allied subjects.
- Organize off-campus trainings for farmers.
- Organize exposure visits and field level training programmes.
- Organize hands on training to local extension functionaries.
- Organize limited extension work in the villages.

Farm Information Unit (FIU)

The unit undertakes various activities to develop and communicate farm information and its dissemination to farmers as well as field extension workers. The main activities of the Farm Information Unit are:

- Publish a book on package of practices for field crops, folders, books/booklets on improved cultivation practices for the crops of the region.
- Contact and coordination with mass media for publicity.
- Arrange Krishimela and participate in state and national level agriculture exhibitions and krishi melas.
- Arrange publicity activities like press visits, press coverage, press conferences, release information to press and writing special stories and success stories to press.



Agricultural Technology Information Centre (ATIC)

The centre was established in the year 1999 with the following objectives.

- To offer single window delivery system for agricultural information and the products at institutional level
- To render farm advisory services to solve problems through multidisciplinary approach from different Subject Matter Specialists
- To provide improved agriculture technologies through publications and other medias to the farmers
- To establish a mechanism to get the feedback from the users to the University
- To disseminate technical information through Information and communication tools.



Bakery Training Unit (BTU)

The Bakery Training unit was established in 1968 to impart training in bakery technology to the practicing bakers and those who opt or choose bakery as profession. The main objectives are as follows

- Impart knowledge on quality baking and bakery.
- Impart professional management skills.
- Impart hands on training in preparation of bakery and value-added products
- Promote technical personnel in the field of bakery industry.
- Organize bakery technology courses and certificate courses on different duration.
- Continuous research and impart training on value addition.
- Preparation and sale of bakery products.



National Agricultural Extension Project (NAEP)

National Agriculture Extension Project (NAEP) was started in the year 1984. Currently, working at Bangalore and Mandya districts with the following objectives.

- Conduct district level bi-monthly technical workshops for field functionaries of the development departments.
- Conduct district level diagnostic survey.
- Develop literature on crops and agricultural enterprises suitable for the district.
- Organize farmers interaction sessions.

Distance Education Unit (DEU)

The University of Agricultural Sciences, Bengaluru started the correspondence course during the year 1974 on different aspects for educating the literate farmers on principles involved in production technologies, to motivate the participant farmers to apply such knowledge gainfully. Later, the Distance education programmes started to provide educational opportunities to those who cannot afford formal education in the field agricultural sciences. The Department of Distance Education was first established at College of Agriculture, GKVK during 2010 and in 2012, it was transferred to Directorate of Extension and renamed as Distance Education Unit. The objectives of the Unit are as follows.

- Development of Human Resource in rural areas for better performance of agriculture and allied activities
- Encourage distance education in agriculture
- Liaison with sponsoring organizations in getting the required support as per the terms of reference and acting accordingly.
- Facilitation in offering non formal educational courses in the University to different stakeholders.
- Leadership in developing course wise reference material, conducting classes, examinations, evaluation and distribution of certificates
- Facilitation in enrolment of required number of participants for each course
- Generating revenue to the University
- Facilitation in planning, execution monitoring and evaluation Distance Education Unit activities, mobilization and management of funds

The courses offered by the Distance Education Unit are

- One Year Diploma in Agriculture
- Post Graduate Diploma in Agriculture

- MANAGE, Hyderabad sponsored Post Graduate Diploma in Agricultural Extension Management (PGDAEM) programme
- Certificate course on Organic Farming
- Certificate course on Apiculture
- Certificate course on Integrated Farming System

State Agriculture Management and Extension Training Institute (SAMETI)

SAMETI (South) was established during the year 2005 at the Directorate of Extension, UAS, Bengaluru with the following mandates.

- Organize the HRD activities for the stake holders of Agriculture Technology Management Agency (ATMA) districts of Southern Karnataka.
- Guide in the preparation of Strategic Research and Extension Plan (SREP)
- Coordinate in implementation of ATMA programmes.

Agricultural Sciences Museum (ASM)

University established a state-of-the-art museum devoted to agricultural sciences at GKVK in 2013 to showcase the agricultural science and technologies. Depict the historical perspectives of agriculture in the state and the country, status of agricultural development, contemporary issues and latest developments in agricultural sciences.

The objectives of museum are:

- Display the crops and recent production technologies of the crops
- Provide the information on pest and diseases of the crops of the region
- Highlights the dryland technologies and water management practices
- Provide the research, teaching, extension highlights for the benefit of farmers.



Krishi Vigyan Kendras (KVKs)

Seven KVKs sponsored by ICAR have been established under the jurisdiction of UAS, Bengaluru in the districts of Bengaluru Rural, Chamarajanagara, Chikkaballapura, Hassan, Mandya, Ramanagara and Tumkur. The mandates of KVKs are:

- Conducting on-farm testing to identify the locations specificity of agricultural technologies under various farming systems
- Organizing frontline demonstrations to establish production potential of various crops and enterprises on the farmers' field
- Organizing need-based training for farmers to update their knowledge and skills on modern agricultural technologies related to technology assessment, refinement and demonstration, and training of extension personnel to orient them in the frontier areas of technology development
- Creating awareness about improved agricultural technologies among various clientele through an appropriate extension programmes.
- Production of quality seeds, planting materials, livestock breeds, animal products, bio-products etc., as per the demand and supply the same to different clientele.
- Work as resource and knowledge centre of agricultural technology to support the initiatives of public, private and voluntary sectors for improving the agricultural economy of the district.



.KVK, Chamarajanagara



KVK, Chikkaballapura



KVK, Hassan



KVK, Ramanagara



KVK, Tumkur



KVK, Mandya



KVK, Bengaluru Rural

Extension Education Units (EEU)

The university conducts extension work in a limited way through the Extension Education Units located at Nagenahalli (Mysuru) and Kolar established during 1975 and 2015, respectively with the following objectives.

- Evaluate the performance of research findings
- Demonstrate the proven research findings
- Conduct training programmes and other extension educational activities with the collaboration of developmental departments, input agencies and NGOs.



Staff Pattern

Extension Faculty Strength - Permanent

Sl. No.	Cadre	Sanctioned faculty (No.)	Faculty in place (Appointed) (No.)	Vacant position (No.)	Vacant position (%)
1	Officer	1	1	0	0
2	Professor	5	3	2	40
3	Associate Professor	15	10	5	34
4	Assistant Professor	83	68 (41+27*)	15	18

* Engaged on contract basis

Extension Faculty Strength – Deputed: NIL

Position of the Technical and Supporting Staff

Sl. No.	Position	Sanctioned Staff (No.)	Staff in place (Appointed) (No.)	Vacant position (No.)	Vacant position (%)
Technical					
1	Farm manager	7	7 (3+4*)	0	-
2	Programme Asst. computer	7	7 (5+2*)	0	-
3	Programme Asst. lab	7	7	0	-
Supporting Staff					
1	Superintendent	2	1	1	50
2	Personal Secretary	1	1	0	-
3	Sr. Assistant	7	5 (3+2*)	2	29
4	Stenographer	10	10*	0	-
5	Assistant	10	8 (3+5*)	2	20
6	Lab. Assistant	2	2	0	-
7	Sr. Field Asst.	1	0	1	100
8	Typist	5	4*	1	20
9	Driver (LV/HV/Tractor)	26	22 (14+8*)	4	15
10	Attendees	3	2	1	33
11	Sr. Caretaker	2	2	0	-
12	Asst. cook cum caretaker	7	7 (4+3*)	0	-
13	Messenger	14	12 (2+10*)	2	14
14	Other supporting staff	8	2	6	75
15	Mechanic (Bakery), Baker Driver-cum-Salesman, Bakery Operators, Bakery helper, School Helpers Cleaner / Loader	22	12 (4+8*)	10	45

* Engaged on contract basis

Extension Programmes carried out during 2016-17 to 2020-21

Extension activities of seven Krishi Vigyan Kendras (KVKs)

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers Covered
1.	OFT- No. (Area in ha.)	156 (145.55)	615
2.	FLD- No. (Area in ha.)	571(1589.53)	5894
3.	Farm Trails No. (Area in ha.)	308 (634.05)	723
4.	Training Programmes		
	a. On Campus	981	33753
	b. Off Campus	1201	40670
	c. Extension Functionaries	147	5296
	d. Sponsored training prog.	225	8452
	e. Collaborative prog.	428	23943
	f. Vocational prog.	79	1699
5.	Soil Samples analysed	27969	26183
6.	Water Samples analysed	16472	15872
7.	Served as resource person	2705	193405
8.	Field visits	4871	27784
9.	Consultancy through telephone	35337	40799
10.	Consultancy through face to face	35292	43287
11.	Group Discussion meetings	750	12721
12.	Diagnostic Field visits	781	11774
13.	Newspaper coverage	1356	3.80 crores
14.	Film show organized	610	20414
15.	TV programme	99	1.02 crore

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers Covered
16.	Radio Programme	148	98.05 lakh
17.	Exhibition & Krishimelas organized	91	44520
18.	Krishimelas Participated	209	159814
19.	Exposure visits organized	230	7729
20.	Field days organized	289	12662
21.	Important events / days organized	450	42000
22.	Animal Health Camp	59	5043
23.	Soil Health camp	94	3837
24.	Method demonstrations conducted	814	26449
25.	Bi-Monthly Technical workshop Participated	119	3535
26.	SMS sent to registered farmers (mKissan)	1750	1686581
27.	What's app SMS (Queries answered)	20416	54062
28.	Facebook SMS	365	5519
29.	No. of Video conference/ Zoom meetings conducted	260	6259
30.	DAESI class conducted	885	6798
31.	RSKs visit made	1083	5854

ICAR- Krishi Vigyan Kendras (KVKs)

During the period the following activities were conducted by different KVKs viz., 156 on-farm testing were conducted in an area of 145.55 ha covering 615 farmers to identify the location specific agricultural technologies under various farming systems wherein, assessments were conducted on Red gram for terminal drought, improved Turmeric varieties suitable for higher yield, planting methods in potato, management approaches for yellow mosaic virus in pole bean and mosaic in ridge gourd.



OFT on Diamond back moth management in cabbage



OFT on Yellow mosaic virus management in Pole beans



OFT on Management of YMV in Green gram



OFT on late blight management in Potato

In farmers' field 571 front line demonstrations were conducted in an area of 1589.53 ha. covering 5894 farmers and 308 farm trials in an area of 634.05 ha covering 723 farmers.



Introduction of Finger millet (ML-365)



Popularization of Gangavathi Sona



Management of fall army worm in Maize



Introduction of wilt resistant Redgram



ICM in Cauliflower



INM in Coconut



INM in Tomato

In order to educate the farmers 981 on campus training programmes were conducted covering 33753 farmers/farmwomen and 1201 off campus trainings were conducted covering 40670 farmers. To update the knowledge of extension functionaries on recent developments in agricultural technologies 147 trainings were conducted to 5296 extension functionaries of Agriculture, Horticulture, Animal husbandry, Woman and child development departments. Further, 225 sponsored training programmes were organized for 8452 beneficiaries besides 428 collaborative trainings were conducted benefitting 23943 trainees and 79 vocational trainings on various skill-oriented programmes covering 1699 beneficiaries.



Value addition in vegetables



Mango Marketing through Agri-war Unit



Training on Beekeeping



Mechanized Nipping in redgram



Awareness on DAMU



Method demonstration of Seed treatment

The soil and water testing laboratories functioning at KVK analysed 27969 soil samples benefitting 26183 farmers and 16472 water samples analysed covering 15872 farmers.



Soil testing laboratory



Soil sampling

The scientists of KVKs delivered 2705 guest lecturers (as resource persons) in various programmes organized by district level development departments, NGOs and 193405 farmer/ farm women were benefitted. 4871 field visits were made to problematic fields and suggested suitable solutions to 27784 farmers. Further, provided 35337 consultancy services through telephone and 35292 consultancies through face to face interactions to 40799 and 43287 beneficiaries, respectively.



Pole bean field visit



Diagnostic field visit to Maize



Sunflower field visit



Chrysanthemum field visit



Mulberry field visit



Radish field visit

The activities of KVKs were popularized through print media (1356 newspaper coverage covering 3.80 crore beneficiaries) and in electronic media- TV programmes (99 covering 1.02 crore beneficiaries), radio programmes (148 covering 98.05 lakh beneficiaries). Film shows (610) were organized for 20414 farmers/farm women.

The KVKs organized 91 Agricultural exhibitions/Krishimelas and participated in 209 Agricultural exhibitions/Krishimelas which benefited 44520 and 159814 participants, respectively. 230 exposure/educational tours and visits were organized for 7729 participants.

KVK scientists organised 289 field days covering 12662 farmers. Further, organized 450 important days / programmes (Kissan day, world environment day, World food day, Soil health day *etc.*) where 42000 beneficiaries benefited. 59 animal health camps were organized in which 5043 animals were treated and 94 soil health camps were organized to 3837 farmers.



Rabi campaign



Animal health camp



Krishimela



Soil health campaign

To demonstrate the skills, 814 method demonstrations were conducted on different activities like seed treatment, compost enrichment, preparation of micronutrient spray solution, coconut tree climbing *etc.*, where 26449 farmers benefitted and 119 bi-monthly technical workshops attended by the scientists.

In the digital era, farmers/ farm women/ rural youth were also educated through different ICT tools *viz.*, 1750 short message services sent to 1686581 beneficiaries, 20416 WhatsApp queries attended, sent 365 messages through Facebook and conducted 260 video conference/zoom meetings.

In order to update the knowledge of input dealers, DAESI programmes were conducted to 6798 dealers on various aspects of agriculture. The KVK scientists were made 1083 visits to Raitha Samparka Kendras (RSKs) at hobli level of the state department of agriculture and educated 5854 farmers on different aspects during their visits to RSKs.

Agricultural Technology Information Centre (ATIC)

The centre rendered 20682 face-to-face consultancy services and 9510 consultancies through phone calls to farmers and other stake holders regarding Agriculture, Horticulture, Plant protection, Animal Husbandry, Agri. Engineering and other allied subjects on advanced technologies. It also provided solutions to 2929 plant protection queries through designated WhatsApp number 9482477812.

Further, 57318 farmers, stakeholders, students of colleges/schools and extension functionaries visited the centre to purchase the agriculture inputs / technologies developed by the university like seeds, planting material, bio-fertilizers, micronutrients etc., publications like package of practices of Agriculture, Horticulture, Animal husbandry and CD / DVDs and as an exposure visit.

Extension activities of Agricultural Technology Information Centre

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Consultancy through face to face	20682	20682
2.	Consultancy through telephone	9510	9510
3.	WhatsApp SMS (Queries answered)	2929	2929
4.	Farmers / extension functionaries visit	57138	57138
5.	No. of Video conference - trainings / meetings conducted	113	1695
6.	Served as resource person	89	2905
7.	Field visits	37	74
8.	Krishimelas Participated	19	285758
9.	Agri-portal visitors	3079839	3079839
10.	Training programme for Extension Functionaries	4	52



Providing consultation



Sale of Agriculture Inputs



Display of technologies in Krishimela

Video conferencing facility has been established during 2018-19, 113 programmes viz., training programmes, meetings, discussions, interactions etc. were organised through video conferencing covering 1695 farmers / stakeholders / extension personnel at faster rate with short time and reduced cost.



Video conferencing with KVKs

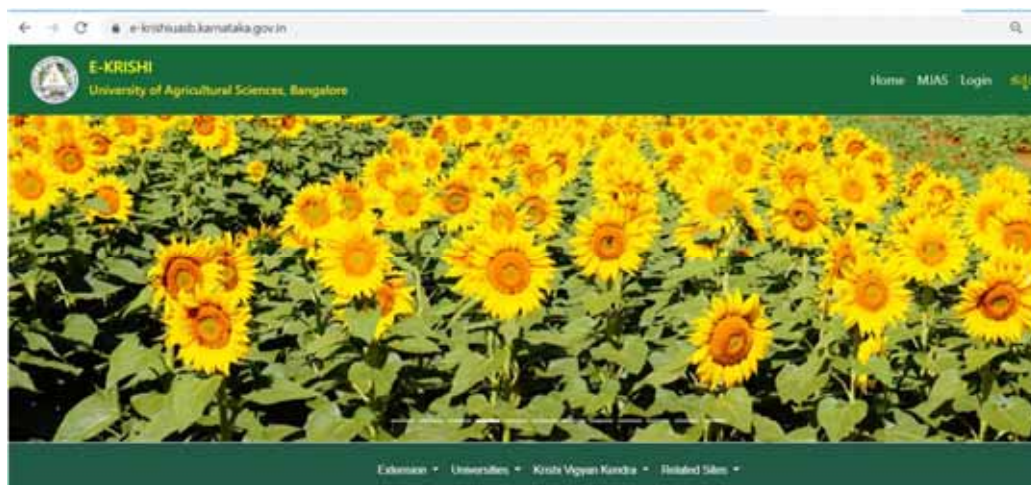


Delivering lecture on ATIC activities



Training of Farm tele-advisors

The technical experts of the centre participated as resource person in 89 programmes covering 2905 farmers and delivered lecture on advanced technologies of Horticulture crops, Agriculture crops and livestock production. Also made 37 field visits covering 74 farmers in and around Bangalore to offer technical guidance regarding cultivation practices, INM and IPM practices. ATIC also participated in 19 Krishimelas / exhibitions organized by farm universities of Karnataka, ICAR-IIHR and other institutes wherein the University technologies and publications were displayed and books were sold. The centre has organized four training programmes to 52 Farm Tele Advisors from Kissan Call Centre, IFFCO Kissan Sanchar Ltd., on various agricultural and Horticultural aspects.



e-Krishi UASB portal

e-Krishi UASB portal was established at this centre under RKVY project. It contains digitised technical information on production technologies of agricultural and horticultural crops, animal husbandry, sericulture, fisheries, etc. So far 30,79,839 visitors viewed the agri. Portal as on January 25, 2021. The links were also provided to farm universities of Karnataka, developmental departments, ICAR institutes and UASB KVKs.

Extension activities of Staff Training Unit

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Training Programmes		
	a. On Campus	57	2750
	b. Off Campus	9	599
	c. Sponsored training prog. organised	21	473
	d. Collaborative prog. organised	14	578
2.	Served as resource person	226	7101
3.	Field visits made	65	30
4.	Exposure visits organized	3	97
5.	Important events / days organized	5	558
6.	No. of Video conference/Zoom meetings conducted	13	743
7.	DAESI class conducted by STU	5	200
8.	DAESI Batches conducted under SAMETI (S)	137	5514
9.	Workshops participated	7	1134

The Unit has a mandate to promote professional competency among the staff of various organizations within and outside the State of Karnataka. To full fill these mandates, organized 57 on campus trainings, induction training, Refresher training, ATMA orientation & Convergence, Competency Development Programme, Skill Training to trainers, Developing Winning Research Proposals and Doubling of farmer's income for UASB & ATMA Staff. The field-oriented training programmes like Integrated Pest, Disease & Nutrient Management, Natural Resource Management, Farm mechanization, Precision farming were organized benefiting 2750 personnel of private, government and quasi-government organizations. Nine off campus training programmes on Malnutrition & Value addition for officials of women and child development department & Farmers Producers Organizations (FPOs) were conducted benefiting 599 extension workers to upgrade their knowledge and skill.

In addition, 14 collaborative programmes involving line departments, NGOs, corporate sectors were conducted on drought proofing management, integrated pest management, soil analysis and soil health

card benefiting 578 extension personnel. Twenty-one sponsored programmes on Agri-Clinics & Agri-Business Centre (AC&ABC), Business Opportunities in Horticulture for agripreneurs, Integrated Nutrient Management for fertilizer dealers were organized benefiting 473 participants. The unit also organized three exposure visits / educational tours to 97 State level Farm Advisory Committee (SFAC) Farmers KVK scientists to Tamil Nadu, Kerala & Gujarat for cross learning.



On-Campus Training programmes



Of-Campus Training programmes



Exposure Visits

During Covid -19 pandemic 13 online trainings / webinars on e- trading, e-learning, Farm bills 2020, Tilapia Fish Culture, Nutri-cereals; importance & value addition, Soil health management, Silk worm rearing, Livestock Management, Medicinal & aromatic crops were conducted benefiting 743 field level extension workers to provide technology backstopping regarding agriculture and allied subjects. Under SAMETI(S)-DAESI, 5743 input dealers were trained on diagnostic skills in important crops.



Online trainings



DAESI Programmes

Extension activities of Bakery Training Unit

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Training Programmes		
	a. 14-weeks certificate course in bakery technology	13	376
	b. 4-weeks commercial baking course	50	834
	c. Short duration courses (2 days to 5 days)	101	1389
	d. Summer Special Camp	45	514
	e. Orientation prog.	17	1848
	f. Off Campus	74	3905
2.	Technical support and Consultancy	507	507
3.	Job placement cell	115	115
4.	Entrepreneurs developed	397	397
5.	Sponsored training prog.	8	219
6.	Consultancy through telephone	7350	7350
7.	Consultancy through face to face	3614	3614
8.	Group Discussion meetings	369	2496
9.	Newspaper coverage	54	207850
10.	Exhibition organized	15	2851
11.	Exhibition & Krishimelas Participated	25	25700
12.	Exposure visits organized	41	1393
13.	Important events / days organized	18	1717
14.	Method demonstrations conducted	15016	8866
15.	Guest lecture organized	84	2955
16.	What's app SMS (Queries answered)	3967	3967
17.	Facebook SMS	1076	1076
18.	No. of Video conference/Zoom meetings conducted	73	2560
19.	Internship for trainees	78	78

The unit organized 13 fourteen weeks certificate course on Bakery technology and 376 trainees were benefited. 50 four weeks commercial baking course with 834 participants. Further, the unit also conducted 101 short courses on home baking, value added milk and milk products, Ragi and millets based value added products, Special cakes and decoration, processing of fruit and vegetable, value added Amla products, value added products for school children, diet and nutritional management for diabetes, refreshing juices, value added eggless products, Jack fruit processing, value added spice powders, chat Preparation etc.. to 1389 participants. Six sponsored training programmes for 192 participants and 45 summer special camps for 514 participants were benefited.

Apart from training programmes, the unit provided 507 technical support and consultancy services who were new to the industry and motivated them to become entrepreneurs in bakery and value-added products by helping in project planning and implementation, packaging and labelling of products, guidance on safety, sanitation and personal hygiene, record keeping *etc.*, contacts with banks, NGO's and Industries. Ultimately developed 397 successful entrepreneurs in Bakery and Value addition and also provided 115 job placement in reputed institutes, bakeries, industries, food processing units etc.



14-weeks certificate course trainees



Interaction Session on Product Development

The unit has conducted 73 online classes for 2,560 participants, organised 84 Guest lectures in associated fields of Bakery Industry and entrepreneurship development for 2,955 trainees. 74 off campus training programmes were conducted in different districts of Karnataka state for 3905 participants, in order to outreach the rural people and create awareness regarding bakery and value addition training programmes helps in enrolling the upcoming training programmes and other events. The unit also involved in organizing skill-oriented training programmes through exposure visits to different industries, institutions and other various food processing units to gain practical exposure, knowledge and built confidence in trainees to start their own venture, 41 Exposure visits were organized for 1,393 participants. The unit conducted 17 one day orientation programmes for school children, nursing college students, community college students, food technology students for 1,848 participants.



Summer special course for children



UASB Board members visit



Off campus training programme



Collaborative Training Programme



Practical Assessment to the Trainees



Sponsored Training Programmes

The unit also organized national level workshops, webinars and training programmes involving eminent speakers and experts. The unit developed a concept of bake from home and learn-bake-earn concept for housewives to utilize free time as income generating activity for economic empowerment and also encouraged rural youth and women to establish small to medium scale bakeries. The unit trained and established bakery production unit at women central Jail, Tumkur with the CSR fund of BHEL, Bangalore by imparting the skill of preparing the bakery products to lead decent life in the society after their release. The unit is continuously encouraging rural youth and women to take up bakery and value addition as an enterprise for employment generation, upliftment of socio-economic status by conducting different capacity building programmes. The unit has established exclusively 16 women run bakeries in rural areas in Tumkur, Mandya, Bengaluru rural districts of Karnataka state. This has given momentum for economic empowerment of rural women.

The unit has designed and developed exclusive informative website (www.bakerytrainingunituasb.com) for focusing the programmes and future plans which is drawing lot of attention of the viewers which in-turn helped to increase the participation level in different training programmes. This is facilitating for better presentation and for discipline development. The unit is continuously involved in research for developing and marketing of bakery and value-added processed products such as Ragi malt, Ragi hurihittu, weaning food, Ragi and millet laddu, millet strips, Palak bites, nutri-rich Flax seed laddu, nutri rich health drink, chutney powder of Drumstick leaves, millets and Flax seeds, tasty Palak bites, millet strips, Navane frames, Ragi papad, low fat biscuits, gluten free biscuits, by product utilization in bakery products, coconut flour based bakery and value added products etc., bakery and value added products by adding immunity boosters like Amruthballi, Cinnamon, Clove, Turmeric, Ginger, Jeera, Pudina, Coriander, Pepper *etc.* Products prepared are bread, rusk, biscuits, beverage mix, soup mixes and chutney powders etc. to enhance the immunity to the consumers.

Extension activities of Farmer's Training Institute

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Sponsored training programmes		
	a. On campus	113	2742
	b. Extension Functionaries	3	68
	c. Collaborative Programmes	41	1227
2.	Served as resource person	542	3998
3.	Field visits	164	3789
4.	Consultancy through telephone	155	155
5.	Consultancy through face to face	178	292
6.	Exhibition & Krishimelas Participated	4	3840
7.	Important events / days organized	4	633
8.	Method demonstrations conducted	99	697
9.	SMS sent to registered farmers (mKissan)	124	124
10.	What's app SMS (Queries answered)	140	670
11.	No. of zoom meetings conducted	2	148
12.	DAESI class conducted (3 batches)	150	5405
13.	Nutrition counselling	4	110

The institute has organized 113 sponsored on-campus and off-campus training programmes benefiting 2742 farmers. Three trainings organized for 68 extension functionaries. Further, 41 collaborative training programmes were organized for the benefit of 1227 farmers and farm women.



On campus trainings for farmers

Scientists of the institute delivered 542 guest lectures in different programmes benefiting 3998 participants. Further, 164 field visits were made covering 3729 farmers, also provided consultancy through phone (155), face to face (178), four TV programmes, one radio programme and the faculty participated in the four-district level Krishimelas.



Visit to Azolla and Turmeric demonstration plots

Organized two World Food Day programmes, one Woman in Agriculture Day programme and one Breast Feeding Week (online) covering 633 participants. 99 method demonstrations were conducted to 697 farmers.



World Food Day



Method Demonstrations on value addition

Sent 124 SMS to registered farmers and answered 140 WhatsApp queries from 670 farmers.
Conducted three batches of DAESI programme and organized four nutritional counselling to 110 persons.

Extension activities of Farm Information Unit

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Press Coverage	2058	4.94 crores
2.	Press conferences organized	18	864 (Reporters)
3.	Press Release	224	11424
4.	Special Interviews / popular articles/ special stories / success stories published	76	7.22 lakhs
5.	TV/Radio Co-ordinated programmes	664	862 (Reporters)
6.	Organized / Participation in exhibition / Krishimelas	31	1.54 crores famers/ public
7.	Participation in State Level Media Co-ordination Committee meetings	43	43 meetings
8.	Sponsored training prog.	3	91

Farm Information Unit

The Farm Information Unit organized 18 press conferences, 2058 times the university activities were appeared in newspapers and journals, 76 success stories / popular articles were published in newspapers / journals, participated / organized 31 agricultural fairs / exhibitions, co-ordinated 664 TV / Radio programmes. 392 times visited electronic and media offices. Participated in 43 state level media co-ordination committee meetings. UAS(B) YouTube channel and Facebook accounts were created and uploaded 5 minutes duration videos on University technologies. A documentary film in English and Kannada on University of Agriculture Sciences, Bangalore entitled “Krushi Janana Degula” was developed and uploaded in University website, YouTube and Facebook. Produced 4 to 6 minutes videos (6 Nos.) in Kannada on 1) Hitihasa –GKVK, Bangalore, 2) Sadhaneya Hadhiyalli- GKVK, Bangalore, 3) Krushi Shikshana - GKVK, Bangalore, 4) Krushi Samshodane - GKVK, Bangalore, 5) Krushi Vistharane -GKVK, Bangalore and 6) Krushi Belegala Apatha Margadarshi” and uploaded in University Website, YouTube and Facebook. The PDF format of improved Package of Practices in Agriculture was sent to 2,82,885 Farmers / Farmers groups through WhatsApp. Organized one state level training programme on Farmers oriented articles for 27 participants. One State level workshop on Agriculture in Mass Media for 119 participants and three state level training programmes on Krushikara Kaige Lekhani for 91 participants.



Popular articles/ Success stories



Popular articles/ Success stories



TV / Radio programmes co-ordinated



Creation of UAS(B) YouTube channel and Face book

Extension activities of NAEP, Bangalore & Mandya and Agril. Sciences Museum

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	Training Programmes - Extension Functionaries	14	469
2.	Served as resource person	35	23956
3.	Field visits	142	1680
4.	Consultancy through telephone	341	341
5.	Consultancy through face to face	219	278
6.	Group Discussion meetings	2	39
7.	Diagnostic Field visits	86	468
8.	Newspaper coverage	6	12350
9.	Field days organized	2	79

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
10.	Method demonstrations conducted	26	325
11.	Bi-Monthly technical workshop participated	85	4704
12.	What's app SMS (Queries answered)	34	34
13.	No. of Video conference/Zoom meetings conducted	6	126
14.	RSKs visit	20	178
15.	Farm Trails supervised& area covered (ha.)	1095 (34.02ha.)	1095
16.	Krishi Abhiyan programme participated	21	6275
17.	Skill Demonstrations	45	588
Agricultural Sciences Museum			
	No. of farmers visited		29150

National Agricultural Extension Project

The NAEP has organized need based farm technology transfer activities by using different extension methods to the field extension functionaries of Karnataka State Department of Agriculture and to the farmers of the different Agro-climatic zones coming under the jurisdiction of UAS (B). The units working at Bangalore and Mandya has conducted Bi-monthly technical workshops to the field functionaries of KSDA and allied Departments, undertaking diagnostic surveys, monitoring of farm trials, method demonstrations, Field visits etc. The units promoted need based farm technologies and reached nearly 63,500 field extension functionaries and the farmers. In the bi-monthly technical workshops, newly released farm technologies were familiarized to the extension functionaries, diagnostic skills were imparted through method demonstrations and also arranged field visits. Seasonal diagnostic surveys were undertaken to document the extent of pest and disease incidence and suggested remedies to address the problems. Farm Trials (1095) were monitored and facilitated in getting the results from the scientists.

Agricultural Sciences Museum

Agricultural Sciences Museum depicts the historical perspectives of agriculture in the state and the country, status of agricultural development, contemporary issues and latest developments in agricultural sciences to which, 29150 students, farmers and other stake holders were visited.

Extension activities of EEU, Kolar& Mysore

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
1.	FLDs (Area in ha.)	115 (805.51)	2133
2.	Farm Trails (Area in ha.)	53 (41.8)	231
3.	Training Programme		
	a. On Campus	32	1452
	b. Off Campus	113	7717
	c. Sponsored training prog.	2	30
	d. Collaborative Programmes	28	2851
4.	Served as resource person	171	8968
5.	Field visits	1692	5258
6.	Consultancy through telephone	6493	6493
7.	Consultancy through face to face	3018	4938
8.	Group Discussion meetings	2465	16269
9.	Diagnostic Field visits	2592	11197
10.	Newspaper coverage	30	22550
11.	Exposure visits organized	5	269
12.	Field days organized	44	2617

Sl. No.	Type of Extension Programme	No. of Programmes	Farmers covered
13.	Important events / days organized	6	365
14.	Method demonstrations conducted	267	2519
15.	Bi-Monthly Technical workshop Participated	20	592
16.	What's app SMS (Queries answered)	856	5508
17.	No. of Video conference/Zoom meetings conducted	12	480
18.	DAESI class conducted during the year	4	160

Extension Education Unit

The Units in Mysuru and Kolar were conducted 115 demonstrations involving 2133 farmers in an area of 806ha. The demonstrations were mainly concentrated on system of rice intensification, direct seeded rice, integrated crop management in paddy & ragi, varietal demonstration of red gram, green gram, black gram, dolichos and maize, integrated pest and disease management in tomato, chilli, ginger and banana, introduction of high yielding variety of IIHR in tomato, chilli, beans, okra and popularization of sunflower hybrids.

Totally, 53 farm trials involving 231 farmers covering an area of 41ha. were conducted to evaluate the performance of the trials. The units organized 145 training programmes by involving 9169 farmers, of which 32 on campus training programs involving 1452 farmers and 113 off campus training by involving 7717 farmers. Training programmes on integrated crop management in rice & ragi, trash mulching in sugarcane, fall armyworm management in maize, integrated pest and disease management in vegetable crops, water management in rice and sugarcane, integrated farming system, organic farming, seed treatment in different crops, establishment and management of nutrition garden, mushroom production & process technologies etc.,



Field Day programmes

Further, Mysuru unit organised two Skill Trainings of Rural Youth (STRY) on Organic farming practices by covering 30 rural youth and also 28 training programs involving 2851 farmers in collaboration with Department of Agriculture, Horticulture, Sericulture, Animal husbandry, ATMA and NGO's. Scientists participated as resource persons in 171 programs involving 8968 farmers and delivered lectures on various productions, protection and other management practices. 1692 field visits were made and provided the technical guidance to 5258 farmers on balanced nutrition, weed management, water management, pest and disease, scientific method of compost preparation, Liquid Organic manure preparation etc.

Technical guidance was provided through telephone (6493) and advisories to the 4938 farmers during their visits to the units. The scientists conducted 2465 group discussion meetings, 2592 diagnostic field visits covering 11,197 farmers and provided the solution to the problems. The activities made by the units were published in 30 local newspapers. Participated in 20 Bi-monthly technical workshops and interacted with the officials of line departments.

The units organized five Exposure visits/Educational tours for the benefit of 269 farmers. Organized 44 field days on various technologies by involving 2617 farmers, celebrated Six Special days viz., World environment day, world food day and National farmers day, Women in Agriculture day, World water day and World soil day covering 365 farmers.

The units conducted 267 method demonstrations involving 2519 farmers to acquire the new skills and develop confidence about the practicability of the technologies. WhatsApp SMS on different technologies were sent to the 5508 farmers, organised 12 Video conference/Zoom meetings involving 480 farmers. The scientists visited Raitha Samparka Kendras (08) and interacted with farmers and officials of line departments on various aspects related to Agriculture, Horticulture, Animal husbandry and Sericulture including doubling the farmers income.

Activities of Distance Education Unit

Sl. No.	Courses	Number Admitted (A)	Number Completed (C)	Percent completed (%)	National Average (%)
I Diploma courses					
1	One Year Diploma in Agriculture in Kannada	847	592	69.89	49.00
2	Post Graduate Diploma in Agriculture (PGDA) in Kannada	36	18	50.00	49.00
3	Post Graduate Diploma in Agricultural Extension Management (PGDAEM) in Collaboration with MANAGE, Hyderabad	520	281	54.00	49.00
II Certificate courses					
1	Integrated Farming System (IFS) in Kannada	175	56	32.00	49.00
2	Organic Farming in Kannada	235	106	45.10	49.00
Total		1813	1053		

Distance Education Unit

To popularize agriculture related technologies the distance education unit is offering the following courses during the last five years.



Distance education classes

One Year Diploma in Agriculture in Kannada

The total number of students admitted for One Year Diploma in Agriculture was 847 and total number of students completed was 592 and the success rate is 69.89 per cent which is above the national average (49 %). This shows that UAS efforts in reaching the un-reached is achieved to a considerable extent through distance education programmes.

Post Graduate Diploma in Agriculture (PGDA)

The number of students admitted for Post Graduate Diploma in Agriculture is 36 & completed is 18, which accounts for 50 per cent against the national average (49 %). However, the number of admissions is increasing gradually over the years.

Integrated Farming System (IFS) in Kannada

The number of students admitted to the course is in the increasing trend over the years. However, the success rate was reduced due to covid-19 pandemic.

Organic Farming in Kannada

The candidates admitted and completed during the period is in reducing trend. The success rate is 45.10% vis-à-vis national average of 49%.

Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

The total number of candidates admitted to PGDAEM during the period was 520 and completed 281. The success rate is above National average (49%). Thus, the sequel of Distance Education Programmes offered at UAS Bangalore is encouraging and Diploma programmes receiving more response compared to certificate courses.



Post Graduate Diploma in Agricultural Extension Management

Other Activities of Directorate of Extension

KRISHIMELA

Krishimela a mega event is one of the important activities of the Directorate of Extension, which is organised every year. The mela is organised to showcase the technologies developed by the university for the benefit of the farming community and extension functionaries of the line departments. The mela is organised in co-ordination with all the developmental departments, various public and private agencies are involved in organizing this programme annually to transfer the technologies to the intended clientele. Specifically, new varieties, inputs, machinery, live demonstrations, etc under one roof for a period of 4 days in one place. Farmers are invited to participate in the Krishimela since “seeing is believing” farmers are actually shown, all the latest technologies which are available for them in the field of Agriculture and allied sectors. In the mela a well organised exhibition of nearly 800 stalls established with participation of line departments, ICAR institutions, Agri input manufactures, SHGs, NGOs, nationalized banks and agri related enterprises which is attracting lakhs of farmers every year.

During the event, farmers and farm women are being awarded with various awards for their achievement in the field of agriculture. To attract rural youth towards agriculture, University is honouring one young farmer and farm women from each taluk, who have settled on agriculture and are model to other farmers.

Krishi mela organised during 2016-17 to 2020-21

Year	Krishimela Dates	Duration (days)	No. of exhibition stalls	No. of farmers/public visited in lakhs
2016	November 18-21, 2016	4	680	10.80
2017	November 16-19, 2017	4	700	12.00
2018	November 15-18, 2018	4	710	11.50
2019	October 24-27, 2019	4	730	13.40
2020*	November 11-13, 2020	3	28	01.10

* Due to COVID-19 pandemic, Krishimela organised for 3 days through virtual cum physical mode.



Hon'ble Chief Minister of Karnataka interacting with farmers



Hon'ble Agriculture Minister of Karnataka released the new varieties/technologies of UAS, Bangalore and honoured the awardee farmers



Exhibition stall



Overview of krishimela ground

Farmers Science Congress

The 107th National Science Congress was organized by UAS(B) at GKVK, Bengaluru from 3rd January 2020 to 7th January 2020. The Farmer Science Congress was organized for the **first time in the history of Indian Science Congress on 6th January 2020** at GKVK, Bangalore and shared farmer's innovations and their experiences with the following recommendations.

- Farmers Science Congress should be a regular feature in the future Indian Science Congress events to facilitate farmers-scientist's interaction and mainstreaming of farmers innovations.
- ICAR may create a corpus fund in the name of Farmers Innovation Fund to felicitate farmers innovations and extend financial support to test, validate and upscale the innovative ideas of farmers.
- Scientific validation of farmers innovations may be taken up by the ICAR/SAU research system on a regular basis.
- Integrated farming system models identified by ICAR and SAUs and those being practiced by farmers need to be replicated with focus on reducing farmers distress and inducing sustainability to the farming systems.
- Impact of climate change on agriculture & allied activities is a reality which needs to be understood in totality and has to be addressed in a multidisciplinary approach.



Inauguration of Innovative Farmers Exhibition by Dr. Trilochan Mohapatra, Director General, ICAR



Dignitaries visited the Exhibition



Inaugural address by Dr. Trilochan Mohapatra, DG, ICAR, New Delhi



Opening Remarks by Dr. A. K. Singh, DDG (Ag. Extn.), ICAR

Details of Extension Co-ordination Mechanism followed

- Co-ordination with the Farm Universities, State Development Departments viz., Agriculture, Horticulture Animal Husbandry & Veterinary Sciences, Fisheries, Sericulture and Forestry including other agencies such as ICAR-IIHR, MANAGE, NAARM & other national institutes, Coffee Board, Nationalised Banks, Corporate sectors, NGOs, FPOs etc., for planning and organising the extension educational programmes to the extension personnel and farming community
- Co-ordination with National Informatic Centre
- Co-ordination with Print and Electronic Media for publicity of university activities and agricultural technologies

Extension coordination dissemination mechanism of the University



Brief note on Extension and Technology Dissemination System followed

- Consultancy services through phone calls and in person: This is followed in all KVK's and ATIC centres
- Diagnostic field visits were carried out through Scientists of KVK and extension education units
- WhatsApp messages/queries answered: as and when the queries received from the farmers, solutions will be offered through WhatsApp by Farmers Information unit/ATIC/KVK's .
- Agri-portal: Technical Information relating to agricultural crops, commercial crops, sericulture (POP) is uploaded for the benefit of the farmers
- Video conferencing: is organized to interact with KVK heads from the head quarter (HQ) and besides, coordinating VIP programmes, PM address, CM address and ministers of agriculture.
- Kiosk: Information relating to agriculture and allied aspects is stored/uploaded for the benefits of farmers in all KVK's and ATIC the centres.
- Display of technology visual charts/boards: visuals are displayed in the Agricultural Sciences Museum (ASM), ATIC and in all KVK.
- Publication of Popular articles, success stories and special articles in print and electronic media on agricultural technologies: The popular articles on recent agricultural technologies and success stories of award-winning formats special articles on recent technologies released by the university and significant achievements of the University is published in newspapers, journals and magazines for wider publicity.
- Sending PDF version of package of practices through WhatsApp to mobile to mobile phones of requested farmers: The Pdf version of POP is sent to 2,82,865 farmers/extension workers, who have requested through WhatsApp. It saves money, time and no need to carry books along with them. While working in the field they can get solution to their agricultural problems while working in the field visits.
- Production and uploading of 5 minutes duration videos and short movies on agricultural technologies in social media (WhatsApp, YouTube, Facebook and Twitter) and university web site: By watching this videos viewer can acquire more skills stages involved and better way of understanding technologies.
- Organizing farmers fairs/agricultural exhibitions to exhibit advanced technologies: Krishimela organized in the university is very popular both in state and national level. Every

year more than 15 lakh farmers were visit to this mela, which is the best platform to create awareness among public on agricultural technologies. Participating in national/state/regional level farmers fairs to create awareness among the public. It is a way to show case the products besides promoting sales.

- Bimonthly technical workshops to the extension functionaries of KSDA and line departments were conducted as a part of NAEP and SAMETI in all KVKS' based on the field problems noticed along with KSDA and line departments.
- Identification/ selection of farmers for implementing farm trial, front line demonstration and training programmes through Participatory Rural Appraisal techniques (PRA) and line departments in the district through KVKS.
- Organizing large scale demonstration: EEUS' and KVKS' are conducting this activity to promote large scale application of technology involving all the line departments with their coordination is august at different level for wider dissemination.
- Organising field days: field days are conducted in KVKS' to prove the worthiness of technology at micro level involving farmers and demonstrator farmers.

Contributions of Directorate of Extension in academic programmes

Sl. No.	Name and designation of the faculty	Chairman of Advisory Committee (No.)		Member for Advisory committee (No.)	
		M.Sc.	Ph.D.	M.Sc.	Ph.D.
1	Professor	22	19	34	18
2	Associate Professor	13	5	35	14
3	Assistant Professor	7	-	36	8

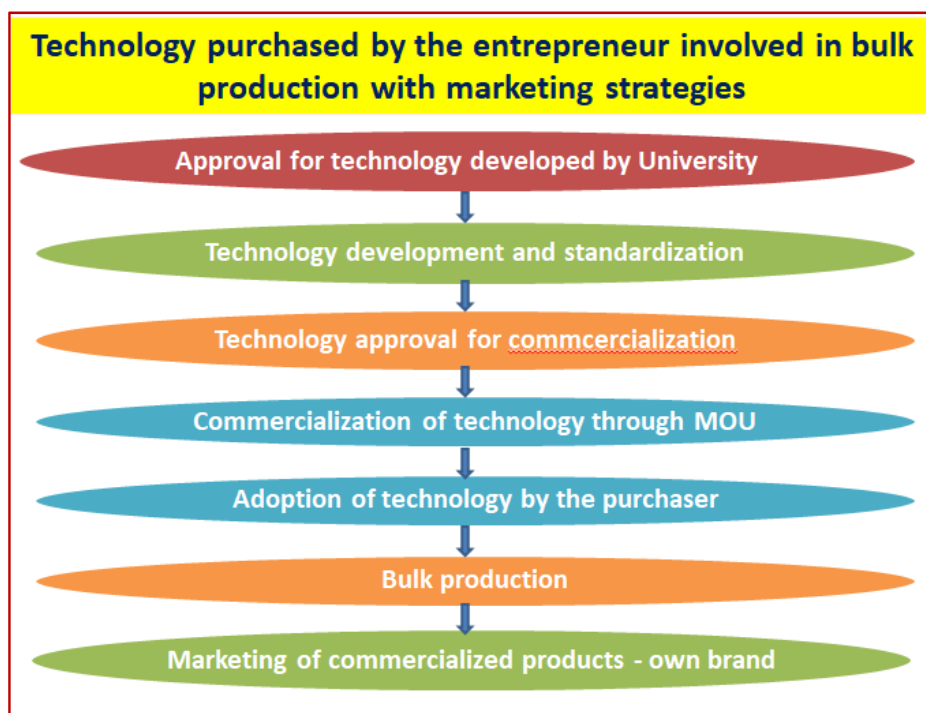
- Faculty working in Directorate of Extension offering UG and PG courses and share their field experiences
- Guiding the PG students and serving as member of Advisory Committees
- Co-ordinating UG student's placement in RAWEP and HOT classes
- Provided publicity in Print and Electronic Media on Foundation Day, Convocation, Seminars, Workshops *etc.*,
- Co-ordinating with Print and Electronic Media to publish / telecast the programmes / Articles of teachers
- Educational tours for UG & PG students to different KVKs / units of the directorate
- The infrastructure developed in different units of directorate utilised for practical classes in general and Hands on Training / Experiential learning courses in particular
- Serving as external examiners for other Universities

6.6.4.3. Extension Planning and Technological Impact

Bakery Training Unit

Ways of planning that supports enterprises	New Technologies deployed	New Technologies Commercialised
<ul style="list-style-type: none"> Operational Efficiency-creating platform to update the knowledge through trainings, exposure visits, interaction with the successful entrepreneurs, organising guest lectures from the experts Providing opportunity for hands on training through skill imparting. Displaying, packaging, branding and marketing the products in melas, exhibitions etc. Opportunity Creation- development of healthy, nutritional value-added bakery products through innovative methods. Expanding marketing opportunities through digital mode, social media and direct marketing through outlets. Planned to reach the unreached for free time income generating activity by training the housewives and women of urban areas. Planned and established bakery production centres in central prison of men and women to bring them to the main stream of the society after release with the skills of production technology. 	<ul style="list-style-type: none"> Development of healthy nutritious bakery products Innovations in use of raw materials Development of novel products By-product utilisation of farm produce for effective utilisation and additional income Development of no maida, no sugar and no fat bakery products 	<ul style="list-style-type: none"> Enriched Ragi Vermicelli Ragi Vermicelli with madhunashini leaves powders Ragi Vermicelli with amruthaballi leaves powder Ragi Vermicelli with germinated fenugreek seeds powder Ragi Vermicelli with Jamun seeds powder Ragi Vermicelli with Ashwaganda root powder Coconut flour Cookies Coconut Flour Masala Biscuit Coconut Flour Cake Coconut Flour Rusk Coconut Flour Sweet and salt biscuit Coconut Flour salt biscuit Coconut flour Nutri stripes Coconut flour Ladoo

Mechanism in place to study the technological impact



The technologies such as Enriched Ragi Vermicelli, Ragi Vermicelli with Madhunashini leaves powder, Ragi Vermicelli with Amruthaballi leaves powder, Ragi Vermicelli with germinated Fenugreek seeds powder, Ragi Vermicelli with Jamun seeds powder, Ragi Vermicelli with Ashwaganda root powder, Coconut flour Cookies, Coconut Flour Masala Biscuit, Coconut Flour Cake, Coconut Flour Rusk, Coconut Flour Sweet and Salt biscuit, Coconut Flour Salt biscuit, Coconut flour Nutri stripes and Coconut flour Laddu were developed and approved for commercialization by the Bakery Training Unit, UASB. The commercialized technologies were purchased by four entrepreneurs for commercial production.

The commercialised technologies are expected to have a great future in food industry since they contain higher proportion of carbohydrate in the form of non-starchy polysaccharides and low fat together can provide health benefits. Finger millet-based vermicelli with additional benefit of hypoglycaemic foods will be a good addition to the diet of diabetics. Hence, different finger millet vermicelli and its blend with different hypoglycaemic foods were developed and are commercialized.

The technologies developed from coconut flour obtained from the residue after the extraction of virgin coconut oil (VCO) has low economic value and returns to the farmer making virgin coconut oil. It has potential application in high protein-fibre enriched food products. With regard to bakery products, consumers are demanding more on quality and nutritional contents of bakery products and bakery industry is looking forward for newer options to ingredients having functional and nutraceutical properties. Hence, there is a need for partial substitution of refined wheat flour by fibre and protein rich natural ingredients which can be accomplished by using defatted coconut flour.

The purchaser is a former trainee of the Bakery Training Unit who started his venture in the field of healthy bakery products. The production of these products resulted in enhancing of his income by 10-12 per cent. The indirect impact of the technology helped the VCO producing farmers for selling the byproduct i.e., coconut flour and gaining an additional income by 10-15 per cent.



Finger Millet Vermicelli with Madhunashini leaves powder



Finger Millet Vermicelli with Defatted soya flour



Coconut Flour Cake



Coconut Flour Salt Biscuit



Coconut Flour Ladoo



Coconut Flour Cookie

6.6.4.4. Implementation of National Initiative

I. Green initiatives					
National Initiative	Year of start	Current Status/ (On-going / completed)	Total Funding Received (Rs. in lakh)	Significant Extension Programmes organized	Significant Milestones Achieved
Swachhbharat/Swacchatha Pakhwada	2015	On-going	13.13	<ul style="list-style-type: none"> Awareness programmes on cleanliness and hygienic for the public Campaigns on Swaccha Bharath Parthenium eradication Swacchta Pakhwada programme. 	All KVK's involved in creating awareness among 10,000 public under Swaccha Bharath.
Jal Shakthi Abhiyana	2019-20	Completed	23.50	<ul style="list-style-type: none"> Awareness programmes on water conservation among the public. Organized campaigns, conducted technical sessions by involving Ministry of Jal Shakthi and line departments of the district. Hand bills were printed and distributed 	Awareness was created among 11,000 farmers (I phase).
II. Paramparagath Krishi Vikas Yojana (PKVY)	2019	On-going	23.10	<ul style="list-style-type: none"> Provided organic inputs (AMC, Neem oil, Pongamia cake, Azospirillum, PSB, etc.), Created awareness on organic farming, training cum method demonstration on 	<p>Farmers have adopted organic farming practices</p> <p>Value addition and market linkage for better price to the produce.</p>

				<ul style="list-style-type: none"> organic farming practices • Formation of FIGs on organic paddy • Demonstration, training programmes, field days, field visits were conducted 	
III. District Agromet Unit	2019	On-going	46.40	<ul style="list-style-type: none"> • Created awareness on Weather parameters <i>i.e.</i> rainfall, temperature, humidity <i>etc.</i>, among farming community of the district • SMS service to take up farming activities based on rainfall prediction in near future • Conducted training programmes on weather-based Apps. 	<p>KVK Chamarajanagara: As high as 81.30 per cent farmers were satisfied with the services provided.</p> <p>KVK Mandya: Disseminated Bi-weekly Agromet Advisory Bulletins to 25000 farmers via SMS, WhatsApp and Email and SMSs delivered to 46000 farmers via m-Kisan portal.</p>
IV. National Food Security Mission (NFSM)	2015	On-going	43.25	<ul style="list-style-type: none"> • Provided critical inputs • Conducted front line demonstrations on pulses and oil seeds to popularize new varieties and technologies 	Introduction, popularization and linking Karnataka state seeds corporation with department of agriculture for procurement of high yielding Redgram varieties BRG-3 and BRG-5
V. Attracting and Retaining Youth in Agriculture (ARYA)	2015	On-going	65.04	<ul style="list-style-type: none"> • Conducted skill-based training programmes on coconut tree climbing, bee keeping, value addition in agriculture produce and vermi-composting for rural youth of Bengaluru Rural District. 	Imparted three skill-oriented trainings on Vermicomposting, Coconut Climbing and Bee keeping and developed 78 rural youth as agri-entrepreneurs
VI. SEED HUB project	2018	On-going	150.00	<ul style="list-style-type: none"> • Production of quality seeds of pulses • Conducted trainings for seed production farmers under 	Production and distribution of 326 qtl. of quality pulse seeding Mandya and other

				participatory mode	neighbouring districts
VII. National Initiative on Climate Resilient Agriculture (NICRA)	2011	On-going	53.67	Natural resource management through construction of farm ponds, percolation tanks, trench cum bunds, nala bunds, desilting <i>etc.</i>	Created additional water storage capacity of more than 3 crore litres of water and improved groundwater table.

GREEN INITIATIVES

A. Swachhabharat/Swacchta pakhwada

Swachha Bharat Mission (SBM), Swachh Bharat Abhiyan (SBA) or Clean India Mission is a country-wide campaign initiated by the Government of India during 2014, to eliminate open defecation and improve solid waste management (SWM). The mission aimed to achieve an "open-defecation free" (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi. The objectives of the mission is eradication of manual scavenging, generating awareness and bringing behavioural change regarding sanitation practices, and augmentation of capacity at the local level. In this background, Indian council of Agricultural Research (ICAR) has decided to implement Swachhabharat/Swacchta pakhwada programmes in all Krishi Vigyan Kendras (KVK's) of the country under green initiative programme.



All the KVKs coming under UAS (B) jurisdiction have implemented Swachhabharat programme since 2015-16. Total amount received for this activity was Rs. 13.13 lakh and significant extension programmes *viz.*, campaigns on Swachhabharat, Parthenium eradication and Swacchta Pakhwada programmes to create awareness on cleanliness and hygienic for the public. As a result, created awareness among public (> 10,000) under Swachhabharat.



JalShakthi Abhiyana

Inspired by the Hon'ble Prime Ministers' impetus on JalSinchayi, the JalShakthi Abhiyana (JSA), a time-bound, mission-mode water conservation campaign was implemented in six KVKs from 2019. During the campaign, officers, groundwater experts and scientists from the Government of India worked together with state and district officials for water conservation and water resource management by focusing on accelerated implementation of five target interventions. The phase-I programme was completed in 2020 and the total outlay of amount received for one year was Rs. 23.50 lakh.



The significant extension programmes organized under this Abhiyana were awareness programmes on water conservation among the public campaigns, technical sessions by involving Ministry of JalShakthi and line departments of the district, Hand bills were printed and distributed.



The programme has created awareness among 11,000 farmers (I phase).



Awareness programme on Jal-Shakthi Abhiyana

Paramparagat Krishi Vikas Yojana (PKVY)

Paramparagat Krishi Vikas Yojana (PKVY) is a sub-component of Soil Health Management (SHM) scheme under National Mission for Sustainable Agriculture (NMSA) which aims at development of sustainable models of organic farming through a mix of traditional wisdom and modern science to ensure long term soil fertility build-up, resource conservation and helps in climate change adaptation and mitigation.



The PKVY programme was implemented in six KVKs of UAS (B) since 2019, with the total outlay of Rs. 23.10 lakh. The major activities conducted were awareness on organic farming, training cum method demonstrations, field days, field visits and provided organic inputs (AMC, Neem oil, Pongamia cake, Azospirillum, PSB, pheromone traps and green manure seeds).



The programme has resulted in formation of FIG on organic paddy, chemical free jaggery production, reduced fertilizer usage and value addition besides, market linkage for better price to the produce. About 30 per cent of the beneficiaries adopted the organic practices.

District Agromet Units (DAMU)

The Government of India under Indian Meteorological Department (IMD) has established weather observatory system and developed Garmin Krishi Mausam Sewa in the country. DAMU units were established (2019) with the cost of Rs. 46.40 lakh in four KVKs of UASB and receives weather forecast from IMD to prepare and disseminate to sub-district level through agromet advisory bulletins.



The extension activities like sensitization of farmers about weather-based information, training programmes on weather-based Apps and sent agro-advisory SMS to the registered farmers on rainfall prediction.

Under the project 1035 agromet advisories were disseminated to 40000 farmers via decision support system of agromet website and sent advisories to 1,16,000 farmers via m-kisan portal. About 68 per cent farmers expressed their satisfaction with the services provided.



DAMU awareness programme



DAMU unit at KVK Tumkur-I

National Food Security Mission (NFSM)

Cluster front line demonstrations (CFLDs) concept a novel approach of this mission is to provide a direct interface between researcher and farmer for the transfer of technologies developed by them and to get direct feedback from farming community. The demonstrations are conducted under the supervision of scientists of KVKs.

All seven KVK's have implemented the project with an outlay of Rs. 48.25 lakh. The major technological interventions include introduction of improved varieties, seed treatment, mechanical nipping, application of neem oil, plant protection measures etc., Demonstrations, field visits and field days were conducted. This has resulted in horizontal spread of improved varieties Redgram (BRG-1, BRG-3, BRG-5) to 7471 ha. and Bengal gram (JAKI-9218) to 3673 ha. Thirty (30) quintals of quality seed production of multiple resistant Bengal gram variety JAKI-9218 is linked to seed hub project.



Field Visit under NFSM



Diagnostic Field Visit



Nipping in Redgram

Attracting and Retaining Youth in Agriculture (ARYA)

KVK Bangalore Rural has implemented the ARYA programme with an outlay of Rs. 65.04 lakh. The significant extension activities carried out includes skill-based training programmes on coconut tree climbing, bee keeping, value addition and vermicomposting in order to make them entrepreneurs. This has resulted in development of 78 rural youth as agripreneurs.



Preparation and production of vermicompost

Seed Hub

The Krishi Vigyan Kendra, Mandya established Seed Hub on Pulses entitled creation of seed hubs for increasing indigenous production of pulses in India sanctioned during the year 2017 with a total outlay of Rs.150 lakh for a period of 3 years. The activities carried out includes conducting trainings on seed production, the protocols to be followed during seed production under farmers participatory mode.

Produced 326 qtl of pulses and able to provide quality seed to the farmers of Mandya district and in other districts viz., Shivamogga, Udipi and Tumkur.

National Innovations on Climate Resilient Agriculture (NICRA)

The KVK Chikkaballapura has implemented the NICRA project since 2011 with an outlay of Rs. 53.67 lakh. The significant activities carried out like Natural resource management through construction of farm ponds, percolation tanks, trench cum bunds, nala bunds, desilting *etc.* Further, custom hiring centre was established to overcome labours scarcity. These interventions resulted in creation of additional water storage capacity of more than 3 crores litres of water and improved groundwater table.



Water conservation structures



Vegetable production



Custom hiring centre

6.6.4.5. Innovation and Best Practices

Sl. No.	Innovation Type	Innovative Efforts / Best Practices
1	e-krishiuasb portal (http://e-krishiuasb.karnataka.gov.in)	<ul style="list-style-type: none"> • Uploaded the digital information on POP of Agriculture, Horticulture, Sericulture, Animal Husbandry, Farm Management and other related topics. • Provided additional gadgets on success stories of awardee farmers, contingent cropping plan, weather forecast, agriculture related information published in newspapers. • The package of practices from the portal can be downloaded • Uploading PDF format of package of practices of agriculture and allied subjects in the portal which enables the farmers to access in their field as and when it required • Websites of KVKs, line departments, farm Universities of Karnataka and ICAR institutions are linked to the portal.
2	Video-Conferencing	<ul style="list-style-type: none"> • Video-Conferencing facility established at 9 centres viz., 7 KVKs, 1 EEU of Mysuru and main expert centre at ATIC, UAS, GKVK. • It helps to organise training programmes and meetings with farmers and extension personnel on virtual mode
	KIOSK	Established KIOSK facility for the benefit of farmers, extension personnel and other stake holders to view the uploaded information in the UASB agri portal which contains technical information about cultivation practices of agriculture and horticultural crops, animal husbandry, sericulture, fisheries and other supplementary information.
	TOLL FREE No.	Farmers can contact TOLL FREE No. 18004250571 for instant technical advisories on agriculture and allied subjects
	Agri War Unit	<ul style="list-style-type: none"> • AgriWar Unit established for serving the farming community during COVID -19 pandemic • Team of dedicated scientists from different disciplines of UASB, GKVK and seven KVKs provided technical advisory services. • Act as a linkage between farmers and the consumers for marketing of Agri. and Horticultural produce as an off-market sale

WhatsApp	<ul style="list-style-type: none"> • ATIC has designated WhatsApp number 9482477812 for crop advisories • WhatsApp numbers of Scientists of KVKs and other units have been shared with farmers and line department officials to address the farmers queries. • Crop advisories, weather advisories and location specific technologies are disseminated through WhatsApp groups created for this purpose
Facebook / YouTube	<ul style="list-style-type: none"> • All KVKs have Facebook account. Different technologies, crop advisories, weather advisories, technology videos are uploaded in Facebook (https://www.facebook.com/sis.uasb) • YouTube channels are created and videos pertaining to different technologies like seed treatment, seed hardening, farm mechanization, ITKs etc., are uploaded regularly in channel (https://www.youtube.com/c/UASBangaloreGKVK) • Uploaded short movies on Agricultural Technologies of University for the benefit of farmers
mKissan	Farmers are registered in mKissan portal. Three messages every week is being sent to registered farmers from each KVK
Website	Websites are being used as window to depict activities of KVK, facilities available for farmers, contacts of scientist. Different technologies demonstrated in the district are uploaded in the website for horizontal spread of technologies.
Virtual trainings	Online trainings are conducted to farmers through zoom app, Cisco Webex, google meet etc.,
Market led extension	<ul style="list-style-type: none"> • Establishment of retail organic outlet by farmers associations. • Promotion of direct marketing of agriculture produce to apartments • Linking the farmers with agro based companies like BigBasket, Ninja cart, Reliance sputnik farms etc., • Promotion of online marketing of agriculture produce
Establishment of KVK outlets	<ul style="list-style-type: none"> • Display of technologies, farm literature • Selling of technological inputs
Village adoption programme	Each KVK has adopted one village and conducted different capacity building programmes. Nutri gardens were established in the village and crop demonstrations were conducted. These villages serve as model villages for the district.
Establishment of model IFS farm	Each KVK has developed model integrated farming system farm based on agro climatic conditions.
Bakery technologies	<ul style="list-style-type: none"> • Organizing skill-oriented training programmes • Development of need based curriculum for conducting new courses • Bake from Home concept for housewives to utilize free time as income generating activity for economic empowerment.

		<ul style="list-style-type: none"> • Encouraging rural youths and women to take up bakery and value addition as an enterprise for employment generation and upliftment of socio-economic status. • Offering courses for school children on nutrition and value-added bakery products. • Establishment of exclusively women run Bakeries in rural areas • Designed and developed exclusive informative website for Bakery Training Unit, UAS, Bangalore. www.bakerytrainingunituasb.com • Established Bakery production unit at Women Central Prison, Tumkur with the CSR fund of BHEL, Bangalore by imparting the skill of handling the bakery products to prisoners. This has led them to lead decent life in the society after their release. • Trained 28 physically challenged children to prepare their own snacks in order to make them to feel that they are one among the society. • Organised sensitisation programmes for transgenders to establish exclusive bakery by transgenders. • Trained housewives of Jawans of MEG to make them self-reliant.
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6.6.4.6. Consultancy / Certification / Testing

Sl. No.	Year	Resources generated through Consultancy/ Certification/Testing / outreach etc.	Details of Activities carried out	Participation of Faculty (No.)
1	2016-17	Consultancy	Bio-craft unit	621
		Certification	-	-
		Testing / outreach	-	-
2	2017-18	Consultancy	Bio-craft unit	415
			Problematic field visit	11
		Certification	-	-
		Testing / outreach	-	-
3	2018-19	Consultancy	Bio-craft unit	424
			Problematic field visit	28
		Certification	-	-
		Testing / outreach	Soil and water testing	455
4	2019-20	Consultancy	Bio-craft unit	1198
			Problematic field visit	66
		Certification	-	-
		Testing / outreach	Soil and water testing	05
FMC India Pvt. Ltd. (Pesticide testing)	02			
5	2020-21	Consultancy	Bio-craft unit	216
			Problematic field visit	23
		Certification	-	-
		Testing / outreach	Soil and water testing	217

Resources generated through Consultancy/ Certification/Testing / outreach etc. during 2016-17 to 2020-21

Sl. No.	Year	Resources generated through Consultancy/ Certification/Testing / outreach etc. (Rs.)	Details of Activities carried out		Participation of Faculty (No.)
			Activities	Quantity	
1	2016-17	498100	Soil analysis	10000 Nos.	13
		407760	Water analysis	6783 Nos.	13
		632374	Nursery	99878 Nos.	21
		635797	Agril. Crops	847.97 Qtls.	23
		370410	Dry Land Fruit Crops	357.5 Qtls.	19
		356006	Dairy	9710.4 litres.	15
		142730	Sheep/Goat	197 Nos.	14
		110950	Piggery	72 Nos.	6
		354070	Poultry	4206 Nos.	9
		264000	Hostel rent for trainees	2295 Nos.	23
		580660	KVK outlet	3543.76 Qtls	2
	Total	4352857			
2	2017-18	835350	Soil analysis	6054 Nos.	13
		548580	Water analysis	3791 Nos.	13
		727760	Nursery	80737 Nos.	21
		896398	Agril. Crops	5424.86 Qtls.	23
		556970	Dry Land Fruit Crops	18814.5 Qtls.	19
		304895	Dairy	7727 letters.	15
		209125	Sheep/Goat	47 Nos.	14
		113000	Piggery	245 Nos.	6
		8200	Poultry	25 Nos.	9
		381950	Hostel rent for trainees	2867 Nos.	23
		670880	KVK outlet	3117.25 Qtls.	2
		10800	Paid Trainings	108 Nos.	2
	Total	5263908			
3	2018-19	680500	Soil analysis	4370 Nos.	13
		399650	Water analysis	2588 Nos.	13
		728741	Nursery	268553 Nos.	21
		860312	Agril. Crops	907.61 Qtls.	23
		739465	Dry Land Fruit Crops	7275.37 Qtls.	19
		406556	Dairy	12798.2 ltrs	15
		198299	Sheep/Goat	334 Nos.	14
		151240	Piggery	468 Nos.	6
		313440	Poultry	2041 Nos.	9
		486075	Hostel rent for trainees	2439 Nos.	23
		719763	KVK outlet	4945.59 Qtls.	2
		319307	Seed Hub (Pulses)	34.37 Qtls.	7
	Total	6003348			
4	2019-20	901150	Soil analysis	4386 Nos.	13
		361250	Water analysis	1828 Nos.	13
		1124775	Nursery	116617 Nos.	21
		346716	Agril. Crops	1362.95 Qtls.	23
		533811	Dry Land Fruit Crops	533811 Qtls.	19
		497944	Dairy	11217 ltrs.	14
		191625	Sheep/Goat	179 Nos.	6
		47100	Piggery	131 Nos.	6
285745	Poultry	2522 Nos.	9		

		364920	Hostel rent for trainees	1813 Nos.	23
		1435960	KVK outlet	32628.75 Qtls.	2
		31800	Paid Trainings	106 Nos.	2
		553746	Seed Hub (Pulses)	66.7 Qtls.	7
	Total	6676542			
2020-21		672600	Soil analysis	3067 Nos.	13
		324300	Water analysis	1607 Nos.	13
		1031715	Nursery	120655 Nos.	21
		3282468	Agril. Crops	5591 Nos.	23
		870125	Dry Land Fruit Crops	11325 Qtls.	19
		376777	Dairy	11300.8 ltrs.	14
		101798	Sheep/Goat	12 Nos.	6
		103030	Piggery	14 Nos.	6
		245826	Poultry	1985 Nos.	9
		140800	Hostel rent for trainees	553 Nos.	23
		1403129	KVK outlet	25217.36 Qtls.	2
		17100	Paid Trainings	57 Nos.	2
		430068	Seed Hub (Pulses)	44 Qtls.	7
	812004	ATIC outlet		5	
	Total	8999735			
Grand Total		3,12,96,390			

Overall Resources generated through Consultancy/ Certification/Testing / outreach etc.

The resource generated from the activities such as soil analysis, water analysis, nursery raising, production of agricultural, dry land fruit crops, Dairy, Sheep and goat rearing, piggery, poultry, conducting of trainings and use of hostel facilities, paid trainings and the sale of micronutrient formulations for plant growth, bio-agents and value-added products and seed production from seed hub projects.

The soil and water testing facility provided at KVKs for the benefit of farmers. The total soil and water samples analysed were 27877 and 16597, respectively. The KVKs produced and sold 686440 quality seedling / saplings to the farmers worth of Rs. 42.45 lakh. Similarly, improved breeds of sheep / goat, pigs and poultry birds (52703, 770 and 930 numbers, respectively) were sold and generated a revenue of Rs. 25.76 lakh.

The farm in the KVKs have established demonstration units exhibiting the improved technologies to be adopted for sustainable yield which are useful for farmers in getting better experience on visit to KVKs which includes agricultural crops and dry land fruit crops accounting to 14134.39q (Rs. 60.22 lakh) and 53702.61q (Rs.30.71), respectively.

Through KVK outlets, 9967qtl (Rs. 48.10 lakh) of micronutrient mixtures, bio-agents and value-added products were sold. The resource generated through the farmers training hostel (10779Nos) and paid trainings (69453Nos) were Rs.16.38 lakh and Rs. 0.60 lakh respectively. In addition, under Seed Hub project sold 145.07q (Rs.13.03 lakh) quality pulse seed. The total resource generated from all the activities accounts to Rs.312.96 lakh.

Overall Resources generated through Consultancy/ Certification/Testing / outreach etc.

Activity	Total quantity	Total amount realised (Rs.)	Faculty involved
Soil Analysis (Nos.)	27877	3587700	13
Water Analysis (Nos.)	16597	2041540	13
Nursery (Nos.)	686440	4245365	21

Agril. Crops (Qtls)	14134.39	6021691	23
Dry Land Fruit Crops (Qtls.)	53702.61	3070781	19
Dairy (Itrs)	52702.61	1942178	15
Sheep/Goat (Nos.)	52753.4	843577	14
Piggery (Nos.)	769.7	525320	6
Poultry (Nos.)	929.5	1207281	9
Training. Hostel (Nos.)	10779	1637745	19
KVK outlet (Qtls.)	9967	4810392	23
Paid Trainings. (Nos.)	69453	59700	2
Seed Hub on pulses (Qtls.)	145.07	1303121	7
Total		3,12,96,390	184

Resources generated at ATIC, GKVK, Bangalore

Sl. No.	Inputs sold	Amount realised (Rs.)				
		2016-17	2017-18	2018-19	2019-20	2020-21 (Up to Jan-21)
1	POP-Books on Agriculture, Horticulture, Animal husbandry and other books	5,96,892	11,65,974	12,33,816	10,40,369	1,62,073
2	CD's, Bio-fertilizers, Organic manure, and Bio-pesticides, Horticulture nursery plants and nursery implements	42,74,063	52,73,683	55,08,944	57,01,099	70,77,214
3	Seeds	60,13,910	34,50,119	14,56,179	19,40,670	22,01,875
Total (Rs.)		1,08,84,865	98,89,776	81,98,939	86,82,138	94,41,162
4 % of seeds amount and 10 % of other inputs amount realised as handling charges to revolving fund		7,27,652	7,81,970	7,32,840	7,51,774	8,12,004

Agriculture Technology Information Centre at GKVK, Bangalore under single window system delivering seeds, planting material, bio-fertilizers, organic manures, bio-pesticides, nursery implements, publications *etc.*, The total resource generated was Rs.38.06 lakh as handling charges on total turnover of Rs.470.97 lakh.



Well-equipped soil and water testing laboratory



AAS for micronutrients analysis at KVKs



Pulse seed production at Farms



Paddy seed production at Farms



Preparation of bio-fungicide Trichoderma at KVK



Honey processing unit



Intercropping demonstration at Farm



Sale counter at KVK



Seed storage & sale counter at KVK



Agro-processing unit at KVK



Goat rearing unit at KVK



Sheep rearing unit at Farm



Poultry unit at KVK



Piggery unit at KVK



Rabbit rearing unit at KVK



Vermicompost unit at KVK



Micro nutrients formulations



Precision farming at KVK



Biofuel unit at KVK



Farmers Hostel at KVKs

6.6.5. Faculty and Staff Development

6.6.5.1. Recruitment and Promotional Avenue

The Government of Karnataka issued Order dated 23-03-2010 by revising UGC/ICAR Pay Scale and Gazetted on 25.03.2010 to adopt Qualification and Scorecard for the Recruitment of Teachers and equivalent cadres under direct recruitment in the Farm Universities of Karnataka. Accordingly, qualification and scorecard for the recruitment of above posts have been developed. The minimum qualification for the recruitment of Professor post includes Ph.D. degree in the concerned/relevant discipline with evidence of published work with a minimum of 10 publications as books and/or research/policy papers, of which at least five papers in NAAS rated journals, total service required is

13 years in the cadre of Assistant Professor and above Teaching/Research/Extension experience in University/College/National level institutions with 3 years in the cadre of Associate Professor. The minimum marks to secure is 50 out of 100 marks to become eligibility for recruitment process. The allotment of 100 marks for Recruitment of Professor post is furnished below:

Sal No.	Particulars	Marks allotted for main items
1	Academic Qualifications.	20
	Academic Experience.	-
2.	a. Experience in Teaching/Research/Extension/ Corporate activities (University) in the cadre of Associate Professor. (Over and above 13 years)	06
	b. Outstation experience in the cadre of Associate Professor.	05
3.	Scientific publications in the cadre of Associate Professor.	20
4.	Special Awards/ Medals/ Fellowships/ Recognition for academic excellence in the cadre of Associate Professor.	05
5.	Attainment in the professional field in the cadre of Associate Professor.	13
6.	Externally funded Projects operated as Associate Professor.	08
7.	a. Organizing Symposium Seminar/ Summer Institute/ Winter Institutes/Refresher Courses/ Workshops and Training Programme as Associate Professor. b. Participation in Symposium/Seminar/ Summer school/ Winter school / Refresher Courses/ Workshops and Training Programme as Associate Professor.	08
8.	Confidential reports for the preceding 5 years in the cadre of Associate Professor.	05
9	Performance in the interview	10
Total Marks		100

The minimum Qualification for recruitment of Associate Professor post includes Ph.D. Degree in the concerned/ relevant disciplines, Master's Degree with at least 55% marks or equivalent, minimum of eight years of experience of Teaching/Research/ Extension in an academic / research position equivalent to that of Assistant Professor with minimum of 5 publications as books and/or research / policy papers, of which at least three papers in NAAS rated/ Refereed journals. The minimum marks to secure is 40 marks out of 100 marks to enter in to the eligibility list for recruitment process. The allotment of 100 marks for the recruitment of Associate Professor post is furnished below:

Sl. No.	Particulars	Marks allotted for main items
1	Academic Qualifications.	20
2.	Academic Experience.	-
	a. Experience in Teaching/Research/Extension/ Corporate activities in the cadre of Assistant Professor.	06
	b. Outstation experience in the cadre of Assistant Professor.	05
3.	Scientific publications in the cadre of Assistant Professor.	20
4.	Special Awards/ Medals/ Fellowships/ Recognition for academic excellence in the cadre of Assistant Professor.	05
5.	Attainment in the professional field in the cadre of Assistant Professor.	15
6.	Externally funded Projects operated as Assistant Professor.	06

7.	a. Organizing Symposium Seminar/ Summer Institute/ Winter Institutes/Refresher Courses/ Workshops and Training Programme as Associate Professor. b. Participation in Symposium/Seminar/ Summer Institute/ Winter Institutes/ Refresher Courses/ Workshops and Training Programme as Associate Professor.	08
8.	Confidential reports for the preceding 5 years in the cadre of Assistant Professor.	05
9	Performance in the interview	10
Total Marks		100

The minimum Qualification for recruitment of Assistant Professor Post includes 55% (Traditional) or 60% (Trimester) or 70% (Semester) marks or its equivalent at the Master's Degree level in a concerned subject with NET as Compulsory, Essentiality of NET can be waived-off for the candidates holding Ph.D. degree, at least two full length publications having a NAAS rating not less than 4/ minimum of four full length papers in NAAS rated State Agricultural Universities (SAUs) Journals and NET shall not be required for such Masters Programmes in disciplines for which NET is not conducted. The minimum marks to secure is 30 out of 100 marks to enter in to the eligibility list for recruitment process.

The allotment of 100 marks for Recruitment of Assistant Professor Post is furnished below:

Sl.No.	Particulars	Marks allotted for main items
1.	Academic Qualifications	43
2.	Medals/Awards/Recognition	06
3.	Sports & Cultural/NCC/NSS/Scouts & Guides activities	06
4.	Experience in Teaching/Research/Extension	15
5.	Special Attainment in academic field	05
6.	Publications	15
7.	Interview performance	10
Total Marks		100

Promotion Process of Teaching Faculty under Career Advancement Scheme- 2006.

The Government of Karnataka issued Order dated 23-03-2010 by revising UGC/ICAR Pay Scale and Gazetted on 25-03-2010 to adopt Qualification and Scorecard for Promotion of Teachers and equivalent Cadres under Career Advancement Scheme-2006 in Farm Universities of Karnataka. Accordingly, Qualification and Scorecard for Recruitment of above posts have been developed.

The minimum requirement for promotion of Teacher from Assistant Professor with AGP 6000 to Assistant Professor AGP 7000 must have completed 4years of service with Ph.D. degree, with 5 years of service with M.Phil. /M.Sc. in Professional Courses (Agriculture allied disciplines) and 6 years of service without Ph.D. degree or M.Phil./M.Sc. in Professional Courses in AGP6000 with completion of One of 10 days and above duration of summer/winter/Refreshment Courses during assessment period. The minimum marks to secure is 60 marks out of 100 marks to get promoted to Assistant Professor with AGP6000 to Assistant Professor AGP7000.

The minimum requirement for promotion of Teacher from Assistant Professor with AGP 7000 to Assistant Professor AGP8000 must have completed 5years of service in AGP7000with completion of One of 5 days and above duration of summer/winter/Refreshment Courses during assessment period. The minimum marks to secure is 65 marks out of 100 marks to get promoted to Assistant Professor with AGP7000 to Assistant Professor AGP8000.

The allotment of 100 marks for Promotion of Teachers Under CAS-2006 for Assistant Professor AGP 6000 to AGP 7000 and Assistant Professor AGP 7000 to AGP 8000 is furnished below:

Sl. No.	Particulars	Marks allotted for main items
1.	Specific Achievements in Teaching/Research/Extension/ work during Assessment Period (the activities to be certified by competent authority)	50
2.	Published work During the Assessment Period	10
3.	Summer Schools/ Winter Schools/ Refresher Course/Special Training/ Training/ Symposia/ Seminar/Workshop/ Conference	06
4.	Creative/Innovative achievements in teaching/ research/ Extension (AGP of Rs6000 and above)	02
5.	International Exposure (AGP of Rs6000 and above)	01
6.	Awards/Distinctions received (AGP of Rs6000 and above)	03
7.	Corporate/ Other Activities	11
8.	Outstation service (AGP of Rs6000 and above)	05
9.	Annual Evaluation Reports (during the assessment period)	12
Total Marks		100

The minimum requirement for promotion of Teacher from Assistant Professor with AGP 8000 to Associate Professor AGP 9000 must have completed 3years of service in AGP8000 with completion of One of 5 days and above duration of summer/winter/Refreshment Courses during assessment period and must publish 5 publications after being placed in the AGP of 6000 to 8000. The minimum marks to secure is 70 marks out of 100 marks to get promoted to Assistant Professor with AGP8000 to Associate Professor AGP 9000.

The minimum requirement for promotion of Teacher from Associate Professor with AGP9000 to Professor AGP10000 must have completed 3years of service in AGP9000 and must publish 3 publications after being placed in the AGP of 8000 and 9000. The minimum marks to secure is 70 marks out of 100 marks to get promoted to Associate Professor with AGP9000 to Professor AGP10000.

The allotment of 100 marks for Promotion of Teachers Under CAS-2006 for Assistant Professor AGP 8000 to Associate Professor AGP 9000 and Associate Professor AGP 9000 to Professor AGP 10000 is furnished below:

Sl. No.	Particulars	Marks allotted for main items
1.	Specific Achievements in Teaching/Research/Extension/ work during Assessment Period+ previous Two years (the activities to be certified by competent authority)	45
2.	Published work During the Assessment Period + previous Two years	12
3.	Summer Schools/ Winter Schools/ Refresher Course/Special Training/ Training/ Symposia/ Seminar/Workshop/ Conference	04
4.	International Exposure (AGP of Rs6000 and above)	01
5.	Awards/Distinctions received (AGP of Rs6000 and above)	03
6.	Corporate/ Other Activities	08
7.	Outstation service (AGP of Rs6000 and above)	05
8.	Annual Evaluation Reports (during the assessment period)	12
9.	Performance in interview	10
Total Marks		100

The minimum requirement for promotion of Teacher from Professor with AGP 10000 to Professor (HAG) must have completed 10years of service in AGP10000 and should have evidence of Post-doctoral research output of high standard must have obtained awards /honours/ and recognitions and must additional degrees like D.Sc., D.Litt., LID, etc.; patents and IPR on products and processes developed/ technology transfer achieved in the case of Teachers in Science and Technology. The minimum marks to secure is 70 marks out of 100 marks to get promoted to Professor with from

Professor with AGP10000 to Professor (HAG). The allotment of 100 marks for Promotion of Professor to Professor (HAG) is furnished below:

Sl. No.	Particulars	Marks allotted for main items
1.	Academic Qualification	02
2.	Experience in the cadre of Professor and above	10
3.	Scientific publications in the cadre of Professor	15
4.	Attainment in the professional field in the cadre of Professor	15
5.	Externally funded Projects operated as Professor	15
6.	International Exposure (in the cadre of Professor & above)	05
7.	Institutional Building (in the cadre of Professor & above)	15
8.	Organizing Symposium Seminar/Summer Institute/ Winter Institute/ Refresher Courses/Workshops and Training Programme in the cadre of Professor and Above	05
9.	Awards/Medals/Fellowships/recognition for academic excellence in Teaching/Research/Extension in cadre of Professor and above	05
10.	Out station experience in the cadre of Professor and above	08
11.	Confidential reports for the preceding 5 years in the cadre of Professor and above	05
Total Marks		100

Staff recruited directly at the higher positions in the last five years.

Sl. No.	Year	Officer Posts	Professor Post	Associate Professor Post	Assistant Professor Post
1.	2016-17	08	-	-	-
2.	2017-18	-	-	01	-
3.	2018-19	-	03	-	-
4.	2019-20	-	-	26	57
5.	2020-21	-	-	-	-
Total		08	03	27	57

Recruitment procedure for Technical Staff in UAS, Bangalore

The Technical posts include Technical Assistant / Field Supervisors/ Training Assistant, Farm Managers and Programme Assistant (Computers) which come under T-4 Series Posts. The qualification for Direct Recruitment of Technical Series posts is included in Cadre and Recruitment Regulations of UAS, Bangalore by notifying it in the Karnataka gazette. The qualification prescribed for recruitment of technical series posts is as follows:

Training Assistant / Technical Assistant / Field Supervisor

- (a). A Bachelor's degree in Agriculture / Horticulture / Home Science / Agril. Engineering / Veterinary Science / Animal Science / Forestry / Sericulture / Agricultural Marketing and Co-operation / Food Science / Agri. Biotechnology from a recognized Agricultural University with good academic record with a minimum OGPA of 6.50/10.00 or CGPA of 2.25/4.00 or its equivalent or 55% of marks (where grade points are not in vogue).
- (b). A relaxation of minimum OGPA from 6.50/10.00 to 6.00/10.00 and CGPA of 2.25/4.00 to 2.00/4.00 is provided for SC/ST category (55% to 50% of marks where grade points are not in vogue).

Farm Manager

- (a). A Bachelor's degree in Agriculture / Horticulture / Forestry / Sericulture / Agril. Marketing and Cooperation from a recognized Agricultural University with a good academic record and a minimum OGPA of 6.50/10.00 or CGPA of 2.25/4.00 or its equivalent or 55% of marks (where grade points are not in vogue).

- (b). Relaxation of minimum OGPA from 6.50/10.00 to 6.00/10.00 and CGPA of 2.25/4.00 to 2.00/4.00 is provided for SC/ST category (55% to 50% of marks where grade points are not in vogue).

Programme Assistant (Computer)

A Pass in B.Sc. (Computer Science) / Bachelor in Computer Application **OR** Any Bachelor degree from a recognized University with one-year Diploma in Computer Application.

Notification will be issued for recruitment of technical posts by inviting the applications in the prescribed form from eligible candidates for filling up of the Technical Series Posts Sanctioned to different Schemes and KVK's in the University of Agricultural Sciences, Bangalore. The procedure for selection of candidates for the posts advertised will be in accordance with the Statute 32 and the Cadre and Recruitment Regulations of UAS, Bangalore and the classification of vacancies are made in accordance with the relevant Government orders as amended from time to time. The selection of the technical staff will be done as per the Score Card published in the Karnataka Gazette dated 31-01-2008 of UAS, Bangalore and ICAR guidelines notified time to time.

Promotion Procedure for Technical Staff T4 to T5 Series Posts:

The promotion of Technical Staff will be done on the basis of Guidelines of Assessment Procedure and Score Card for Promotion of T-4 Series to T-5 Series Post in UAS, Bengaluru. Assessment of the technical personnel for promotion from T4 to T5 shall take into consideration of the following:

- The material furnished in the 5 years Assessment Proforma (enclosed)
- Annual Confidential Reports for the last 5 years

The Assessment Committees will be constituted by the Appointing Authority and will comprise not less than 3 and not more than 5 members including the Chairman. The Chairman of the Committee would be a person from outside the University and would be nominated by the Vice-Chancellor, UAS, Bangalore. Separate Assessment Committees will be constituted for each professional group (Farm Manager / Training Assistant / Programme Assistant (Computer) / Technical Assistant / Field Supervisor) and will include experts in the particular professional groups/discipline in addition to Director of Extension/Director of Research concerned in the University.

Score card for promotion of T4-T5

I.	Evaluation of Annual Confidential Reports (during the assessment period)	80 Marks
II.	Assessment Committee Evaluation	20 Marks
Total		100 Marks

The merit promotion from T-4 to T-5 grade shall be made only if an employee meets the following minimum percentage.

Grade	Minimum percentage for SC / ST employees	Minimum percentage for Others
For promotion from T-4 to T-5 grade	62%	67%

Promotion Procedure for Technical Staff T6 to T9 Series Posts:

Assessment of the technical personnel shall take into consideration of the following:

- The material furnished in the five years assessment proforma(enclosed).
- Performance record files maintained by the technical personnel in a suitable proforma.
- Biodata and career information (various posts held etc.) of the technical personnel throughout their service.
- Annual Confidential Reports for the past 5 years

Assessment Committee

The Assessment Committees will be constituted by the Appointing Authority and will comprise not less than 3 and not more than 5 members including the Chairman. The Chairman of the committee would be a person of the rank of Officer in the university and would be nominated by the Vice-Chancellor, UAS, Bangalore. A Common Committee will be constituted for all professional groups (Farm Manager /Technical Assistant/ Programme Assistant (Computer) /Programme Assistant (Lab Technician) and will include expert in the particular professional groups /discipline in addition to Director of Extension/ Director of Research concerned in the University

Score card for promotion of T6-T9

I.	Evaluation of Annual Confidential Reports (during the assessment period)	80 Marks
II.	Assessment Committee Evaluation	20 Marks
Total		100 Marks

The merit promotion from T-5 to T-9 grade shall be made only if an employee meets the following minimum percentage.

Grade	Minimum percentage for SC / ST employees	Minimum percentage for Others
For promotion from T-5 to T-6 grade	62%	67%
For promotion from T-6 to T-(7-8) and to T-9 grade	70%	75%

Recruitment procedure for Supporting and Administrative Staff in UAS, Bangalore

The direct recruitment of Supporting and Administrative Staff is done as per the Statute and Cadre and Recruitment Regulations of UAS, Bangalore and the classification of vacancies are made in accordance with the relevant Government orders as amended from time to time.

Earlier, applications were invited by the eligible candidates in the prescribed format for the different Cadres as per the qualification prescribed in the C&RR of UAS, Bangalore by notify the same in the leading new papers.

Scrutiny committee will scrutinize the application received for different cadres as per the prescribed qualification and they will prepare the eligible candidates list for calling interview. The selection of candidates were done the basis of the marks obtained in the interview and as per the marks prescribed for the qualification and experience.

The Selection Committee for Direct Recruitment shall be appointed by the Vice-Chancellor and shall be comprised of not less than five members of which two shall be from among the Officers of the University. One of the five members shall be Director of Social Welfare, Government of Karnataka or his nominee not below the Rank of Deputy Director. The Vice-Chancellor shall appoint one of the members as Chairman of the Committee. Three members shall constitute the quorum.

Now the selection is done by calling applications through online and conducting the Competitive Examinations for eligible candidates on the basis of the Karnataka Civil Service (Direct Recruitment rules) notified by Government of Karnataka. There will be no interview in the recruitment process. The selection will be done on the basis of the marks obtained in the Competitive Examinations conducted by UAS, Bangalore

Recruitment procedure for Supporting and Administrative Staff in UAS, Bangalore

Promotion of Supporting Staff and administrative Staff is done on the basis of the Cadre and Recruitment regulations of UAS, Bangalore.

The following Screening committee with be constituted for promotion as per their eligibility,

1. Director of Research
2. Director of Extension
3. Comptroller

4. Estate Officer
5. Administrative Officer - Member - Secretary

The eligibility list of persons for promotion shall be prepared by the Screening Committee based on the following:

- i) A person to be qualified for inclusion in the Eligibility list, should have completed at least 2 years of service in the category of post in which one is working after successful completion of probation in that post in the University. Minimum qualifications for each category of posts are indicated in the schedule Provided, an official who has been inflicted with a major punishment shall not be eligible for Promotion for a minimum period of 5 years from the date of punishment, while an official who has been inflicted with a minor punishment shall not be eligible for promotion for a minimum period of one year from the date of punishment.
- ii) Seniority of the persons in the category of posts in which he is working
- iii) Satisfactory performance in the post in which he is working, in terms of the confidential reports.
- iv) The eligibility list so prepared by the Committee shall be notified by the Administrative Office. Any employee aggrieved by the list so notified, shall appeal to the vice-chancellor within 30 days from the date of notifying the same
- v) The vice-chancellor, after considering the appeals, if any, shall approve the eligibility list with or without modifications, based on their seniority. The decision of the vice-chancellor in this respect shall be final.
- vi) The Administrative Officer shall issue orders of promotion with the approval of the vice-chancellor based on the approved list and in accordance with the roster of reservations for promotions in force from time to time.

Appointment of non- teaching posts under direct recruitment for last five years group wise

Sl. No.	Year	Group-A	Group-B	Group-C	Group-D
1	2016-17	-	-	-	-
2	2017-18	-	-	-	-
3	2018-19	-	-	01	-
4	2019-20	-	-	58	-
5	2020-21	-	-	-	-
Total		-	-	59	-

University has adopted following procedure for engaging Teaching and Non-teaching staffs on contract basis. The contract work is entrusted to the entry-level posts. After issue of Notification and receiving of Quotation, selection committee finalize and recommended for selection of candidates and Concerned Heads will issue the Orders. The remuneration for Contract employees will be fixed as per the guidelines and the Contract period of 179 days shall be with effect from the date of duty report.

Details of Security, up keeping and manpower personals deployed at various places in UAS Bangalore

Year	Security	Upkeeping	Manpower supply to Hostels
2016-17			
GKVK	Security guards- 80 Head guards-3 Security Officer-1 Gun man -2	Upkeeping Personnel- 55	-
Hebbal	Security guards -22 Head guards-3	Upkeeping Personnel- 6	-
2017-18			
GKVK	Security guards -98 Head guards-3 Security Officer-1 Gun man -2	Upkeeping Personnel- 57	-
Hebbal	Security guards -22	Upkeeping Personnel- 7	-

	Head guards-3		
2018-2019			
GKVK	Security guards-99 Head guards-3 Security Officer-1 Gun man -2	Upkeeping Personnel- 63	Caretaker-2 Clerk-1 Cooks-11 Helper-38 Servant-6
Hebbal	Security guards-22 Head guards-3	Upkeeping Personnel- 7	
Hassan	14	Upkeeping Personnel- 8	Caretaker-2 Clerk-2 Cooks-13 Helper-11 Servant-9
Mandya	14	Upkeeping Personnel- 8	Caretaker-2 Clerk-3 Cooks-8 Helper-9 Servant-7
Chintamani	6	Upkeeping Personnel- 5	Caretaker-2 Clerk-2 Cooks-9 Helper-7 Servant-5
2019-2020			
GKVK	Security guards-103 Head guards-3 Security Officer-1 Gun man -2	Upkeeping Personnel- 75	Caretaker-3 Clerk-1 Cooks-16 Helper-38 Servant-6
Hebbal	Security guards-22 Head guards-3	Upkeeping Personnel- 7	
Hassan	Security guards-14	Upkeeping Personnel- 8	Caretaker-2 Clerk-2 Cooks-13 Helper-11 Servant-9
Mandya	Security guards-14	Upkeeping Personnel- 10	Caretaker-2 Clerk-3 Cooks-8 Helper-9 Servant-7
Chintamani	Security guards-6	Upkeeping Personnel- 7	Caretaker-2 Clerk-2 Cooks-9 Helper-7 Servant-5
2020-2021			
GKVK	Security guards-109 Head guards-3 Security Officer-1 Gun man -2	Upkeeping Personnel- 77	Caretaker-4 Clerk-1 Cooks-19 Helper-38 Servant-6
Hebbal	Security guards-22 Head guards-3	Upkeeping Personnel- 7	
Hassan	Security guards-14	Upkeeping Personnel- 8	Caretaker-2 Clerk-2

			Cooks-13 Helper-11 Servant-9
Mandya	Security guards-14	Upkeeping Personnel- 15	Caretaker-2 Clerk-3 Cooks-8 Helper-9 Servant-7
Chintamani	Security guards-6	Upkeeping Personnel- 7	Caretaker-2 Clerk-2 Cooks-9 Helper-7 Servant-5

Procedures followed during calling tenders for security, up keeping and manpower supply arrangements in UAS Bangalore.

University is calling tenders for the services Like Security upkeeping and manpower personnel through e-procurement portal of Government of Karnataka. Following are the steps involved in tenders

1	Preparation of estimate based on the requirement of manpower for different campuses of University.
2	Inviting tenders and publishing tender in the leading newspapers for wide publicity among the man power supplying Agencies.
3	Uploading tender documents such as Tender Notification, conditions for two cover system, Schedule –A, schedule- B, and general conditions to the agencies etc., in e-procurement portal
4	Conducting pre-bid meeting for Clarifying the doubts of the agencies regarding the tenders as per schedule of events.
5	Opening of technical bid, according to schedule of events on specified Date, evaluation of technical bid furnished by various tenderers through tender scrutiny committee.
6	Opening of financial bid of qualified tenderers in technical bid
7	Awarding of contract to lowest quoted tenderer
8	Making agreement with UAS

Agriculture Education Day-2020

To commemorate the birth anniversary of (Late) Bharath Rathna Dr. Rajendra Prasad, who was the first Union Minister for Agriculture and the first President of Independent India. The University organized Agriculture Education Day on 18.12.2020. Elocution and debate competitions were conducted separately for UG and PG students on the topics entitled ‘*Organic farming will be the major shift like green revolution in India*’ and ‘*Farmers bill 2020: one India one Market*’, respectively.

An Invited lecture by Prof. K.N. Ganeshiah, National Advisor, Indian Bioresources Information Network, Department of Biotechnology, Govt. of India, on “Travelling Beyond the Known Boundaries of Knowledge”. In his lecture he inspired the students to question and learn, to *doubt a concept and verify* before accepting. His talk gave examples on how to break the barriers between Religion and Science, Arts and Science, between streams of Science and within the streams of Science.

The programme was inaugurated by Dr. N. Srinivasa, Dean (Post Graduate Studies), Presided by Dr. D.L. Savithamma, Dean (Agri.), College of Agriculture, UAS, GKVK and attended by the Registrar, Director of Extension, Administrative officer, Comptroller, Controller of Examinations, Heads of the Departments, Faculty, both UG and PG students of GKVK Campus.



6.6.5.2. Participation of Faculty in Symposia/Workshops

During the assessment period, teaching, research and extension faculties of the university participated in 1552 different academic events. These events have helped the faculty in gaining knowledge, upgrading skills, networking with professionals working in other institutions in their respective disciplines. The faculty were participated in 207 international and 1345 national level Seminars / Symposia / Workshops / Training / Consultancy visits / Special assignments etc. College-wise brief abstract is presented below and details of the participation are furnished in the subsequent table and **Annexure -7.**

Abstract of Participation of Faculty in Symposia / Workshops

Sl. No.	Teaching / Research / Extension	2016-17		2017-18		2018-19		2019-20		2020-21		Grand Total		
		I	N	I	N	I	N	I	N	I	N	I	N	I+N
1	College of Agriculture GKVK	6	95	14	105	23	96	27	155	-	-	70	451	521
2	College of Agriculture Mandya	-	21	3	18	-	13	1	23	13	74	23	83	166
3	College of Agriculture Hassan	3	22	1	10	2	22	17	29	-	-	17	149	106
4	College of Sericulture Chintamani	5	7	4	10	6	7	10	46	5	75	30	145	175
5	Directorate of Extension	5	59	5	27	9	49	19	95	14	135	52	365	417
6	Directorate of Research	4	20	1	17	-	34	5	29	5	52	15	152	167
	Grand Total	23	224	28	187	40	221	79	377	37	336	207	1345	1552

Note: I – International; N – National

Seminar / Conference / Symposia/Workshops organised by the faculty

	Colleges & directorates	Seminars/ Workshops				Training programmes				Conferences				Summer/Winter Schools			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1	CoA, GKVK	51	11	11	21	8	114	21	59	17	4	1	13	1	2	1	
2	CoA, Mandya			1	1		3	13	2								
3	CoA Hassan	1		2	2	2	4	68	1		1					4	
4	CoA, Chintamani				1				5								
5	CoA Chamarajanagara				1												
6	Directorate of Research		7	12	9	10	16	13	51	1		2	1				
7	Directorate of Extension			5	2	6	602	622	676	1						1	2
8	DoE & PPMC				7				5				1				
	Total	52	18	31	44	26	739	737	799	19	5	3	15	1	2	6	2
		144				2301				42				11			

A-2016-17, B-2017-18, C2018-19, D-2019-20

XIII Agricultural Science Congress - 2017

The University of Agricultural Sciences, Bangalore; National Academy of Agricultural Sciences (NAAS), New Delhi and Indian Council of Agricultural Research, New Delhi organised XIII Agricultural Science Congress - 2017 with Theme "Climate Smart Agriculture" from Feb. 21-24, 2017. Sri Vajubhai Vala, Hon'ble Governor of Karnataka and the Chancellor of the University inaugurated the programme. Sri Krishna Byregowda, Hon'ble Minister for Agriculture, GoK and Pro-Chancellor of the University inaugurated the Agricultural Exhibition and presided over the programme. Dr. Ramesh Chand, Member, NITI Aayog, New Delhi and Dr. T. Mohapatra, Secretary (DARE) and Director General (ICAR), New Delhi participated as guests of honour. Dr. S. Ayyappan, Immediate Past President, NAAS, New Delhi welcomed the gathering. Dr. Panjab Singh, President, NAAS, New Delhi briefed the theme of the congress. Message of Prof. M. S. Swaminathan, Founder Chairman and Chief Mentor, MSSRF, Chennai was displayed on screen through video on this occasion, presented NAAS Awards, unveiled website and released the publications viz., Agriculture under Climate Change - Threats, Strategies and Policies, a key note address of lead speakers of technical sessions; Compendium of Abstracts; Special issue of The Mysore Journal of Agricultural Sciences and Souvenir of the University. Dr. H. Shivanna, Vice-Chancellor and Convener of XIII Agricultural Science Congress proposed vote of thanks. The Congress provided the platform for learned intellectuals for discussing key issues related to Climate Smart Agriculture on various facets, including socio-economic empowerment of marginal farmers through technology development and policy initiative for sustainable farming, forestry and natural resource management in tune with global climate change.

Sri Vajubhai Vala, Hon'ble Governor of Karnataka; Sri Krishna Byregowda, Hon'ble Minister for Agriculture, GoK; Dr. Ramesh Chand, Member, NITI Aayog; Dr. T. Mohapatra, Secretary (DARE) and Director General (ICAR); Dr. S. Ayyappan, Immediate Past President,



NAAS; Dr. Panjab Singh, President, NAAS, New Delhi and Dr. H. Shivanna, Vice-Chancellor during the inaugural function on Feb. 21, 2017

107th Indian Science Congress-2020

The University of Agricultural Sciences, Bangalore had an opportunity to host prestigious 107th Indian Science Congress-2020 (107th ISC) with a theme of "*Science & Technology: Rural Development*" from 3rd to 7th Jan 2020 at GKVK campus. The basic facilities such as upgradation of roads, footpaths, repairs and renovation of buildings, auditoria, conference halls, and beautification of campus were undertaken besides erecting German structures over an area of 14 hectares for inaugural function, conference halls, pride of India science exhibition, children's exhibitions, registration counters, kitchen and food courts, etc., The activities of 107th ISC were divided in to 11 major events such as Noble Lectures, Public Lectures, plenary Sessions, Technical Sessions, Children's Science Congress, Women's Science Congress, Science Communicators Meet, Pride of India Expo, Farmers' Science Congress, Vice-Chancellor's Conclave and Yoga Science Meet. For the first time, 'Farmers' Science Congress', 'Yoga Science Meet' and 'Vice-Chancellors Conclave' were organized as a part of ISC.

The 107th ISC was inaugurated by Shri. Narendra Modi *ji*, Hon'ble Prime Minister of India on 3rd January 2020. In his inaugural address he posed his numerous visions and thoughts especially on exploration of space and underwater resources for betterment of tomorrow's India. He articulated that the ambition to develop India as a world-class US\$100 billion bio-manufacturing hub by 2024 and that



the motto of the young scientists mushrooming in the country should be to '*Innovate, Patent, Produce and Prosper*'. Dr. Harsha Vardhan, Hon'ble Minister of Science & Technology, Earth Sciences and Family Health & Welfare, Govt. of India and Shri B.S. Yeddyurappa, Hon'ble Chief Minister, Govt. of Karnataka graced the inauguration programme along with Dr. K.S. Rangappa, General President, ISCA, Kolkata and Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, Bangalore.

The prime spot of light and a great tradition in every Indian Science Congress is listening to the highest achievers of science. The Nobel Laureates Prof. Stefan Walter Hell, German Physicist and Prof. Ada E. Yonath, Israeli Crystallographer were invited for the occasion to ignite scientific temperament among early age researchers and students of India. The mega event was attended by around 15,000 participants from various parts of the country as well as the world, besides, around 10,000 to 12,000 children, general public and others witnessed science expo and conferences of their interest.

Women's Science Congress

The "Women's Science Congress" was organized on 5th and 6th January 2020 and it was inaugurated by Dr. Trilochan Mohapatra, Secretary, Department of Agriculture & Research and Director General, ICAR, New Delhi and the Chief Guest was Dr. Tessy Thomas, Director General, Aeronautical Systems, DRDO, Bangalore. Dr. Mohapatra mentioned that, Indian Science Congress is a good forum for congregation of Scientists from several disciplines, so that original basic science will set new pathos for advanced frontier area technologies.



Children's Science Congress

The 'Rashtriya Kishore Vaigyanik Sammelan' or the 'Children's Science Congress' (CSC) was an important event of the ISC which was organized to provide a unique opportunity to children of the age group of 10-17 years. The aim of the event was to expose young budding scientists to the world of contemporary science through their active participation in deliberations of the ISC. The CSC was inaugurated by Prof. C.N.R. Rao, National Research Professor and Honorary President, JNCASR, Bengaluru and Prof. Ada Yonath, Nobel Laureate in Chemistry, Israel.

Science Communicators Meet'

As part of 107th ISC 2020, 'Science Communicators Meet' / 'Vigyan Sancharak Sammelan-2020' was organised. Dr.S.M. Shivaprasad, Director, Karnataka State Higher Education Academy, Dharwad and Professor of JNCASR, Bengaluru was the chief guest and stressed on need for research on Science communications, institutionalization of science communications, combining ethics, pathos, logos in science communication and Science communication should be part of every curriculum.

Farmers' Science Congress

The 'Farmers' Science Congress' was organized on 6th January, 2020. Dr. Trilochan Mohapatra, Secretary (DARE) and Director General (ICAR), New Delhi inaugurated the programme and mentioned the role of Karnataka farmers in pulse revolution of the nation and the ICAR created the "Farmers Innovation Fund" to support farmers to do research and innovations. Dr. A. K. Singh, Deputy Director General (Agri. Extension) and Dr.R.C. Agarwal, Deputy Director General (Education), ICAR, New Delhi, Dr. S. Rajendra Prasad, VC, UASB and Chairman, 107th ISC and Shri, Hanumanagouda Belagurki, Chairman, Karnataka Agricultural Price Commission, GoK were the guests of honour.



The Valedictory Programme of the 107th ISC was held on 7th January, 2020. Participating as chief guest, Shri B.S. Yeddyurappa, Hon'ble Chief Minister of Karnataka appealed the scientists to find solutions to the burning problems through science and technology. Shri. M. Venkaiah Naidu, Hon'ble Vice-President of India delivered the Valedictory Address and opined that Agriculture is the basic culture of India that plays a vital role in Indian economy. He opined that there is a need to apply S&T to overcome the agrarian distress and to make agriculture sustainable giving importance to value addition.



Vice-Chancellors' Conclave

The "Vice-Chancellors' Conclave" on "Sustenance of Quality in Higher Education Institutions-Future Directions" was held on 04th Jan 2020 as part of the 107th ISC. Prof. S. P. Thyagarajan, former Vice-Chancellor of Madras University spoke on "Quality Internationalization Pathways in Indian Higher Education". Dr. Thyagarajan extensively quoted the recommendations of Kothari Commission report and also the data drawn from the AISHE (All India Survey on Higher Education (published by UGC to highlight the measures needed to enhance the quality in Higher Education. He emphasized the adoption of E-Governance in the Universities to move towards paperless administration. He suggested moving from Quality Internalization towards Quality Institutionalization. Twenty-five former Vice-Chancellors of various Universities from different have participated in the programme.

Yoga Science Meet

Yoga Science Meet was organized as a part of the 107th Indian Science Congress on 5th Jan.2020, which was inaugurated and addressed by head of the SVYASA Yoga University Dr. H.R.Nagendra. He said yoga heals the mind, body and soul thereby insulating those doing yoga from diseases. Dr.Indranil Basu Ray, a cardiologist from Canada spoke on Yoga Research. He gave examples of people practicing yoga and how it helped them cope up with ailments. The other highlights of the yoga Science Meet are discussion on the benefits of yoga, sharing of ideas and views on yoga research and presentation of case studies.

Workshop on 'National Education Policy-2020'

The Nodal Agricultural Education Cell-ICAR (NODAEC) of UAS, Bangalore organized a workshop on 'Agri-Education in sync with National Education Policy-2020' on 22.03.2021 at GKVK, Bengaluru on both virtual and offline modes. Dr. Siddayya, Programme Director and Nodal Officer, NODAEC presented the objectives of the workshop. Dr. R.C. Agarwal, DDG (Education), ICAR, New Delhi inaugurated the workshop. In the inaugural address, he highlighted the importance of National Agricultural Education Policy in sync with NEP-2020. The guest of honour, Dr. P.S. Pandey, ADG (EP&HS), ICAR, KAB-II, New Delhi mentioned that NARS and SAUs have already adopted most of the policy indicatives that will pave way for Agri-Education in Sync with NEP- 2020. Dr. T. V. Kattimani, Vice-Chancellor, CTUAP, Andhra Pradesh emphasized the importance of agricultural education in regional languages.

Dr. S. Rajendra Prasad, Vice-Chancellor, UASB while interacting with students and faculty expressed that the University is in tune with NAEP and NEP-2020. Invited faculty and students gave their comments and suggestions for NAEP. The Officers, Heads of the Departments, Faculty and Students have participated in the workshop.



Report on Visit of Dr. Trilochan Mohapatra, Hon'ble Director General, ICAR & Secretary, DARE and Interaction of with Faculty and Students of UAS, Bangalore on 20.03.2021

The programme started with the welcome note by Dr. S. Rajendra Prasad, the Hon'ble Vice-Chancellor, explaining the measures taken up at UAS, Bangalore for improvement in Teaching, Research and Extension activities. For which, he thanked the Hon'ble Director General, ICAR & Secretary, DARE for supporting the University through its Developmental Grants and facilities extended under NAHEP programme.

During, his speech the Hon'ble Director General, ICAR & Secretary, DARE first took the questions invited from the students and assured that suitable action will be taken by the ICAR. Further, he appreciated the work carried out by UAS, Bangalore, but insisted that the University should further thrive to attain better national ranking. He further suggested that publishing research work in reputed Research Journals should be the top priority and that ICAR will be introducing a system to improve publication standards among all the SAUs.

Further, Hon'ble Director General, ICAR & Secretary, DARE released a booklet on **IT & Green Initiatives** of UAS, Bangalore and an app on **Diabetics** developed by the AICRP on Home Science. Dr. D.L. Savithramma, Dean (Agri.) proposed the Vote of Thanks.



Dr. Trilochan Mohapatra, Secretary, DARE and Hon'ble Director General, ICAR; Dr. S. Rajendra Prasad, Hon'ble Vice-Chancellor & Dr. D.L. Savithramma, Dean (Agri.) in an interaction meeting with faculty and students of UAS, Bangalore at GKVK on 20.03.2021

6.6.5.3. Incentives for Excellence/Faculty Recognition

To promote excellency among and to create the healthy competitive environment for achieving efficiency among the faculties of the University every year the University honours outstanding faculties in teaching, research and extension in the foundation day of the University and Dr. R. Dwarakinath Best Extension Worker Award during 'Krishi mela'.

Procedure Followed in Selection of ICAR Best Teacher

Each year outgoing student nominate the best teacher from each college and the Dean of the campus forward the nomination and application of the teacher to the best teacher award committee. As per the form the Registrar of the University (notification No. R/PS/AC-179 (Part-B: Item-10)/Modified/2014-15 dated march 19, 2015) the score card followed in selection of best teacher is presented below.

Score card for the selection of ICAR Best Teacher Award

Sl. No	Details	Maximum Marks
1	Total length of teaching at UG & PG level in years (2 marks for each 5 years limited 6 marks for 15 years or more)	04
2	Number of course thought in las 5 years UG/PG	02
3	Number of lectures actually taken year-wise in the last 5 years (5 marks for 90 lectures/year with 2 marks for extra 10 lectures with a maximum of 10 marks per year) UG Teaching/PG Teaching	40
4	Specific efforts made for improving teaching methodology	
	a. Manual prepared (1mark/course)	02
	b. Audio visual prepared (1 mark/course)	03
	c. Instructional materials/ Aid developed: Lecture notes/ e-notes (1 mark/course)	06
	d. outline/ lesson plan given to students (0.25 mark/course)	01
5	No. of PG students guided year wise who received degree in last 5 years (1 mark for PhD and 0.5 mark for M.Sc., 0.25 mark for advisory member per student)	06

6	a. Publications out of student thesis on last 5 years (1 marks each for full length paper published in a scientific/ professional journal with NAAS rating of 4 and above)	05
	b. If not guided, research paper published during last 5 years (1 marks each)	05
7	Number of students guided (as Chairman) having won medal or ICAR thesis award INSA award (5 marks each) or society award for thesis work (2.5 marks) or best poster/presentation/research paper award (1 marks each)	05
8	Additional responsibility (during las five years): Warden, ADSW, coordinator of exam cell, tour leader, Asst. Registrar, Placement Cell, foreign student advisor, student exchange coordinator, training courses (1 marks/activity/year)	06
9	Operation of externally funded projects (During las five years) As PI- 1 mark each, As Co-PI 0.5 marks each	05
10	Presentation of best teacher assessment report (mode: power point presentation)	10
Total		100

In the reporting period following faculty were conferred with ICAR best teacher award

Awardees of ICAR Best Teacher Award

Sl. No.	Year	Campus	Name and Designation
1	2015-16	College of Agriculture, GKVK, Bengaluru	Dr. S. Bhaskar, Professor of Agronomy
2	2015-16	College of Agriculture, GKVK, Bengaluru	Dr. N. Nagaraju, Professor of Plant Pathology
3	2015-16	College of Agriculture, GKVK, Bengaluru	Dr. T. Chikkaramappa, Professor of Agricultural Chemistry and Soil Sciences
4	2015-16	College of Agriculture, GKVK, Bengaluru	Dr. V. Govinda Gowda, Assistant Professor of Agricultural Extension
5	2015-16	College of Agriculture, Hassan	Dr. Bhausahab Tambat., Assistant Professor of Crop Physiology
6	2016-17	College of Agriculture, GKVK, Bengaluru	Dr. M. K. Prasanna Kumar Assistant Professor of Plant Pathology.
7	2016-17	College of Agriculture, GKVK, Bengaluru	Dr. S. Ramesh, Professor of Genetics & Plant Breeding
8	2016-17	College of Agriculture, GKVK, Bengaluru	Dr. M. R. Girish., Associate Professor of Agril. Marketing
9	2016-17	College of Agriculture, Hassan	Dr. G. G. Kadalli, Associate Professor of Soil Sci. & Agril. Chemistry
10	2016-17	College of Agriculture, Hassan	Dr. G. M. Gaddi., Assistant Professor of Agricultural Economics
11	2017-18	College of Sericulture, Chintamani	Dr Rajanna K M., Professor of Horticulture
12	2017-18	College of Sericulture, Chintamani	Dr. V. Venkatachalapathi., Assistant Professor of Agronomy & Farm Superintendent
13	2017-18	College of Agriculture, GKVK, Bengaluru	Dr. K.P. Raghuprasad, Professor of Agricultural Extension
14	2017-18	College of Agriculture, GKVK, Bengaluru	Dr. R. Muthuraja, Assistant Professor of Agricultural Microbiology
15	2018-19	College of Agriculture, Mandya	Dr. Lohithaswa, H.C., Professor of Genetics and Plant Breeding
16	2018-19	College of Agriculture, GKVK, Bengaluru	Dr. Y. M.Somashekar, Professor of Plant Pathology
17	2018-19	College of Agriculture, GKVK, Bengaluru	Dr. Y.N. Shivalingaiah, Professor of Agricultural Extension

18	2018-19	College of Agriculture, GKVK, Bengaluru	Dr. B. S. Lalitha, Associate Professor of Agronomy
19	2019-20	Nomination received and selection is under process	

Best Researcher Awards

Nagamma Dattatreya Rao Desai Award and Kalayya Krishnamurthy National Awards are conferred to the outstanding agricultural researchers. For both the awards University invites applications every year in the month of July. The received applications are submitted to the Committee Members for evaluation along with guidelines and score card. The evaluation reports of the Committee are placed in the meeting under the Chairmanship of Hon'ble Vice-Chancellor of the University for finalization of awards. In the reporting period following faculties (Table ??) of the University we conferred with the Best Researcher awards

Awardees of Best Researcher

Sl. No.	Year	Nagamma Dattatreya Rao Desai Awardees	Dr. Kalayya Krishnamurthy National Awardees
1	2015-16	Dr. V. R. Ramakrishna Parama, Professor of Soil Science & Agril. Chemistry, College of Agriculture, GKVK, Bengaluru	Dr. B. K. Ramachandrappa, Chief Scientist, DLAP, GKVK, UASB
2	2016-17	Dr. H.C. Lohithaswa, Professor & Head, Department of Genetics & Plant Breeding, College of Agriculture, VC Farm Mandy	Dr. Bijendra Singh, Director, ICAR – Indian Institute of Vegetable Research, Mau, Varanasi
3	2017-18	Dr. B. M. Dushyantha Kumar, Professor of Genetics & Plant Breeding, College of Agriculture, UAHS, Shivamogga	Dr. N. B. Prakash, Professor of Soil Science & Agril. Chemistry College of Agriculture, GKVK, Bengaluru
4	2018-19	Dr. Mudalagiriappa, Chief Scientist, DLAP, GKVK, UASB	Dr. M. Pandiyan, Dean, Agricultural College and Research Institute, Tamil Nadu Agricultural University, Vazhavachanur, Tamil Nadu
5	2019-20	Dr. A. G. Sreenivas, Professor of Agricultural Entomology & Head, Centre for Agro-Climatic Studies, University of Agricultural Sciences, Raichur.	Dr. Uma Subbaraya, Director, ICAR - National Research Centre for Banana, Thayanur, Trichy, Tamil Nadu

Best Extension Worker Awards

Two awards viz. Award and Dr. R. Dwarakinath Best Extension Worker Award are being conferred to the faculties who excelled in extension work. Year wise best extension workers awardees during the reporting period is presented in below mentioned Table.

Best Extension Worker Awardees

Sl. No.	Year	M/s Zuari Industries Limited Best Extension Worker awardees	Dr. R. Dwarakinath Best Extension Worker Awardees
1.	2015-16	Dr. K.H. Nagaraj, Programme Coordinator, KVK, Magadi Taluk, Ramanagara District	Dr. Ananda G.Manegar, Subject Matter Specialist (Animal Science), KVK, Hadonahalli, Bangalore Rural
2.	2016-17	Dr. T.S.Sukanya, Senior Scientist & Head, KVK, Konehalli, Tumkur	Dr. B.Hanumanthe Gowda, Subject Matter Specialist (Plant Protection), KVK, Hirehalli, Tumkur.
3.	2017-18	Dr. C.M. Savitha, Associate Editor, Communication Centre, UAS, GKVK, Bangalore	Dr. K.R.Srinivasa, Scientist (Plant Protection), KVK, Konehalli, Tiptur Taluk, Tumkur
4.	2018-19	Dr. Savita S. Manganavar, Senior Scientist & Head, KVK, Magadi Taluk, Ramanagara Dist.	Dr. Savita S.Manganavar, Senior Scientist & Head, KVK, Magadi Taluk, Ramanagara Dist.

5.	2019-20	Dr. H.S.Mamatha, Assistant Professor, Bakery Training Unit, Hebbal, Bengaluru- 560024	Dr. K.Shivaramu, Professor & Senior Information Specialist, Farm Information Unit, GKVK, Bangalore
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Felicitation to Dr.Savita S.Manganavar - M/s Zuari Industries Best Extension Worker award during UAS(B) Foundation Day 2019



Felicitation to Dr.H.S.Mamatha - M/s Zuari Industries Best Extension Worker award during UAS(B) Foundation Day 2020



Felicitation of Dr.R.Dwarakinath Best Extension worker award (Dr.K.Shivaramu first Right) during Krishimela 2020

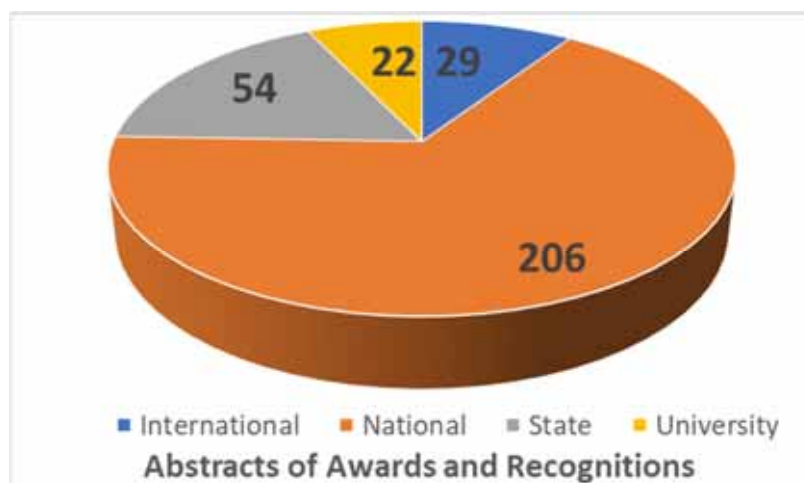


Felicitation of Dr.R.Dwarakinath Best Extension worker award (Dr.Savita S.Manganavar first Left) during Krishimela 2019

Other than these in-house awards and recognitions, individual faculty of the University has conferred with various awards and recognitions from professional societies, government and international agencies. During the reporting period, 29 international awards, 206 National awards, 54 state level awards and 22 University awards were conferred to individual faculty. Year wise details of awards are presented in following Table. Details of individual faculty wise awards and recognitions are presented in annexure.

Abstract of awards and recognitions received by the University Faculty

Year	International	National	State	University	Total
2015-16	2	29	7	3	41
2016-17	5	37	7	6	55
2017-18	12	29	10	4	55
2018-19	8	64	16	2	90
2020-21	2	47	14	7	70
Total	29	206	54	22	311



Awards received by the faculty / scientists / extension personnel during reporting period

Sl. No.	Name of the faculty	Year of award	Status of award	Name of the award and awarding agency
1	Dr. C. Narayanaswamy	2018	International	Best Paper Presenter, ICRD, Colombo, Srilanka
2	Dr. H S Shivaramu	2017	International	Certificate of Merit for paper presentation on "Trends in rainfall, LGP and drought occurrence in Karnataka, India at 3 rd International conference on Dry Zone Agriculture at faculty of agriculture organized by University of Jaffna, Srilanka held on 1st and 2nd November 2017, Srilanka
3	Dr. H S Shivaramu	2018	International	Certificate of Merit for Research and Presentation of the paper "Per cent available, soil moisture criterion for declaration of drought: Case studies in selected field crops in Alfisols of Karnataka" at the International Conference on Dry zone Agriculture by Faculty of Agriculture, University of Jaffna, Srilanka during 1 st and 2 nd November 2018.
4	Dr. H. R. Raveendra	2019	International	Plant Protection scientist award at Sci. Con Series 3 rd International Conference on In Sync – With Next Generation Biosciences (INGB)-2019 organized by Scire Science at Goa from 06.11.2019 to 08.11.2019.
5	Dr. K. Venkataranga Naika	2020	International	Certificate of Excellence, Journal of Education
6	Dr. K.B. Suresha	2018	International	Recognition of his Excellence in Research in the field of Dairy Technology at International Conference on GRISAAS-2018 held at RARI Durgapura Jaipur on 30 th October, 2018
7	Dr. M. S. Ganapathy	2018	International	SERS Excellence in Teaching Award – 2017, Nanyang Technological University, Singapore
8	Dr. P. Venkatesha Murthy	2019	International	Environmental Award 2018 during International Conference on Research intervention and advancements in life science at Grand Exotica Business Hotel, Pune, Maharashtra, India from 01-08-2018 to 03-08-2018
9	Dr. Papireddy, M	2019	International	Best oral presentation award, Sovereign Science Group 2019 at Bangkok, Thailand
10	Dr. R. Umashankar	2017	International	Erasmus Namaste Exchange Fellow by Uppsala University, Uppsala, Sweden
11	Dr. S. Rajendra Prasad	2016	International	Life time Achievement Award by M/S Venus International Foundation, Chennai.
12	Dr. S. V Suresha	2017	International	Eminent Scientist of the Year 2018 award, International Foundation for Environment and Ecology
13	Dr. S. V Suresha	2017	International	World sustainable Agriculture Development Award 2019, International Benevolent Research Foundation
14	Dr. S. V Suresha	2018	International	Distinguished Scientist of the Year 2018 award, International Academy of Science and Research
15	Dr. S.B. Yogananda	2020	International	Best Paper Award, Water Resource and Environmental Engineering, Singapore
16	Dr. Shobha D	2018	International	Second prize for the Poster presented at the International Conference on Recent Advances in Food Processing Technology organized by Indian Institute of Food Processing Technology. (IIFPT) during 17th to 19th August 2018 at IIFPT, Ministry of food Processing industries, Government of India, Thanjavur, Tamil Nadu State for "Development and quality evaluation of maize Dhokla".

17	Dr. Shobha D	2018	International	Best poster in “13 th Asian Maize Conference and Expert Consultation on Maize for Food, Feed, Nutrition and Environmental Security” held on 8 th to 10 th October 2018 at Ludhiana jointly organized by ICAR, CIMMYT, IMMR, PAU, CGIAR and BISA for “Comparative Assessment of Maize and Rice idli Prepared from Maize and Rice Semolina.”
18	Dr. Sukanya T S	2019	International	Distinguished Scientist Award by Astha Foundation at International Conference on Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS) at NAARM, Hyderabad, Andhra Pradesh from 20 th to 22 nd , Oct., 2019.
19	Dr. T. K. Nagarathna	2016	International	International Achievement Award” at 4 th Academic Achievement Awards-2016 from Education export, Mumbai.
20	Dr.K.Geetha	2019	International	Best paper presentation award at Sci. Con Series 3 rd International Conference on In Sync – With Next Generation Biosciences (INGB)-2019 organized by Scire Science at Goa from 06.11.2019 to 08.11.2019.
21	Dr.R.C.Gowda	2018	International	Excellence in Research Award “ for outstanding contribution in the field of Soil Science & Agricultural chemistry on the Occasion of International Conference on Advances in Agriculture and Allied science technologies for sustainable development (ICAAASTSD- 2018) held on February 10-11,2018 at Osmania University ,Hyderabad
22	Dr.Thimmegowda, P.	2019	International	Best Paper Award for the paper on “Scheduling of irrigation with mulch under different sugarcane planting methods” presented at <i>International Conference on water resource and environmental engineering</i> , August 22-23, 2019, Singapore.
23	Mr.Jadav Balaji	2018	International	Young Scientist Award, SSDAT
24	Mr.Jadav Balaji	2018	International	Excellence in Extension award, ASTHA Foundation
25	P. K. Basavaraja	2017	International	Dr Banyal Memorial Best Paper Award 2017, for paper entitled “Evaluation of different approaches of fertilizer recommendation on finger millet (<i>Eleusine coracana</i> L) yield, nutrient requirement and economics”, which was published in International Journal of Farm Sciences 7(2): 1-7, 2017.
26	Dr. B.N. Sathyanarayana	2018	International	Lifetime Achievement Award during International Conference on Current Trends in Biosciences/ Cochin Kerala on 21 st to 23 rd August 2017
27	Dr. P. Venkatesha Murthy	2018	International	SESR Agronomist (Horticulture) 2017 Award during International Conference on Current Trends in Biosciences/ Cochin Kerala on 21 st to 23 rd August 2017
28	Dr. P. Venkatesha Murthy,	2019	International	Best Horticulturist -2019 Award in the International Conference on in sync-with next generation Biosciences (INGB)-2019 from 06-11-2019 to 08-11-2019
29	Dr. P. Venkatesha Murthy,	2019	International	Appreciation for Session Chair Certificate in the International Conference on in sync-with next generation Biosciences (INGB)-2019 from 06-11-2019 to 08-11-2019
30	Dr. B.A. Anand	2019	National	Best Paper Award, International Academy of Science and Technology, Chennai
31	Dr. K.B. Suresha	2016	National	Young Scientist Award -2016” in IJTA 3 rd International Conference on Agriculture, Horticulture and Plant Sciences held during June 25-26, 2016 organized by IJTA & Serial Publishers Pvt. Ltd, New Delhi.
32	Dr V Palanimuthu	2020	National	Certificate of Appreciation for his presentation entitled “ <i>Entrepreneurial Opportunities in Millet processing and Value addition</i> ” during the year Webinar on “Entrepreneurial Opportunities in Micro Food Processing Industry” held on 04.01.2021 at ICAR-Indian Institute of Horticultural research, Bengaluru, Karnataka
33	Dr. C. M. Sunil	2020	National	Young Agronomist Award, Agricultural and Environmental Technology Development Society, Uttarakhand, India
34	Dr. M. S Dinesh	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
35	Dr. A. P. Mallikarjuna Gowda	2020	National	National Green Award, World Environment Summit 2020, Vallabhbhai Patel Chest Institute, New Delhi
36	Dr. Anilkumar T Dandekar	2019	National	Uttam Acharya Award, Indian Servers, Vijayawada, Andhra Pradesh

37	Dr. Anitha M.S	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
38	Dr. Anitha M.S	2020	National	Best Oral presentation Award, ICAR, Indian institute of soil and water conservation, regional centre, Udthagamandalam, TN
39	Dr. B. Gayathri	2020	National	Best KVK Scientist award, AETDS
40	Dr. B. Gayathri	2020	National	Best paper presentation Award, Society of Krishi Vigyan
41	Dr. B. K. Ramachandrappa	2016	National	Kalayya Krishnamurthy National Award” for outstanding contribution in research during the 51 Foundation day of UAS, Bangalore
42	Dr. B. K. Ramachandrappa,	2016	National	Fellow of National Environmental Science Academy, New Delhi.
43	Dr. B. Manjunath	2019	National	Award for outstanding achievements and contributions, Society for Biocontrol Advancement, NBAIR, Bengaluru
44	Dr. B. Manjunath	2019	National	Outstanding Extension worker Award, Madhumitha Foundation, Telangana
45	Dr. B. Manjunath	2020	National	Excellence in Extension Award in the field of Plant Pathology, society for Scientific Development in Agriculture and Technology, Meerut, Uttar Pradesh
46	Dr. B. S. Rajendra Prasad	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
47	Dr. B. Tambat	2018	National	Adarsh Vidya Saraswathi Rashtriya Puraskar
48	Dr. C. Narayanaswamy	2016	National	National Young Leader Award, GoI, Ministry of Youth Affairs & Sports, UASB
49	Dr. C. P. Manjula	2020	National	2 nd best poster presentation in National Symposium on Advances in crop health management organised by IPS South zone held at ICAR-IARI Regional Station, Nilgiris, Tamil Nadu during 1-2 nd December, 2020 (Online) for the research paper Management of sunflower Alternaria leaf blight using combined fungicide products”
50	Dr. C.P. Gracy	2018	National	Outstanding Scientist Award 2018 by The Society of Tropical Agriculture (reg.No.S/1714/2017), New Delhi, India in the event of 7th International Conference on Agriculture, Horticulture and Plant Sciences- Hotel Landmark, the Mall, Shimla (June 28 – 29th, 2018)
51	Dr. Channakeshava, S	2020	National	Adarsha vidya Saraswathi Rashtriya Puraskar, Global management council, Ahmedabad
52	Dr. Chethana, B.S.,	2019	National	First Prize for Oral Presentation Award in ISMPP 40th Annual Conference and National Symposium jointly organised by Dept. of Bio-technology and Micro-biology, Karnataka University, Dharwad and Indian Society of Mycology and Plant Pathology from 24th and 25th September, 2019 at Karnataka University, Dharwad.
53	Dr. Darshan, M. B.	2017	National	IEI Young Engineers Award” by The Institution of Engineers (India) during “30 th National Convention of Agricultural Engineers” organized at Pantnagar, Uttarakhand on 27.02.2017.
54	Dr. Darshan, M. B.,	2016	National	Young Scientist Award” for his outstanding contribution in the field of Post -Harvest Engg. & Tech. by SSDAT, Meerut on the occasion of National Conference on Innovative and Current Advances in Agriculture and Allied Sciences (ICAAAS-2016) during 10-11 December, 2016 held at Prof. Jayashankar Telangana State Agricultural University, Hyderabad.
55	Dr. Dronachari Manvi	2019	National	Best Researcher award, 7th Annual Academic Awards
56	Dr. Dronachari Manvi	2019	National	Young scientist Award, Dr.B.Vasanth Raj David Foundation Chennai
57	Dr. G. G. Kadalli	2018	National	Best Oral Presentation Award for the research paper entitled Effect of long-term fertilization on yield and NUE under finger millet-Maize cropping system during DST sponsored national seminar on Technological interventions to enhance nutrient use efficiency to meet food security and environmental sustainability held at Annamalai Univ. Annamalai Nagar, Tamil Nadu during 26-27th October 2018.
58	Dr. G. G. Kadalli	2019	National	Best Oral Presentation Award for the paper entitled “Sustaining productivity and controlling land degradation in Gaudagondanahalli sub-watershed Jagaluru Taluk, Davanagere Dist. of Karnataka by integrated watershed

				management” in the 28th National Conference of soil conservation society of India, New Delhi on Farmers friendly soil and water conservation technologies for Mitigating climate changes impact organized by ICAR-Indian Institute of Soil and Water Conservation, Regional Centre, Udhagamandalam and Tamil Nadu State Chapter of SCSI during 31st January-2nd February 2019
59	Dr. G. M. Sujith,	2016	National	Braja Gopal Sharma All India Best Outstanding Extension Worker award -2015” from Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh
60	Dr. G. N. Dhanapal	2016	National	NESA FELLOW OF THE YEAR-2016” by the National Environmental Science Academy, New Delhi on 19.11.2016 during the National Conference at Chandigarh.
61	Dr. G. N. Dhanapal	2016	National	Fellow of Indian Society of Weed Science 2016 during the Indian Society of weed science Golden jubilee international conference held on 21.11.2018 at Jabalpur, Madhya Pradesh.
62	Dr. Geetha M. Yankanchi	2018	National	Women Scientist Award for the paper “Efficacy of different educative methods to combat anaemia among adolescent girls” presented in 14 th Kannada Vigyan Sammelana organized by Shree Devaraj Urs Academy of Higher Education and Research, Tamaka, Kolar on 16 th November, 2018.
63	Dr. H. R. Raveendra	2017	National	Upcoming scientist award” for 2017, honoured by National Institute of Education and Research, New Delhi on 29.07.2017
64	Dr. H.B. Mahesh	2019	National	Jawaharlal Nehru Award, ICAR, New Delhi
65	Dr. Hanumanthappa, D. C.	2019	National	Best Poster Presentation award during National conference on Arid Fruits: A way forward for Sustainable production and nutritional security on 28th to 30th November-2019 at UAS, Raichur.
66	Dr. Jadesha. G	2020	National	awarded with “Young Researcher Award -2020” by Institute of Scholars, New Delhi for the publication of Research paper on Management of Phytophthora blight of Pigeonpea using a <i>Trichoderma asperellum</i> and a chemical fungicide
67	Dr. Jahir Basha, C.R	2016	National	Excellence in Research Award funded by Genesis Urban And rural development society, Hyderabad, Telangana,
68	Dr. Jahir Basha, C.R	2017	National	Scientists of the year award 2017, funded by Green reap welfare society, Indian Institute of Rice Research (IIRR), Rajendranagar, Hyderabad
69	Dr. Jahir Basha, C.R	2018	National	Dr. APJ Abdul Kalam Life Time Achievement National Award funded by KRIST FOUNDATION (R), Bengaluru
70	Dr. Jayaramaiah,R	2020	National	Best Thesis Award- 2019, Society for scientific development in Agriculture and Technology, Merit, U.P.
71	Dr. K. Venkataranga Naika	2017	National	ISEE Fellow Award, ISEE
72	Dr. K. Venkataranga Naika	2018	National	Best Paper Presentation Award, ISEE
73	Dr. K. R Shreenivasa	2020	National	Adarsh Vidya Saraswathi Rashtriya Puraskar, Global Management Council, Glacier Research Foundation Ahmadabad
74	Dr. K. R Shreenivasa	2020	National	Award Bhagyavantar, Samarthasahithya & Samskruthika Prathisthana, Bangalore
75	Dr. K. R. Shreenivasa	2019	National	Outstanding Agricultural Extension Worker award, SADHNA society Parmar Univ. of Horticulture & Forestry, Solan Himachal
76	Dr. K. R. Shreenivasa	2020	National	Krishi Rathna, Atmashree Kannada Samskruthika Prathisthana, Bangalore, Atmashree Kannada
77	Dr. K. S. Vinoda	2020	National	Women Scientist award, SBER
78	Dr. K. Venkataranga Naika	2019	National	Best Paper Presentation Award, ISEE
79	Dr. K. Venkataranga Naika	2019	National	O P Dahama Memorial Award, ISEE
80	Dr. K. Venkataranga Naika	2020	National	Best Academician Award, KJER
81	Dr. K.B. Suresha	2016	National	Young Scientist Award” for his outstanding contribution in the field of Dairy Tech. by SSDAT, Meerut on the occasion of National Conference on Innovative and Current Advances in Agriculture and Allied Sciences (ICAAAS-2016) during 10-11 December, 2016 held at Prof. Jayashankar Telangana State Agricultural University, Hyderabad.

82	Dr. K.B. Suresha	2017	National	Third best oral presentation for the paper entitled "Development of foxtail millet malted dairy food" presented in the <i>National Conference on "Advances in Food Science and Technology – Current trends and Future Perspectives (AFST-2017)"</i> Organized by Department of Food Technology, Eternal University, Himachal Pradesh from 24-25 th of March, 2017.
83	Dr. Keshavaiah,	2019	National	Silver Medal Award for the paper Wide row planting, Drip irrigation and intercropping in sugarcane for higher nutrients efficiency, yield and quality at 49 th Annual Convention of The South Indian Sugarcane and Sugar Technologists Association held on 28 th and 29 th June 2019 at Tamil Nadu.
84	Dr. Lohithaswa, H.C.,	2019	National	Best Teacher Award 2018-19 sponsored by ICAR and UAS(B) in the Foundation Day of UAS(B) on 5 th October 2019
85	Dr. M. Byregowda	2016	National	Bharat Rathna Mother Teresa Gold Medal Award, Global Economic Progress & Research Association, New Delhi
86	Dr. M. Byregowda	2016	National	Bharath Rathna Mother Teresa Gold Medal Award" sponsored by "Global Economic Progress and Research Association", Chennai, Tamil Nadu.
87	Dr. M. Byregowda	2017	National	ISPRD Recognition Award, Indian Society of Pulses Research and Development
88	Dr. M. Manjunatha	2017	National	Award by Indian Innovation Growth Programme (IIGP) 2016:
89	Dr. M. Manjunatha	2017	National	Appreciation Certificate award by IDEA
90	Dr. M. Manjunatha	2017	National	Emerson Cup 2015-Jury' s Special Mention Award
91	Dr. M. Manjunatha	2019	National	Best oral paper presentation award, Jnana Chilume 2019 Jain (Deemed to be university)
92	Dr. M. N. Thimmegowda	2016	National	Best poster presentation award during 25 th APWSS conference at PJTSAU, Hyderabad held from 13 th -16 th Oct, 2015.
93	Dr. M. S. Ganapathy	2017	National	National Award- Distinguished Scientist Award at the National Conference on Emerging Challenges and Opportunities in Agriculture, Social, Plant, Environment, Co-operatives and Technology- September, 2016
94	Dr. M.N. Thimmegowda	2019	National	"Best Oral Presentation award" during National conference on Arid Fruits: A way forward for Sustainable production and nutritional security on 28 th to 30 th November-2019 at UAS, Raichur.
95	Dr. N. G. Ravichandra,	2018	National	NESA Eminent Scientist Award' during Dec. 2018 from National Environment Science Academy, New Delhi for his outstanding contributions in the field of Plant Pathology.
96	Dr. N. Manjula,	2018	National	Best KVK Scientist Award at National Seminar on "Integrated Farming System for Enhancing Farmers' Income and Nutritional Security" organized by Indian Society of Extension Education, conducted at WBUAFS, Kolkata from 5 th to 7 th December 2018.
97	Dr. N. Manjula,	2019	National	Young Scientist Award" from Indian Society of Extension Education, Division of Agricultural Extension., Pusa, New Delhi during the ISEE National Seminar 2019 on Socio-digital approaches for transforming Indian agriculture" held at Choudhary Charan Singh Haryana Agricultural University, Hisar, Haryana from 20 to 22 November, 2019.
98	DR. N. Umashankar	2017	National	Best Paper Award for presenting Paper at the International Symposium, International Symposium on Biodiversity, Agriculture, Environment and Forestry
99	DR. N. Umashankar	2017	National	Bharat Gaurav Award
100	DR. N. Umashankar	2019	National	Adarsh Vidya Saraswathi Rastriya Puraskar, Global Management Council
101	DR. N. Umashankar	2019	National	Best Teacher, Global Management Council
102	DR. N. Umashankar	2019	National	Reviewer Excellence Award
103	DR. N. Umashankar	2019	National	Best Researcher Award
104	Dr. N. Umashankar Kumar	2019	National	Bharatha Rathna Rajiv Gandhi gold medal award
105	Dr. N.Eranna	2017	National	Lifetime achievement Award, Venus International Research Foundation, Chennai, India
106	Dr. Nagappa Desai	2020	National	Best Agricultural Extension Worker Award, Society for Advancement of Human and Nature (SADHNA)Dr YS Parmar University of Horticulture & Forestry, Solan Himachal Pradesh, India

107	Dr. Nataraja N Karaba	2020	National	awarded INSA teachers award 2020 by Indian National Science Academy, New Delhi
108	Dr. P. K. Basavaraja	2019	National	Award by SIRI Society -2019 (FOCUS 2019) on 23 rd & 24 th February 2019 at Thorur, Mahabubabad, Telangana. For the outstanding contribution in the field of soil science and agricultural chemistry.
109	Dr. Palanna,	2019	National	First Best Poster Presentation Award in ISMPP 40th Annual Conference and National Symposium jointly organised by Dept. of Bio-technology and Micro-biology, Karnataka University, Dharwad and Indian Society of Mycology and Plant Pathology from 24th and 25th September, 2019 at Karnataka University, Dharwad.
110	Dr. Palanna,	2019	National	Best Poster Presentation Award in Central Conference of Indian Phyto pathological Society, New Delhi, on 17th Dec., 2019 organised by IPS, New Delhi, ARS, Vizianagaram and Acharya NG Ranga Agricultural University, Guntur.
111	Dr. Pavithra	2017	National	Young Professional Award, Green Reap Welfare Society
112	Dr. Prakash S.S	2018	National	Best poster award, Annual convention of Indian Society of Soil Science
113	Dr. Prakash S.S	2018	National	Scientist Associate Award, Science and Tech society for Integrated Rural Improvement
114	Dr. Prakash S.S	2020	National	Eminent Scientist Award, Samagra Vikas Welfare Society (SVWS)
115	Dr. Prakash S.S	2020	National	Best oral presentation, Kerala Agricultural University, Thrissur.
116	Dr. Prakash, N. B.	2016	National	Kalayya Krishnamurthy National Award” for outstanding contribution in research during the Foundation day of UAS, Bangalore on 1st October, 2016.
117	Dr. R. Manjunatha	2020	National	Best paper presentation Award, Society of Krishi Vigyan
118	DR. R. MUTHURAJU	2019	National	Dr. APJ Abdul Kalam Life Time Achievement Award, International Institute for Social and economic Reforms @, Bengaluru
119	DR. R. MUTHURAJU	2019	National	ESDA Green Leadership Award
120	Dr. R. Narayana Reddy	2017	National	Distinguished Scientist, Venus International Foundation Chennai, Tamilnadu, India
121	Dr. R. Narayana Reddy	2017	National	Bharat Jyoti Award, India International Friendship Society, New Delhi
122	Dr. R. Narayana Reddy	2020	National	Best Assistant Professor Award, PEARL – A Foundation for Educational Excellence Madurai-Tamil Nadu
123	Dr. R. Narayana Reddy	2020	National	Excellence in Extension Award, Bihar Veterinary College, Patna
124	Dr. Raghavendra	2017	National	Gold Medal Award, Society for Recent Development in Agriculture
125	Dr. Raghavendra	2017	National	Best Master Thesis Award, Society for Scientific Development in Agriculture and Technology
126	Dr. Raghavendra	2018	National	Young Scientist Associate Award, Society for Recent Development in Agriculture
127	Dr. Raghavendra	2019	National	Young Scientist Award, United Lightning Vision Association
128	Dr. Rame Gowda,	2017	National	<i>Fellow of Indian Society of Seed Technology</i> presented by the Indian Society of Seed Technology, New Delhi during XXXII Annual Group Meet held from 22 nd to 24 th April, 2017 at SKRAU, Bikaner, Rajasthan by ICAR-IISS, Mau.
129	Dr. Roopa B Patil	2020	National	Adarsha Vidya Saraswathi Rastriya Puraskar, Global Management council, Ahmedabad
130	Dr. Roopashree, D. H	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
131	Dr. S. Ganesamoorthi	2017	National	<u>ICAR’s Best KVK Award, ICAR, New Delhi</u>
132	Dr. S. N. Vasudevan,	2017	National	Best poster presentation award at National seed Seminar, ISST, New Delhi
133	Dr. S. N. Vasudevan,	2017	National	<i>Fellow of Indian Society of Seed Technology</i> presented by the Indian Society of Seed Technology, New Delhi during National Seed Seminar, on January 30 th 2017 at New Delhi.
134	Dr. S. N. Vasudevan,	2019	National	Conferred with Agriculture Research Communication Centers’; Journals awarded REVIEWER EXCELLENCE AWARD for reviewer of Indian Journal of Agricultural Research, on 26.09.2019.
135	Dr. S. N. Vasudevan,	2020	National	Conferred with Agriculture Research Communication Centers’, Journals REVIEWER EXCELLENCE AWARD for reviewer of Agricultural Science Digest, on 26/03/2020.

136	Dr. S. N. Vasudevan,	2020	National	Conferred with Agriculture Research Communication Centers', Journals REVIEWER EXCELLENCE AWARD for reviewer of legume research, on 30/06/2020
137	Dr. S. N. Vasudevan,	2020	National	Conferred with Agriculture Research Communication Centers', Journals REVIEWER EXCELLENCE AWARD for reviewer of legume research, on 25/09/2020
138	Dr. S. N. Vasudevan,	2020	National	Conferred with Agriculture Research Communication Centers', Journals REVIEWER EXCELLENCE AWARD for reviewer of legume research, on 21/12/2020.
139	Dr. S. Rajendra Prasad	2016	National	Honorary Fellowship of Indian Agriculture Scientists and Farmer's Congress during 2016 by M/S Bioved Research Institute of Agriculture, Technology & Science, Allahabad, UP.
140	Dr. S.B. Yogananda	2017	National	Bharat Rathna Dr. Abdul Kalam Gold Medal Award, Global Economic Progress & Research Association, Tamil Nadu
141	Dr. S.N. Vasudevan	2019	National	Best poster presentation award at National seed Seminar, ISST, New Delhi
142	Dr. S.N. Vasudevan,	2019	National	Excellent performer award, ICAR, New Delhi
143	Dr. S.N. Vasudevan,	2019	National	First Best Poster Award for the presentation of research paper on "Effect of Optimum planting ration (Female: Male and foliar spray of plant growth regulators on seed yield and quality in CMS based chilly (<i>Capsicum annum L.</i>) Hybrid UARCHH42 (JCH 42)" in the National Seminar organized by Indian Society of Seed Technology on "Strengthening of seed systems in the North Eastern and un reached Regions problems, Prospects and policies" held during 3 rd and 4 th February, 2019 at ICAR-Research complex, Manipur centre, Lalmphepat, Imphal, India.
144	Dr. Savithramma, D L	2017	National	Eminent Scientist at Inspiring woman award ceremony by Samagra Vikasa Welfare Society, Lucknow, UP
145	Dr. Shobha D.	2020	National	Best poster award in National Seminar: Maize for Crop Diversification Under Changing Climatic Scenario held at PAU, Ludhiana campus on 9th& 10th Feb -2020.
146	Dr. Shobha, D.	2018	National	Best oral presenter for the paper "Suitability of quality protein maize (QPM) for the preparation of multipurpose mix" presented at 11th National Women's Science congress Mysore on 11th November, 2018.
147	Dr. Sukanya T.S.,	2019	National	Paramount Achievement award – SADHNA 2019, from Dr.Y. S. Parmar University of Horticulture and Forestry, Solan, Himachal Pradesh
148	Dr. Swamygowda. S.N.,	2019	National	Silver Medal Award for the paper Wide row planting, Drip irrigation and intercropping in sugarcane for higher nutrients efficiency, yield and quality at 49th Annual Convention of The South Indian Sugarcane and Sugar Technologists Association held on 28th and 29th June 2019 at Tamil Nadu.
149	Dr. T. Chikkaramappa,	2018	National	Best Poster Presentation Award (first prize) for the presentation of research paper on "GIS based land suitability evaluation of crop production in Basavapura micro watershed, Chamarajanagara district of Karnataka" in the 83rd annual convention of Indian Society of Soil Science held at Anand Agricultural University during 27th to 30th November, 2018.
150	Dr. T. K. Nagarathna	2016	National	Eminent scientist of the year award-2016" conferred by National Environmental Science Academy (NESA), New Delhi.
151	Dr. T. K. Nagarathna,	2016	National	Achiever Award-2015" Society for Advancement of Human and Nature (SADHNA), Dr. Y. S. Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh
152	Dr. T. Onkarappa	2017	National	Fellow" conferred by Indian Society of Oil Seeds Research, PJTSAU, Hyderabad on 31-12-2017.
153	Dr. V B Sanath Kumar	2019	National	Best poster award, ANGRAU, Vishakapatnam, Andhra Pradesh
154	Dr. V. Govinda Gowda,	2016	National	Distinguished Scientist Award, GUARD society at Rice Research Institute, Hyderabad
155	Dr. V. Palanimuthu	2017	National	second best poster paper entitled "Accelerated ageing of paddy by dry steaming technique and its effect on milling, physico-chemical and textural characteristics of milled rice" presented in the KSTA National Conference on Science and Technology Education organized by KSTA & UAS, Raichur, India, July 21-22, 2017.

156	Dr. V.L.Madhuprasad	2019	National	Outstanding Scientist Award, The Society of tropical Agriculture
157	Dr. V.L.Madhuprasad	2020	National	Prof. M.S.Swaminathan Best Scientist Award, Bose Science Society
158	Dr. Vasanthi, B. G	2016	National	2 nd Best poster presentation award, TNAU, Coimbatore
159	Dr. Vasudevan,	2019	National	Conferred with Agriculture Research Communication Centers', Journals REVIEWER EXCELLENCE AWARD for reviewer of legume research, on 26.03.2019.
160	Dr. Vasudevan,	2019	National	Conferred with Agriculture Research Communication Centers'; Journals awarded REVIEWER EXCELLENCE AWARD for reviewer of legume research, on 24.07.2019.
161	Dr. Y. G. Shadakshari	2016	National	Fellow of Indian Society of oilseeds Research (ISOR) during Annual Group Meeting held on 16 th to 18 th April, 2015 at Orissa University of Agriculture and Technology, Bhubaneswar, Odisha.
162	Dr.B. Gayathri	2019	National	Young scientist award, SIRI Society
163	Dr.B.A. Anand	2018	National	Best Paper Award, International Academy of Science and Technology, Chennai.
164	Dr.B.G.Shekara	2018	National	Best poster presentation award in National Symposium Forage and Livestock based Technological Innovations for doubling farmers income, organized by RMSI, IGFRI, Jhansi held on 13 th & 14 th of December-2018 at UAS, Dharwad-Karnataka.
165	Dr.B.Kalpana	2016	National	Best Oral Presentation Award for the paper entitled, 2016. Value addition, diversification of jackfruit (<i>Artocarpus heterophyllus</i> Lam) – Recent trends. Paper presented in the National Seminar on Horticultural Diversity for Prosperity - 2016, organized by Orissa Horticultural Society at OUAT, Bhubaneswar, Odisha, India, Feb 10-12, 2016.
166	Dr.C.T.Subbarayappa	2017	National	Best Oral Paper Presentation Award at National Conference on IECIE- NESA, Bhopal held during 23rd-24th December, 2017
167	Dr.C.T.Subbarayappa	2018	National	Fellow of the year by National Environmental Science Academy on 15th December, 2018.
168	Dr.G.C.Jayashree	2018	National	Best Paper Award, UAS, Bangalore
169	Dr.G.C.Jayashree	2018	National	Young Agricultural Scientist Award, International Academy of Science and Technology, Chennai.
170	Dr.H.G.Ashoka	2017	National	Eminent Agricultural engineer at 30 th National convention of Agricultural engineers at Pant Nagar on 27-28, 2017
171	Dr.H.K.Pankaja	2019	National	Young Scientist Award, SSDAT
172	Dr.H.K.Pankaja	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
173	Dr.K.B.Murthy	2018	National	Gauravacharya Award, National Institute of Education and Research ,New Delhi
174	Dr.K.B.Pallana	2016	National	Awarded Best paper in National symposium on “Recent Advances in plant Health Management for Sustainable Productivity”, December 15-16, 2016 UAS, Dharwad, Karnataka, India.
175	Dr.K.B.Pallana	2016	National	Awarded Best paper in National symposium on “Recent Advances in plant Health Management for Sustainable Productivity”, December 15-16, 2016 UAS, Dharwad, Karnataka, India.
176	Dr.K.B.Pallana	2016	National	II best paper in National symposium on “Recent trends in plant pathological research and education”, January 5-6, 2016 UAS, Raichur, Karnataka, India.
177	Dr.K.N.Krishnamurthy	2018	National	Best Teacher in Statistics, National Institute of Education and Research ,New Delhi
178	Dr.N.B.Prakash	2018	National	Kalayya Krishnamurthy National Award” for outstanding contribution in research during the Foundation day of UAS, Bangalore during 53 rd foundation day.
179	Dr.S. Shyamamma	2020	National	Best Oral Presentation Award for paper entitled “Influence of pre-treatments, packaging materials and storage conditions on shelf life and quality of minimally processed RTC tender jackfruit at National Conference on Health and wellness through Nutrition and Nutraceuticals organised by Nutrition and Nutraceutical Research Centre, Ramaiah University of Applied Sciences, Bangalore during 23 & 24th Jan, 2020.
180	Dr.Shivaramu, H. S.,	2020	National	Second prize in oral presentation to paper entitled Effect of sowing dates and row spacing on phenological phases,

				thermal time requirement and heat use efficiency of pigeonpea varieties at National Seminar on “Agro meteorological interventions for enhancing farmers’ income” (AGMET-2020) from 20th-22nd January 2020 at Kerala Agricultural University, Thrissur, Kerala .
181	Dr. Shivashankar	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
182	Dr. Tanweer Ahmed	2020	National	Best oral presentation award, ASTHA Foundation
183	Er. Syed Mazar Ali	2016	National	Best Presentation award (Team award) at Annual zonal level Review workshop held at Wayanad, Kerala during 20th-23rd May 2016
184	Er. Syed Mazar Ali	2017	National	Best oral presentation award at Second KVK symposium Held during 7 th -8 th March 2017 at TNAU
185	Mr. Babu RM Ray	2019	National	Best paper presentation award, Osmania University, Hyderabad
186	Mr. Basavaraj S.	2017	National	Silver Medal for <i>Design & Development of Sunflower Dehuller</i> , in the All India Design Competition for Engineering Students - 2017 (under Agricultural Engineering Category) conducted by National Design and Research Forum of <i>The Institution of Engineers (India)</i> .
187	Mrs. D. C Preethu	2020	National	Best Poster presentation Award, ICAR-ATARI Bengaluru Extension Education Society, TNAU Campus, Coimbatore and ICAR JSS KVK, Mysuru
188	Mrs. Krishnamma P.N.	2019	National	Young scientist Award, International Conference on Food & Agriculture
189	Ms. A. Bhavana	2020	National	Best paper presentation Award, Society of Krishi Vigyan
190	Nagaraja T E	2017	National	First Best Research Paper Award for the paper “ Response of Sugarcane Genotypes under moisture deficit Conditions” presented at Annual Convention 2017 of North Indian Sugarcane & Sugar Technologist’s Association held at Indian Institute of Sugarcane Research, Lucknow during May 12-13, 2017 in Association with Indian Institute of Sugarcane Research, Lucknow.
191	Nataraja Karaba	2018	National	Sir CV Raman Young Scientist State Award 2017, IISc
192	Prabhu C Ganiger	2016	National	BEST POSTER PRESENTATION award on “The Banana Leaf Roller, <i>Erionota torus</i> Evans (Hesperidae; Lepidoptera): Establishment, Distribution and Extent of Damage in Major Banana Growing Areas of Southern Karnataka ” at Conference on National Priorities in Plant Health Management on 4-5 th February, 2016, conducted by Plant Protection Association of India, Hyderabad.
193	Dr. Arati Pannure	2018	National	Emerging Scientist Award 2018 Agricultural Technology Development Society (ATDS), Ghaziabad, U. P, India
194	Dr. Arati Pannure	2019	National	Young woman scientist award Dr. B. Vasantharaj 2019
195	Dr. Arati Pannure	2019	National	Excellence Teacher 2019 (Subject: Agricultural Entomology) ASTHA Foundation,
196	Dr. D. V. Naveen	2019	National	Young faculty award EET 8th Science and Technology Awards 2019 EET, Education exp
197	Dr. D. V. Naveen	2019	National	Young Scientist Award – 2019 Dr. B. Vasantharaj David Excellence Awards 2019
198	Dr. D. V. Naveen	2020	National	Best teacher award for the year 2020 Adarsha Vidya Saraswathi Rashtriya Puraskar, Global management council, Glacier journal research foundation
199	Dr. D. V. Naveen	2020	National	First Best Poster Presentation Award, International E-Conference on ‘Advances and Future Outlook in Biotechnology and Crop Improvement for Sustainable Productivity’ College of Horticulture, Bengaluru during 24-27th November, 2020.
200	Dr. Latha, HS	2016	National	Young Scientist VIFRA, Chennai, 2016
201	Dr. Latha, HS	2016	National	Rajiv Gandhi Excellence Award Friends foundation, Bangalore 2016
202	Dr. Latha, HS	2018	National	Best Ph.D. Thesis Award International Multi-disciplinary research foundation, 2018
203	Dr. Latha, HS	2019	National	Best teacher Award Global management Council, Glacier Journals Research foundation, Ahmedabad, 2019
204	Dr. Latha, HS	2020	National	Young Achiever Award-2020 Institute of Scholars, Bangalore
205	Dr. M. Manjunatha	2019	National	Gandhian Young Technological Innovation (GYTI) award 2018, National Innovation Foundation, Govt of India

206	Dr. M. V. Srinivasareddy	2019	National	Best Extension Scientist Award-2019 Agricultural Technology Development Society (ATDS) 2019
207	Dr. M. Vasundhara	2018	National	Nominated by the Hon'ble Director General, ICAR, New Delhi as one of his nominees for the Assessment Committee meeting for the ARS Scientist at ICAR-DMAPR, Anand, Gujarat on 30.10.2017.
208	Dr. Nalina, CN	2019	National	Young Scientist Award" International conference on Global research initiatives for sustainable Agriculture & Allied sciences, Astha Foundation , Meerut, 2019
209	Dr. Nalina, CN	2019	National	Official Spotlight Certificate (YOUNG SCIENTIST) Award" Education expo, Bangalore
210	Dr. Narasareddy, G.	2018	National	Excellence in Teaching Award International Conference on Food and Agriculture held during March 29-31, 2018 in Dhanbad, Jharkhand
211	Dr. Nethrayini, KR	2019	National	Kanwar Virender Singh Memorial All India Best Publication Award 2019 Society for Advancement of Human and Nature (SADHNA),
212	Dr. Nethrayini, KR	2020	National	Young Women Scientist Award 2020 Agro Environmental Development Society (AEDS), Rampur, UP, India
213	Dr. Pallavi	2019	National	Women Scientist Award Society for biotech and environmental research, Tripura.
214	Dr. Papireddy, M	2019	National	Award of Excellence in Teaching ASTHA, Foundation for the year 2019.
215	Dr. Priyadarshini, S. K.	2019	National	Young Scientist Award, International conference on Global research initiatives for sustainable Agriculture & Allied sciences, ASTHA Foundation , Meerut, UP, 2019
216	Dr. Radha, B. N.	2019	National	Bharat Rathna Dr. Radha Krishnan Gold Medal Award. Global Economic Programmes Research Association. 1st May 2019, National Unity Conference held by GEPR at Bangalore
217	Dr. Radha, B. N.	2019	National	Young Scientist Award from Dr. Ram Avtar Shiksha Samiti, Lucknow 12th July 2019,
218	Dr. Mahesh, M.	2017	National	Outstanding Scientist Award for the year 2017 Venus International Foundation, Chennai,
219	Dr. Mahesh, M.	2017	National	Best Assistant Professor Award for the year 2017 PEARL-A Foundation for Educational Excellence, Madurai, Tamil Nadu
220	Dr. Mahesh, M.	2017	National	Excellence in Teaching Award for the year 2017 ASTHA foundation, Meerut, U.P., India
221	Dr. Rajanna, K.M	2017	National	ICAR Best Teacher Award for the year 2017-18
222	Dr. Ramakrishna Naika	2016	National	ICAR Best Teacher Award for the year 2014-15
223	Dr. Venkataravana, P	2017	National	Nagamma Dattatreya Rao Desai Award for outstanding adoptive Agricultural research for the year 2016-17 from UAS (B)
224	Mr. Gowda, P. A.	2020	National	Best M.Sc. thesis award Agro Environmental Development Society (AEDS) 2020 and Uttar Pradesh
225	Mr. Gowda, P. A.	2020	National	Best Extension worker ward for mushroom cultivation training to the SHGs . Science and tech society for integrated rural improvement, Thorur Mahabubabad, Telangana.
226	Mr. Rudra Gouda Chillur	2019	National	Agricultural Engineering Division Prize-2019 Institution of Engineers in India (IEI), Kolkata, 2019
227	Mr. Rudra Gouda Chillur	2019	National	AET Best Paper Award Indian Society of Agricultural Engineers (ISAE), New Delhi. 2019 January 28-30, 2019
228	Mr. Rudra Gouda Chillur	2019	National	Excellence Teacher-2019 (Subject: Agricultural - Engineering) ASTHA Foundation,
229	Mr. Rudra Gouda Chillur	2019	National	Agricultural Engineering Division Prize-2019 Institution of Engineers in India (IEI), Kolkata, 2019
230	Mrs. Amrutha, TG	2018	National	Young Scientist Award, 77th International conference on recent trends in environmental sustainability, life sciences 2018 International Multi-disciplinary research foundation 2018, Mysore
231	Mrs. Amrutha, TG	2018	National	Best thesis Award, International conference on Global research initiatives for sustainable Agriculture & Allied sciences, ASTHA Foundation , Meerut.
232	Mrs. Bharathi, V.P.	2019	National	Woman Scientist Award 2019
233	Dr. K. P. Raghuprasad	2018	National level	Special achievement award, Academic Brilliance Awards, Noida, New Delhi
234	Dr. V. Govinda Gowda,	2017	National level	Scientist of the year Award

235	Dr. Y.N. Shivalingaiah	2019	National Level	ICAR Best Teacher Award, ICAR, New Delhi
236	Dr. A. D. Ranganatha	2019	State	Appreciation Award, UAS, Bangalore
237	Dr. B. G. Vasanthi	2019	State	Late Giriappa Gowda award” for best extension worker by Alumni Association, Hebbal, Bangalore on 23rd Nov 2019.
238	Dr. B. Manjunath	2016	State	Best poster presentation award, Indian Phyto pathological Society & UHS, Bagalkot
239	Dr. B. Manjunath	2020	State	Dr. R. Dwarakinath Best Extension Worker Award, Alumni Association, UAS, Bangalore
240	Dr. B. N. Ramesh,	2019	State	Award for Research Publication bestowed by Dept .of information Technology, Biotechnology, GOK and KSTEPS in recognition of the Research Publication under VGST scheme of ARP for the year 2019-20.
241	Dr. B.Tambat	2020	State	Young scientist award in Kannada Sci. Congress held at Davanagere University, Karnataka (2019-20)
242	Dr. B.Tambat	2020	State	Professional Award, Lions club of Hassan Hoysala, Hassan
243	Dr. C. Narayanaswamy	2017	State	Best NSS Programme Officer, GoK, Youth Empowerment & Sports Department, NSS cell
244	Dr. Channakeshava	2016	State	Best Presentation award, ATARI, Bangalore
245	Dr. G. M. Sujith,	2018	State	Prof.B.V.Venkata Rao Best Scientific Article award for the article published in UAS (B) farm magazine Krishi Vignana”.
246	Dr. G.M. Sujith,	2020	State	Dr. R. Dwarakinath Best Article Award 2020 published in University Magazine during 2019 in Krishimela 2020
247	Dr. G.M. Sujith,	2019	State	Dr. R. Dwarakinath Best Article Award 2019 published in University Magazine during 2018 in Krishimela 2019
248	Dr. Geetha M. Yankanchi	2018	State	Women Scientist Award for the paper “Efficacy of different educative methods to combat anaemia among adolescent girls” presented in 14th Kannada Vigyan Sammelana organized by Shree Devaraj Urs Academy of Higher Education and Research, Tamaka, Kolar on 16th November, 2018.
249	Dr. K. R. Shreenivasa	2019	State	Dr. R. Dwarakinath Best Extension worker award, UAS, Bangalore
250	Dr. K. Venkataranga Naika	2020	State	Certificate of Merit, UAS Bangalore
251	Dr. Lohithaswa, H.C.,	2017	State	Nagamma Dattatreya Rao Desai Award” for outstanding Adaptive Agricultural Research for the Year 2015-16 during 52nd Foundation Day of UAS B held on 4 th October 2016.
252	Dr. M. N. Thimmegowda	2017	State	Prof.B.V.Venkata Rao Best Scientific Article award for the article published in UAS (B) farm magazine Krishi Vignana”.
253	Dr. M. T. Sanjay,	2017	State	Rotarian Sunderlal Bagai Young Agricultural Scientist Award” from Rotary Bangalore South on 18.02.2017.
254	Dr. M. Vasundhara	2016	State	Natasaruabhouma Dr. Rajkumar Sanmana Samithi Award for the Best Agricultural Research during 51 st Foundation Day of UASB
255	Dr. Mamatha H. S.	2020	State	M/s Zuari Industries best extension worker
256	Dr. Mamatha, H.S.	2019	State	Appreciation Award, UAS, Bangalore
257	Dr. Mamatha, H.S.	2020	State	Appreciation Award, UAS, Bangalore
258	Dr. Mudalagiriappa,	2019	State	Nagamma Dattatreya Rao Desai Award for outstanding Adaptive Agricultural Research for the Year 2018-19 during 54 th Foundation Day of UAS B held on 1 st October 2019.
259	Dr. N. Nethra	2016	State	awarded for Women Scientist award from Karnataka Science Congress at 11th Kannada vignan sammelana held from 13-15 September, 2015 at Raichur jointly organized by Swadeshi Vignana Andolan- Hebbala, Karnataka and Taranath Educational Institute’s Lakshmi Venkatesh Desai College, Raichur
260	Dr. N. Nethra	2016	State	awarded first prize (Interdisciplinary science division) for the poster presentation in the 8th KSTA Annual conference on SCIENCE AND TECHNOLOGY FOR GenNext URBAN SPACE jointly organized by Karnataka science and technology academy and Bangalore institute of technology held between 5th and 6th November, 2015.
261	Dr. P. K. Basavaraja	2016	State	Conferred with best research paper for the paper entitled “Importance of sub surface drainage in improvement of water logged, saline and alkaline soils and enhancement of crop productivity” at 11th Kannada Vijnana Sammelana at UAS, Raichur held from 13th to 15th September 2015.

262	Dr. P. K. Basavaraja	2018	State	Awarded "Dr. R. Dwarakinath outstanding extension professional award" at UAS, Alumni Association, Hebbal, Bangalore on 9th November, 2018.
263	Dr. P. K. Basavaraja	2019	State	awarded with Eminent Scientist of the Year Award by NESA on 19 & 20 December, 2019 at Department of Nanotechnology Visvesvaraya Technological University, Centre for Postgraduate Studies, Muddenahalli, Chikkaballapur - 562101, Karnataka. Eminent scientist of the year award-2019.
264	Dr. Prakash S.S	2019	State	Best poster award, Bengaluru India Nano
265	Dr. Prakash S.S	2020	State	Best Poster Award, UHS, Bagalkot
266	Dr. Roopashree	2020	State	Certificate of Merit, UAS Bangalore
267	Dr. S. M. Savita	2019	State	Appreciation Award, UAS, Bangalore
268	Dr. S. N. Vasudevan,	2019	State	Best Scientist award, State Agriculture Festival Mysore Dhasara
269	Dr. S. V Suresha	2019	State	Appreciation Award, UAS, Bangalore
270	Dr. S. V Suresha	2020	State	Appreciation Award, UAS, Bangalore
271	Dr. S.M Savita	2020	State	Dr. Dwarakinath Best Extension Worker Award, Alumni Association, UAS, Bangalore
272	Dr. Savita, S.M.,	2019	State	M/s Zuari Industries Ltd. Best Extension Worker Award during 54th Foundation Day of UAS, Bengaluru
273	Dr. Umashanker	2018	State	Best Poster
274	Dr.V.R. Ramakrishna Parama	2016	State	Nagamma Dattatreya Rao Desai Award" for outstanding Adaptive Agricultural Research during 51 st Foundation Day of UASB
275	Mr. H. M. Mahesh	2019	State	Appreciation Award, UAS, Bangalore
276	Mr. Venkatesha	2017	State	Vishwamanava Kuvempu Award-2017, Dr.G.S.Paramashivaiah Sahitya Vedike
277	Mr. Venkatesha	2018	State	Mandavya Maharshi Award, BELAKU, (education, literature and social trust(reg) Mandya
278	Mr.Jadav Balaji	2020	State	Appreciation Award, UAS, Bangalore
279	Mrs. D.C. Preethu.,	2019	State	Appreciation Award, UAS, Bangalore
280	Mrs. Aruna. G.R.	2020	State	Best Scientific literature award, UAS, Bangalore
281	Mrs. K. B. Apoorva	2019	State	Appreciation Award, UAS, Bangalore
282	Smt. Ashwini, A.	2020	State	Appreciation Award, UAS, Bangalore
283	Smt. Jayanthi, T.	2018	State	Women Scientist Award for her Post Doctorate research work presentation on the occasion of 14th Kannada Vigyan Sammelana held on 15th -16th September, 2018 at Kolar, Karnataka.
284	D.V. Kusumalatha	2018	State level	Gold Medals, UAS, GKVK, Bangalore
285	Dr. C. Narayanaswamy,	2018	State level	Best NSS programme officer, Govt. of Karnataka – Dept. of youth Empowerment and Sports
286	Dr. C.M. Savitha	2018	State level	Zuari Industries Best Extension Worker, Zuari Industries
287	Dr. K.P. Raghuprasad,	2018	State level	Best Teacher Award, UAS, GKVK, Bangalore
288	Dr. V. Govinda Gowda,	2017	State level	Sustainable Agriculture Development Award, International Foundation for Environment and ecology, at 3rd International Conference, Kolkata
289	Dr. C. Narayanaswamy	2017	Taluk	Education field, Devanahalli Taluk Administration
290	Dr. Latha, HS	2016	University	Bele kalugala prapancha (Pulse World) Krishi Mela organized at UAS, Raichur Campus from 05-11-2016 to 08-11-2016.
291	Dr. M. R. Girish	2017	University	ICAR Best Teacher Award 2016-17 (Received on 4 th October 2017 at 52 nd Foundation Day of UASB)
292	Dr. M. Vasundhara	2017	University	Natasaruabhouma Dr. Rajkumar Sanmana Samithi Award during 51 st Foundation day, UAS, GKVK, Bangalore: 01-10-2016
293	Dr. R. Muthuraju	2018	University	ICAR –Best Teacher Award, UAS, Bangalore
294	Dr Ashoka K R	2018	University	Best poster award in Science week- 2019, University of Agricultural Sciences, Bengaluru
295	Dr Ashoka K R	2020	University	Best Poster Award, UHS, Bagalkot
296	Dr. Anand Manegar, G.	2016	University	Dr.R Dwarakinath Best Extension Worker Award, UAS, Bangalore
297	Dr. Anilkumar T Dandekar	2020	University	Best Teacher Award, University of Agricultural Sciences, Raichur
298	Dr. B.Tambat	2018	University	ICAR Best Teacher award (2017-18)

299	Dr. H. C. Lohithaswa	2020	University	ICAR Best Teacher Award, University of Agricultural Sciences, Bengaluru
300	Dr. Mamatha, H.S.	2017	University	Appreciation Award, UAS, Bangalore
301	Dr. Mamatha, H.S.	2020	University	Appreciation Award, UAS, Bangalore
302	Dr. Raghavendra	2019	University	Second Best Award for 6 start- up innovations in Agriculture' for served as a mentor
303	Dr. Rajegowda	2017	University	Dr. R Dwarakinath award for best article in Krishi Vigyana, UAS, Bangalore
304	Dr. S. V Suresha	2016	University	Best paper award, UAS, Bangalore
305	Dr. S. V Suresha	2017	University	Appreciation Award, UAS, Bangalore
306	Dr. S. V Suresha	2020	University	Appreciation Award, UAS, Bangalore
307	Dr.G.G.Kadalli	2017	University	ICAR Best Teacher
308	Dr.G.G.Kadalli	2018	University	ICAR Best Teacher
309	K. Shivaramu	2020	University	Dr. R Dwarakinath Best Extension Award, UAS, Bangalore
310	Smt. Ashwini, A.	2020	University	Appreciation Award, UAS, Bangalore
311	Dr. C.T. Ramachandra	2019	University/ State	Incentive Award, UAS, Bengaluru

Award received for the centres during the reporting period

Sl. No.	Name of centre	Year of award	Status of award	Name of the award and awarding agency
1	AICRP for Dryland Agriculture	2019	National	Most Responsive Centre Award” among 31 centre in the country during 26th Biannual Workshop, organized by ICAR-CRIDA, Hyderabad from 16th to 19th January, 2019.
2	AICRP on Agroforestry	2017	National	Best presentation award at National Group meet, during 2017.
3	AICRP on Agrometeorology	2018	National	Best centre award for the year 2017-18 by ICAR-CRIDA at Biennial workshop of AICRPAM held at Vijayapura, Karnataka during 15 th -17 th November 2018.
4	AICRP on Agrometeorology	2019	National	Award of excellence for the year 2019 for outstanding dissemination and outreach of Agromet Advisories by India Meteorological Department, Ministry of Earth Science, Govt. Of India on the occasion of 13 th Annual Review Meeting of Gramin Krishi Mausam Sewa held from 18 th to 20 th , December 2019 at RVSKVV, Gwalior, Madhya Pradesh.
5	AICRP on Forage crops	2018	National	Best Centre Award by ICAR for Outstanding research on Forage crops presented during National Group meet Kharif-2018, held at TNAU, Coimbatore on 6th to 7th April -2018.
6	AICRP on Forage crops	2019	National	Appreciation certificate from ICAR, IGFRI Jhansi for development and dissemination of production technologies during the year -2019.
7	AICRP on Forage crops	2020	National	Appreciation certificate from ICAR, IGFRI, Jhansi for development and dissemination of production technologies during the year -2020.
8	AICRP on Honeybee & Pollinators	2017	National	Best TSP centre during Biennial group meeting held at Solan, HP during 14-16 th October, 2017.
9	AICRP on PHET	2019	National	Best Centre Award of the Year 2018-19 by Project Coordinator Unit, ICAR-CIPHET, Ludhiana on 15-03-2019 during 34 th Annual Workshop of AICRP on PHET held at TNAU, Coimbatore.
10	AICRP on Small Millets	2017	National	Best AICRP centre award by PC unit AICRP on Small Millet (ICAR) at 28th Annual Group Meeting of AICRP on Small Millets at UAS, GKVK on 14th & 15th April, 2017.
11	AICRP on STRC	2016	National	<i>CERTIFICATE OF EXCELLENCE</i> by the ICAR, New Delhi for <i>Best Performance</i> in Seed Technology Research under AICRP on NSP (Crops) for the year 2015-16
12	AICRP on Sugarcane	2019	National	Excellent performer award for the trials conducted during the year 2019-20 by ICAR-All India coordinated Research project on sugarcane at the annual group meeting held at UAS, Dharwad From October 14th to 16 th , 2019.
13	University Library	2017	National	Certificate of Appreciation, Valuable contribution to Krishikosh
14	University Library	2017	National	Certificate of Appreciation, Commendable contribution to strengthening and sustainability of E-Granth Project
15	University Library	2018	National	Best Librarian National Award, Outstanding excellence and remarkable achievement in the field of Teaching, Research & Publication

Awards received by the University during the reporting period

Sl. No.	Name of centre	Year of award	Status of award	Name of the award and awarding agency
1	University	2016	National	ICAR-JRF award-2016 (Second Position)
2	University	2017	National	ICAR-JRF award-2017 (First Position)
3	University	2018	National	ICAR-JRF award-2018 (First Position)
4	University	2019	National	ICAR-JRF award-2018 (First Position)
5	University	2020	State	Karnataka State Higher Education Council Five Star Education Institute Award
6	University	2020	National	Excellence in course and curriculum design, Agriculture Today, The National Agriculture Magazine

109 Students of UAS, Bangalore have cleared ICAR-NET Exam-2020 and the University has Secured 3rd Position among SAUs in India

6.6.5.4. Capacity Building and Training

The faculty have been trained both in-house as well deputed to reputed organizations, within the country and abroad, so that they update their skills in contemporary developments and become more competent. The details of such capacity building programmes are enlisted below.

Sl. No.	Year	Training Focus	No. of programmes organised for			
			Faculty	Supporting Staff	Students	Others*
1	2016-17	Skills	35	16	58	91
		Instincts	03	02	03	2
		Abilities	15	07	11	34
		Processes	00	00	00	12
		Resources	01	01	01	21
		Others	02	02	02	7
Sub-Total			56	28	75	167
2	2017-18	Skills	18	12	32	103
		Instincts	07	05	07	1
		Abilities	09	05	10	42
		Processes	00	00	00	26
		Resources	01	00	01	83
		Others	01	01	01	7
Sub-Total			36	23	51	262
3	2018-19	Skills	25	16	31	121
		Instincts	05	02	05	1
		Abilities	09	05	09	38
		Processes	02	00	01	10
		Resources	01	00	01	20
		Others	07	03	07	21
Sub-Total			49	26	54	211
4	2019-20	Skills	40	33	46	122
		Instincts	01	01	01	0
		Abilities	33	22	34	31
		Processes	00	00	00	27

		Resources	00	00	00	30
		Others	02	02	02	24
		Sub-Total	76	58	83	234
5	2020-21	Skills	07	04	08	41
		Instincts	02	02	02	4
		Abilities	07	00	19	17
		Processes	00	00	00	3
		Resources	00	00	00	9
		Others	03	01	03	1
		Sub-Total	19	07	32	75
		Total	236	142	295	949
		Grant Total	1622			

* Other stakeholders like farmers, fertilizer dealers and input sellers, line developmental departments. These training programmes are mainly organized from the Directorate of Extension.

6.6.6. Student Development

Teaching is the one among the important objective of University of Agricultural Sciences, Bangalore. In order to impart quality learning atmosphere in its constituent teaching campuses, several student developmental activities are being undertaken. The activities initiated and facilities made available by the university have helped the overall development of students. The various student development programmes available in universities are elaborated here below.

6.6.6.1. Scholarships / Stipend

The students of University of Agricultural Sciences, Bangalore are successful in bagging various scholarships of national and international repute. At present, most of our student in the university are obtaining financial assistance from scholarships funded by the State and Central Government. Besides capturing scholarships from external sources, university is also offering different scholarships for meritorious students. The details of the scholarship are furnished below.

Details of Competitive Scholarships/Fellowship: College of Agriculture, UAS, GKVK, Bangalore

Sl. No.	Year	Name of the competitive Scholarships / Fellowships	No. of Students received competitive Scholarships / Fellowships
1	2016-17	Merit Scholarship	24
		General Scholarship	87
2	2017-18	Merit Scholarship	24
		General Scholarship	99
3	2018-19	Merit Scholarship	24
		General Scholarship	167
4	2019-20	Merit Scholarship	24
		General Scholarship	189
5	2020-21	Merit Scholarship	Not yet announced
		General Scholarship	Not yet announced

Details of Competitive Scholarships/Fellowship: College of Agriculture V.C. Farm, Mandya

Sl. No.	Year	Name of the Competitive scholarship /fellowships	No. of students received Competitive Scholarship / Fellowships	No. of passed out students selected for Scholarship /Fellowships in other Universities
1	2016-17	UAS Merit scholarship (UG)	08	
2	2016-17	UAS General scholarship (UG)	37	
3	2016-17	GOI Scholarship (UG& PG)	52	
4	2016-17	BCM –Vidyasiri Scholarship (UG & PG)	222	20
5	2016-17	NTS Scholarship (UG)	10	
6	2016-17	RSK State /READY Programme(UG)	74	
7	2016-17	Sitaram Jindal Foundation	03	

8	2016-17	UAS Merit scholarship (PG)	10	05
9	2016-17	NTS Scholarship (PG)	02	
10	2016-17	JRF Fellowship (PG)	-	10
11	2016-17	PPIC Scholarship (PG)	01	
12	2016-17	Students research scholarship	02	
13	2017-18	UAS Merit scholarship (UG)	08	
14	2016-17	UAS General scholarship (UG)	43	
15	2016-17	GOI Scholarship (UG & PG)	60	
16	2016-17	BCM –Vidyasiri Scholarship (UG & PG)	259	08
17	2016-17	NTS Scholarship (UG)	17	
18	2016-17	RSK State /READY Programme(UG)	77	
19	2017-18	Award of Smt. Swarnamba T.K.Gurusiddappa Scholarship (UG)	01	
20	2016-17	UAS Merit scholarship (PG)	10	02
21	2016-17	NTS Scholarship (PG)	03	
22	2017-18	JRF Fellowship (PG)	05	03
21	2018-19	UAS Merit scholarship (UG)	08	
22	2018-19	UAS General scholarship (UG)	47	
23	2018-19	GOI Scholarship (UG& PG)	55	
24	2018-19	BCM –Vidyasiri Scholarship (UG & PG)	285	12
25	2018-19	NTS Scholarship (UG)	27	
26	2018-19	RSK State /READY Programme(UG)	82	
27	2018-19	UAS Merit scholarship (PG)	10	02
28	2018-19	NTS Scholarship (PG)	03	
29	2018-19	JRF Fellowship (PG)	03	14
30	2018-19	PPIC Scholarship (PG)	01	
31	2018-19	Monsanto Scholarship (PG)	02	
32	2019-20	UAS Merit scholarship (UG)	08	
33	2019-20	UAS General scholarship (UG)	49	
34	2019-20	GOI Scholarship (UG & PG)	56	
35	2019-20	BCM –Vidyasiri Scholarship (UG & PG)	264	07
36	2019-20	NTS Scholarship (UG)	37	
37	2019-20	RSK State /READY Programme (UG)	80	
38	2019-20	UAS Merit scholarship (PG)	10	01
39	2019-20	NTS Scholarship (PG)	03	
40	2019-20	JRF Fellowship (PG)	02	07
41	2019-20	PPIC Scholarship (PG)	01	
42	2019-20	Monsanto Scholarship (PG)	02	
43	2020-21	UAS Merit scholarship (UG)	Not yet announced	
44	2020-21	UAS General scholarship (UG)	Not yet announced	
45	2020-21	GOI Scholarship (UG & PG)	Not yet announced	
46	2020-21	BCM –Vidyasiri Scholarship (UG & PG)		
47	2020-21	RSK State /READY Programme (UG)	102	
48	2020-21	NTS Scholarship (UG)	34	
49	2020-21	NTS Scholarship (PG)	01	
50	2020-21	JRF Fellowship (PG)	01	22

Details of Competitive Scholarships/Fellowships: College of Agriculture, Hassan

Sl. No.	Year	Name of the competitive Scholarships/ fellowships	No. of Students received competitive Scholarships/Fellowships	No. of passed out students selected for Scholarships/ Fellowships in other Universities
1	2016-17	Merit Scholarships	24	JRF – Agriculture -02 Biotech - 04 Food Tech – 05 JNU – 12
		General Scholarships	87	
2	2017-18	Merit Scholarships	24	JRF – Agriculture -12 Biotech - 01 Food Tech – 02 NTS - Agriculture -15 Biotech - 01 Food Tech – 03
		General Scholarships	87	
3	2018-19	Merit Scholarships	24	JRF – Agriculture -18 Biotech - 04 Food Tech – 01
		General Scholarships	100	
4	2019-20	Merit Scholarships	24	JRF – Agriculture -07 Biotech - 05 Food Tech – 03 JNU – Biotech 03
		General Scholarships	79	
5	2020-21	-	-	JRF – Agriculture -22 Biotech - 04 Food Tech – 03 GAT B – Biotech 16

Details of Competitive Scholarships/Fellowships: College of Sericulture, Chintamani

Sl. No.	Year	Name of the competitive Scholarships / Fellowships	No. of Students received competitive Scholarships / Fellowships		No. of passed out students selected for Scholarships / Fellowships in other Universities (JRF/JNAU)	
			B.Sc. (Agri.)	B.Sc. (Seri.)	B.Sc. (Agri.)	B.Sc. (Seri.)
1	2016-17	ICAR NTS Scholarship	13	02	04	01
		UAS (B) Merit Scholarship	08	08	-	-
		UAS (B) General Scholarship	35	15	-	-
		Karnataka Backward Classes Welfare Department Scholarship	200	122	-	-
		GoI Scholarship for SC/ST Students	41	30	-	-
		Sponsor Scholarship	01	00	-	-
2	2017-18	ICAR NTS Scholarship	08	03	08	02
		UAS (B) Merit Scholarship	08	08	-	-
		UAS (B) General Scholarship	35	14	-	-
		Karnataka Backward Classes Welfare Department Scholarship	147	69	-	-

		GoI Scholarship for SC/ST Students	41	19	-	-
		Sponsor Scholarship	01	00	-	-
3	2018-19	ICAR NTS Scholarship	17	05	07	07
		UAS (B) Merit Scholarship	08	08	-	-
		UAS (B) General Scholarship	39	14	-	-
		Karnataka Backward Classes Welfare Department Scholarship	175	67	-	-
		GoI Scholarship for SC / ST Students	46	17	-	-
		Sponsor Scholarship	01	00	-	-
4	2019-20	ICAR NTS Scholarship	22	07	15	05
		UAS (B) Merit Scholarship	08	08	-	-
		UAS (B) General Scholarship	41	15	-	-
		Karnataka Backward Classes Welfare Department Scholarship	186	72	-	-
		GoI Scholarship for SC/ST Students	53	18	-	-
		Sponsor Scholarship	01	00	-	-
5	2020-21	ICAR NTS Scholarship	-	-	18	06
Total			1135	521	52	21

6.6.6.2. Extra and Co-Curricular Activities

The co-curricular activities are regularly organised for overall development of students and keep them fit and develop competitive attitude. Details of extracurricular events organised during the reporting period are as follows.

Status of extra and co-curricular activities of College of Agriculture, GKVK, Bangalore (2016-17 to 2020-21)

Sl. No.	Year	Type of Event	Name of the event	Award/Medals received in the events
1	2016-17	Inter campus	Cricket Men	Winners
		Inter campus	Kabaddi Men	Runners
		Inter campus	Kabaddi Women	Runners
2	2017-18	Inter campus	Football Men	Runners
		Inter campus	Kabaddi Men	Winners
		Inter campus	Kabaddi Women	Runners
3	2018-19	Inter campus	Basketball Men	Winners
		Inter campus	Basketball Women	Runners
		Inter campus	Table Tennis Men &	Runners
		Inter campus	Table Tennis Women	Runners

		Inter campus	Cricket Men	Winners
4	2019-20	Inter campus	Kabaddi Women	Winners
		Inter campus	Kabaddi Men	Third Place
		Inter campus	Badminton Men	Winners
		Inter campus	Badminton Women	Third Place
		5	2020-21	Due to outbreak of Covid-19 pandemic no events are conducted

Details of Sports events participated by College of Agriculture, GKVK, Bangalore

Sl. No.	Type of Event	Name of the event	Event Participated	Award/ Medals received in the events
1. 2015-16				
	Inter campus	Football (M)	CoA, GKVK	Winners
	Inter campus	Kho-Kho (W)	CoA, GKVK	Winners
	Inter campus	Table Tennis (M)	CoA, Mandya	Winners
	Inter campus	Badminton (W)	CoA, GKVK	Winners
	Inter campus	Cricket (M)	CoA, GKVK	Runners
	Inter campus	Chess (M &W)	CoS, Chintamani	Runners
	Inter campus	Kabaddi (M)	CoA, Hassan	Runners
	Inter campus	Table Tennis(W)	CoA, Mandya	Runners
	ICAR (Agri. Sports)	4X100 m R	16 th All India ICAR All India Sports & Games Meet held at TNAU, Coimbatore, TN	Gold Medal
	ICAR (Agri. Sports)	Kabaddi,		Gold Medal
	ICAR (Agri. Sports)	Kho-Kho		Gold Medal
	South zone	Kabaddi (M)	Kuvempu University from Shivamogga from 15 -19 October 2015	
	South zone	Cricket (M)	Savitha University, Chennai from 20-Jan – 6 February 2016	
	South zone	Football (M)	Amrutha Vishwa Vidyapeetam, Coimbatore from 10-19 December 2015	
	South zone	Chess (M)	Amrutha Vishwa Vidyapeetam, Coimbatore from 6-10 October 2015	
	South zone	Ball Badminton (M)	Mangalore University Campus, Mangala Gangotri, D.K from 2-6 January	
	South zone	Basketball (W)	SRM University, Chennai from 24-28 September 2015	
2 2016-17				
	UASB Inter Campus	Cricket (M)	CoA, GKVK	Winners
		Chess (M &W)	CoS, Chintamani	Winners
		Table Tennis (M)	CoA, Hassan	Winners
		Badminton (W)	CoA, GKVK	Winners
		Kho-Kho (M)	CoA, GKVK	Runners
		Kho-Kho(W)	CoA, GKVK	Runners
		Kabaddi (M)	CoA, GKVK	Runners
		Kabaddi (W)	CoA, GKVK	Runners
		Badminton (M)	CoA, GKVK	Runners
		Table Tennis (W)	CoA, Hassan	Runners

ICAR (Agri. Sports)	Kabaddi (W)	17 th All India Inter Agri. University Sports and Games Meet held at CCS Haryana Agricultural University, Hisar – 125004 from 25 th to 29 th March 2017	1-Gold Medal
	Athletics (W)		1-Gold Medal
	Badminton (W)		1-Gold Medal
	Basketball(W)		1-Gold Medal
Zonal/South Zone Inter University Tournaments/ Championships	Badminton (M)	Ayya Nadar Janaki Ammal College, Madurai Kamaraj University Virudhunagar, TN from 3-7 October 2016	
	Chess (M)	Vel-Tech Dr. RR & DR.SR Technical University, Avadi, Chennai from 12-15 October 2016	
	Volleyball (M)	Mahatma Gandhi University , Kottayam, Kerela from 2-6 December 2016	
	Basketball (M)	University of Madras .D.G Vaishnav College, Arumbakkam, Chennai from 16-31 December 2016	
	Basketball (W)	University of Calicut, Kerela from 10-14 December 2016.	
	Ball-Badminton (M)	SRM University, Chennai from 29 December – 2 January 2017	
	Cricket (M)	Hindustan Institute of Technology, Chennai from 2- 11 January 2017	
	Kho-Kho (M)	Mangalore University , Mangalore from 10-13 January 2017	
	Kabaddi (W)	Vel-Tech Dr. RR & DR.SR Technical University, Avadi, Chennai from 18-22 January 2017	
	Kabaddi (M)	Bharathiar University, Coimbatore , TN from 14-17 December 2017	
	Football (M)	Gulbarga University, Kalburgi from 11-21 January 2017	
	2017- 18		
UASB Inter Campus	Kabaddi (M)	CoA, GKVK	Winners
	Table-Tennis (M)	CoA, Hassan	Winners
	Badminton (W)	CoA, Hassan	Winners
	Kho-Kho (W)	CoA, Hassan	Runners
	Badminton (M)	CoA, Hassan	Runners
	Kabaddi (W)	CoA, GKVK	Runners
	Football (M)	CoA, GKVK	Runners
	Basketball (M)	CoS, Chintamani	Runners
	Volleyball (M)	CoA, Mandya	Third position
	Volleyball (W)	CoA, Mandya	Third position
	Chess (M &W)	CoA, Mandya	Third position
	Kho-Kho (M)	CoA, Hassan	Third position
	Athletics (M&W)	Participated	Overall Runners
	100 m (W)	18 th All India Inter Agri.- Sports & Games meet UAS	1-Gold Medal
4x100 m R (W)		1-Gold Medal	

	4x400 m R(W)	(B), Bangalore from 30 Jan to 3 Feb 2018	1-Gold Medal
	200 m (W)		1-Silver Medal
	400 m (W)		1-Bronze Medal
	Kho-Kho (W)		2- Gold Medal
	Basketball (W)		1-Gold Medal
	Kabaddi (W)		1-Gold Medal
	Badminton (M)		2-Silver Medal
	Badminton (W)		1-Silver Medal
	Kho-Kho (M)		3-Silver Medal
Zonal /South Zone	Cricket (M)	Raghu Engineering College (A), Vishakapatnam, Andhra Pradesh (AP) from 3-12 January 2018	Participated
	Basketball (W)	Sri Sairam Engineering College, Anna University, from 26-29 December 2017	Participated
	Basketball (M)	Christ University, Bangalore 29 October – 3 November 2017	Participated
2018-19			
UASB Inter Campus	Football (M)	CoA, Hassan	Runners
	Kho-Kho (M)	CoS, Chintamani	Runners
	Kho-Kho (W)	CoS, Chintamani	Runners
	Basketball (M)	CoA, GKVK	Winners
	Basketball (W)	CoA, GKVK	Runners
	Table Tennis (M)	CoA, GKVK	Runners
	Table Tennis (W)	CoA, GKVK	Runners
	Kabaddi (W)	CoS, Chintamani	Winners
	Kabaddi (M)	CoS, Chintamani	Runners
	Volleyball (W)	PGS GKVK	Winners
	Volleyball (M)	PGS GKVK	Third Place
	Badminton (M)	PGS GKVK	Winners
	Badminton (W)	PGS GKVK	Winners
	Cricket (M)	CoA, GKVK	Winners
	Athletics (M)	CoA, Hassan	Winners
	Athletics (W)	CoA, Hassan	Winners
Chess (M&W)	CoA, Hassan	Winners	
ICAR (Agri.- Sports)	Badminton (M)	19 th All India Inter Agri. Sports and Games Meet held at PAU, Ludhiana from 2 nd -5 th Jan 2019	Participated
	Volleyball (W)		Participated
	4X100m (W)		Gold Medal
	Shot Put (W)		Participated
	Basketball (W)		2- Gold Medal
	Basketball (M)		Participated
	Kho-Kho (W)		4-Silver Medal
	100m (W)		Gold Medal
	200m (W)		Gold Medal
	4X100m (W)		Gold Medal
	800m (W)		Silver Medal
	4X100m (W)		Silver Medal
Zonal/South Zone Inter University Tournaments/ Championships	Kho-Kho (W)	M G Stadium, Udupi, Mangalore University from 15-18 October 2018	Participated
	Kabaddi (W)	Bangalore North University from 12-15 November 2018	Participated

		Basketball (W)	SRM University, Chennai from 4- 8 November 2018	Participated
		Table Tennis(M)	GITAM University, Vishakhapatnam, Andhra Pradesh from 3-5 December 2018	Participated
		Roller Sports(M)	All India Inter University Meet, MDU, Rothak, 27 th - 31 st Jan 2019	Participated
		Karate (M)	All India Inter University Meet, MDU, Rothak, 20 th - 25 th Feb 2019	Participated
		Kho-Kho (M)	South Zone Kho-Kho Camp held at Tirupathi from 24 th - 28 th Oct. 2018	Participated
		Kho-Kho (W)	South Zone Kho-Kho Camp held at Mangalore Univ. DK from 15 th - 18 th Oct. 2018	Participated
		Volleyball (M)	South Zone Volleyball Champ held at SRM Univ. Chennai from 9 th - 14 th Nov. 2018	Participated
		Football (M)	South Zone Football Championship held at Pondicherry Univ. from 3 rd - 11 th Dec. 2018	Participated
		Kabaddi (M)	South Zone Kabaddi Champ. held at SRM Uni from 19 th - 23 th Dec. 2018	Participated
		Cricket (M)	South Zone Cricket Champ. held at VTU, Belgaum from 14 th - 24 th Jan. 2019	Participated
	2019-20			
	UASB Inter Campus	Volleyball (W)	CoA, Mandya	Runners
		Volleyball (M)	CoA, Mandya	Third Place
		Ball Badminton(M)	CoA, Mandya	Third Place
		Football (M)	CoS, Chintamani	Winners
		Chess (M & W)	CoS, Chintamani	Runners
		Kabaddi (M)	CoA, GKVK	Third Place
		Kabaddi (W)	CoA, GKVK	Runners
		Badminton (M)	CoA, GKVK	Winners
		Badminton (W)	CoA, GKVK	Third Place
		Cricket (M)	PGS GKVK	Winners
		Table Tennis(M)	PGS GKVK	Runners
		Table Tennis(W)	PGS GKVK	Winners
		Basketball (W)	CoA, Mandya	Winners
		Basketball (M)	CoA, Mandya	Runners
		Kho – Kho (W)	CoA, Hassan	Runners
		Athletics (M)	CoA, Mandya	Winners
		Athletics (W)	CoA, Mandya	Winners
	ICAR (Agri.- Sports)	Volleyball (W)	20 th All India Inter Agri. Sports and Games Meet held at Sri Venkateshwara Veterinary University	3-Gold Medal
		Basketball (W)		2-Gold Medal
		Basketball (M)		Participated
		Kho-Kho (W)		3-Silver Medal
		4X100m (W)		Gold Medal
		100m (W)		Gold Medal
		200m (W)		Gold Medal

	4X100m (W)	Tirupati. A.P. from 1 st to 5 th March 2020.	Gold Medal
	1500 m (W)		Participated
	800m (M)		Gold Medal
	1500m (M)		Gold Medal
Zonal /South Zone	Kabaddi (W)	South Zone Kabaddi Women Camp. held at Vel-Tech University , Chennai from 3 rd - 6 th Oct 2019	Participated
	Kabaddi (M)	South Zone Kabaddi Camp. held at Govt. First Grade College, PG Studies, Udupi from 11 th - 14 th Dec 2019	Participated
	Volleyball (M)	South Zone Volleyball Champ held at SRR and CVR Govt. Degree College, Vijayawada, Krishna University, A.P from 26 th - 30 th Nov 2019	Participated
	Volleyball (W)	South Zone Volleyball Champ held at SRM Univ. Chennai from 6 th - 10 th Dec 2019	Participated
	Cricket (M)	South Zone Cricket Camp. held at University of Mysore from 28 th Nov - 11 th Dec 2019	Participated
	Basketball (M)	South Zone Basketball Camp. held at Hindustan Institute of Technology and Science, Chennai TN, 7 th - 11 th Dec 2019	Participated
	Basketball (W)	South Zone Basketball Women Camp. held at SRM Arts and Science College Chennai Univ. Chennai from 15 th - 19 th Dec 2019	Participated
	Football (M)	South Zone Football Camp. held at Vellore Institute of Technology, Vellore TN from 9 th - 18 th Dec 2019	Participated
	Badminton (M)	South Zone Badminton Men Camp. held at SRM Univ. Chennai from 16 th -20 th Dec 19	Participated
	Chess (M)	South Zone Chess Camp. held at Gandhi gram Rural Institute ,Dindigul, Tamil Nadu from 22 nd - 25 th Dec 2019	Participated
	Kho-Kho(M)	South Zone Kho-Kho Camp held at Kuvempu, Univ. Shimoga from 23 rd -26 th Dec 2019	Participated
	Athletics (M &W)	AIIU, Athletics Camp. at Alvas Moodibidri from 2 nd - 6 th Jan 2020	Participated
	Ball Badminton (M)	AIIU, Ball Badminton Tournament at Alvas	Participated

			Moodibidri from 29 Jan - 2 nd Feb 2020	
		Roller Sports (M)	RIMT Univ. Mandi, Gobindnagar, Punjab from 11 th - 14 th Feb 2020	Participated
2020-21 UASB Inter Campus Sport and Games have not been conducted due to COVID -19				

Details of the Cultural events participated by College of Agriculture, GKVK

Academic Year	Events Particulars	Music			Dance	Theatre				Fine Arts						Literary			
		Group Song (Indian)	Patriotic Song (Indian)	Light Vocal (Indian)	Group Dance (Folk)	Skit	One Act Play	Mime	Mono Acting	On the spot Painting	Rangoli	Collage	Cartooning	Clay Modelling	Poster Making	Extempore	Debate	Elocution	Quiz
2016-17	Inter Collegiate Youth festival	II	-	II	III	-	-	-	II	II	-	II	-	II	III	II	I	I	III
	AGRIUNIFEST (Nationals)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No. of Students participated from CoA, GKVK (UG) at national level	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-
2017-18	Inter Collegiate Youth festival	I	II	I	II	II	II	I	-	I	-	-	-	-	I	-	I	I	-
	AGRIUNIFEST (Nationals)	-	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	No. of Students participated from CoA GKVK (UG) at national level	3	3	1	4	3	1	3	-	1	-	1	-	-	1	-	-	-	-
2018-19	Inter Collegiate Youth festival	I	-	-	II	III	III	I	-	I	III	-	III	-	II	III	II	-	I
	AGRIUNIFEST (Nationals)	-	-	-	-	-	II	-	-	-	-	-	-	-	-	-	-	-	-
	No. of Students participated from CoA, GKVK (UG) at national level	2	2	-	2	1	2	1	-	-	-	-	-	-	-	-	-	-	2
2019-20	Inter Collegiate Youth festival	III	III	II	I	I	I	-	III	III	-	-	II	-	II	II	-	I	-
	AGRIUNIFEST (Nationals)	-	-	-	I	II	III	-	-	-	-	-	-	-	-	-	-	-	-
	No. of Students participated from CoA, GKVK (UG) at national level	1	1	-	6	4	8	2	-	-	-	-	-	-	-	-	1	1	-
2020-21	Due to COVID-19 pandemic, programmes were not scheduled																		

*2016-17: Nationals (17th Agri-Unifest held at RAJUVAS, Bikaner) - Overall 3rd Position

*2017-18: Inter Collegiate Youth festival (held at Hassan) - Overall Championship Winners

*2018-19: Inter Collegiate Youth festival (held at Mandya)- Overall Championship 2nd Runners

Nationals (19th Agri-Unifest held at SDAU, Dantiwada) - Overall 5th Position

*2019-20: Inter Collegiate Youth festival (held at PG GKVK)- Overall Championship Winners,

Nationals (20th Agri-Unifest held at IGKV, Raipur) - Dance Winners, Theatre Winners & Overall 4th Position

Details of the Sports Activities of College of Agriculture Mandya

Sl. No	Organized/year	Event	Award / Prize
1	2016-17		
	CoA, GKVK, Bangalore (UG)	Chess	Participated
		Volleyball	Participated
		Basketball (Women)	Participated
		Basketball (Men)	Participated
		Ball Badminton	Participated
		Football	Participated
		Cricket	Participated
		Kho-Kho (Men)	Participated
	National level, Jorhat, Assam	Kabaddi (Women)	Gold medal
Kho-Kho (Women)		Gold medal	
2	2017-18		
	Inter Campus		
	18 th All India Agri-sports and Games meet 30 th January to 03 rd February 2017, GKVK, Bangalore	Kho-Kho (M)	Silver medal
		Kho-Kho (W)	Gold medal
		Kho-Kho (W)	Gold medal
		Kabaddi (W)	Gold medal
		Kabaddi (W)	Gold medal
		Basketball (W)	Gold medal
		Basketball (W)	Gold medal
		Shuttle (W)	Silver medal
	Inter Campus		
	College of Agriculture, V.C. Farm, Mandya from 9 th to 11 th September 2017	Volleyball (M)	Silver medal
		Volleyball (W)	Silver medal
		Chess	Silver medal
	College of Agriculture, Hassan From 9 th to 11 th December 2017	Kho-Kho	Participated
		Badminton	Participated
		Table Tennis (M)	Silver medal
	College of Agriculture, GKVK Bangalore from 07 th to 09 th October 2017	Football (M)	Gold medal
		Ball badminton (M)	Participated
	College of Agriculture, GKVK Bangalore from 16 th to 18 th October 2017	Cricket (M)	Participated
	College of Sericulture, Chintamani from 23 rd to 25 th October 2017	Basketball (M)	Participated
		Basketball (W)	Gold medal
	College of Agriculture, GKVK Bangalore from 07 th to 10 th January	Athletics	Participated
	Zonal Level Sports		
	SRM University December 25 th to 31 st December 2017	Basketball (W)	Participated
		Basketball (W)	Participated
		Basketball (W)	Participated
Basketball (W)		Participated	
Ragu Engineering College, Vishakapatnam Andhra University Dec-25 th 2017 to 01 st January 2018	Cricket	Participated	
3	2018-19		
	Inter Campus		
	COA. Mandya 9 th to 11 th September 2017	Volley ball (M)	Gold medal
			Silver medal
		Volleyball(W)	Gold medal
			Silver medal
	Chess	Gold medal	
Silver medal			
Zonal Level			
	Football (M)	Participated	

	South Zone Inter University Football tournament (Men) 2018 from 3 rd to 11 th December 2018 Pondicherry University, Pondicherry	Football (M)	Participated
		Football (M)	Participated
		Football (M)	Participated
		Football (M)	Participated
	South Zone Inter University Basketball tournament (Men) 2018 from 22 nd to 26 th November 2018, SRM University Chennai	Basketball (M)	Participated
	South Zone Inter University Cricket tournament (Men) 2018 from 14 th 24 th January 2019 at Jawaharlal University Shivamogga	Cricket (M)	Participated
	South Zone Inter University Kabaddi tournament (Men) 2018 from 21 st to 23 rd December 2018 at SRM University Chennai	Kabaddi (M)	Participated
		Kabaddi (M)	Participated
		Kabaddi (M)	Participated
		Kabaddi (M)	Participated
	South Zone Inter University Kabaddi tournament (Women) 2018 from 12 th 15 th November 2018 at Bangalore North University, Bangalore	Kabaddi (W)	Participated
		Kabaddi (W)	Participated
	South Zone Inter University Volleyball tournament (Men) 2018 from 9 th to 14 th November 2018 at SRM University Chennai	Volleyball (M)	Participated
		Volleyball (M)	Participated
Volleyball (M)		Participated	
South Zone Inter University Kho-Kho tournament (Women) 2018 from 15 th to 18 th October 2018 at Mangalore University, Udupi	Kho-Kho (W)	Participated	
National Level			
19 th All India Agri.-sports and Games meet 1 st to 5 th January 2019 at Punjab Agricultural University, Ludhiana	Kho-Kho (W)	Silver medal	
	Kho-Kho (W)	Silver medal	
4	2019-20		
CoS, Chintamani	Football	II Place	
	Chess	Participated	
CoA, GKVK, Bangalore (UG)	Kabaddi (M)	II place	
	Kabaddi (W)	II place	
	Badminton (M)	Participated	
CoA, Hassan	Kho-Kho (M)	Participated	
PGS, GKVK, Bangalore	Cricket	IV Place	
	Table Tennis (M)		
Inter Campus			
20 th -22 nd August 2019, CoA, V.C. Farm, Mandya	Volleyball (M&W)	Participated	
15 th -17 th October 2019, CoA, V.C. Farm, Mandya	Ball Badminton (M)	Participated	
10 th -12 th February 2020 CoA, V.C. Farm, Mandya	Basketball (M&W)	Participated	
	Inter-collegiate Athletic Tournament	Participated	
5	2020-21	No events organized due Covid-19 pandemic	

Cultural Activities of College of Agriculture, Mandya

Sl. No	Organized/Year	Event	Award / Prize
1	2016-17 Inter Campus, College of Agriculture, Mandya	Group Song- Patriotic	I prize
		Mime	II prize
		Skit	II prize
		Quiz	II prize
		One act play	III prize
	Inter-University Cultural Meet at UAS, Bengaluru	Skit	II prize
2	2017-18 Inter-Campus	Patriotic song	Gold medal
	College of Agriculture, Hassan from 23 rd to 24 th February 2018	Folk dance	Gold medal
		Rangoli	Gold medal

		Quiz	Silver medal
		One act play	Bronze medal
		Skit	Bronze medal
		Clay Modeling	Bronze medal
		Poster making	Bronze medal
		Solo song	Bronze medal
		Elocution	Bronze medal
	Inter-collegiate debate competition held on 28.12.2017 at College of Agriculture GKVK	Debate (PG)	Silver medal
		Debate (UG)	Bronze medal
	District level Kannada and Samskruthiilakhe and Rangayana, Mysuru at Nalvadi Krishnaraja Kalamandir, Mandya from 11.02.2018 to 12.02.2018	Drama (Ninageneengelathi)	Gold medal
		Folk dance(kamsale)	Silver medal
	Division level Kannada and Samskruthi ilakhe, and Rangayana, Mysuru, at Rangayana, Mysuru on 15.02.2018 to 17.02.2018	Drama	Bronze medal
		Folk dance	Participated
	2018-19		
3	Inter Campus, College of Agriculture, Hassan from 23 rd to 24 th February 2018	Elocution	Gold medal
		Debate	Silver medal
		Extempore	Bronze medal
		Group song (Folk)	Bronze medal
		Collage	Bronze medal
		Mime	Bronze medal
		Group dance (Folk)	Bronze medal
		Mono acting	Bronze medal
	2019-20		
4	13-14 th January 2019, Youth Festival Suggi Sambrama UAS, GKVK, Bangalore	Group Song (Patriotic)	II Place
		Group Song (Folk)	II Place
		Folk Dance	III Place
		Skit	II Place
		Rangoli	III Place
		Poster Making	III Place
		Debate	II Place
		Elocution	II Place
		Extempore	III Place
	18-22 nd December 2019, 35 th South zone State University Youth Festival Alagappa University, Kariakudi, Tamilnadu	Debate	Participated
		Spot paining	Participated
		Collage	Participated
	5-7 th January 2019 Women Science Congress Science Exhibition, UAS, GKVK, Bangalore	Quiz	I place
		Science Modelling	II place
	8 th to 12 th February 2020, All India States University at IGKV, Raipur	Skit	II Place
		Mono Acting	I Place
5	2020-2021 No participation in cultural events due to COVID-19		

NSS/ NCC/ programmes organized at CoA, Mandya

The National Service Scheme (NSS) unit was established in the College of Agriculture, V.C. Farm, Mandya to prepare and motivate students to contribute for Nation developmental activities on various developmental issues of national importance with a sense of patriotic commitment. NSS programme make the students to give due respect for diversities in religion, language, culture, ethnicity, life style and habitat to install a sense of national unity and social cohesion. Main moto of NSS is to improve the ability to participate in community development and other social programmes. NSS unit and its volunteers are actively progressing well. NSS 111 (0+1) course is offered for two years in four semesters for first and second B.Sc. (Hons.) Agri. students.

Regular NSS Activities conducted for volunteers in the camps

- Removal of Parthenium and other weeds in the college premises
- Planting of Tree saplings
- Gardening and landscaping activities in front of college buildings.
- Cleaning and maintenance of hygienic condition in the campus premises.
- Assisting in field preparation by removing tree / trashing.
- Maintenance of planted saplings in the campus (cleaning, watering & pruning)
- Maintenance of compost collection unit in the college premises to collect solid wastes and leaf litter.
- Removal of plastics and maintaining plastic free zone in the campus is a continuous activity.
- Regular conduct of 'Swachata Abhiyan' in the campus.

NSS Special Camp

Seven days special camp is an integral part of NSS course curriculum. At the end of second year NSS programme, suitable villages will be selected and special camp will be organised for NSS volunteers under the guidance of state NSS officers, University Co-ordinator and concerned college Programme Officer. Depending upon the village, several Agricultural and non-Agricultural events will be conducted. Some of the major activities conducted during special camps are furnished below.

Major Activities undertaken by NSS volunteers in Special camps

- Personality development class for volunteers and school children.
- Rodent Control demonstration
- Guest lecture on Dental Health and conduct of free dental check-up for villagers and school children.
- Creation of awareness about blood donation among villagers on the occasion of world blood donation day.
- Creation of awareness on environment, contagious human diseases, alcoholism, disadvantages of cell phones.
- Survey studies on use of toilets in the village
- Creating awareness on maintenance of cleanliness in the village
- Arranged guest lectures on Agriculture related aspects by involving various scientists of the College, Zonal Agriculture Research Station and Krishi Vigyan Kendra

NSS-Special Camps organized during 2016-17 to 2020-21 CoA., Mandya

Academic Year	Duration	Place
2016-17	01.05.2016 to 07.07.2016	Konanahalli, Mandya Tq. & Dist.
2017-18	11.04.2017 to 17.04.2017	Yachenahalli, T.Narasipura Tq, Mysore Dist.
2018-19	26.05.2018 to 01.06.2018	Bevinahalli, Mandya Tq. & Dist.
2019-20	03.06.2019 to 09.06.2019	Kempegowdana Koppalu, Bannur Tq, Mysore Dist.

Glimpses of Special Camps

Programme Conducted/Organized Under National Service Scheme (NSS)

Sl. No.	Programmes	2016-17	2016-17	2017-18	2018-19	2019-20
1.	World Environmental Day	05.06.2016	05.06.2016	05.06.2017	05.06.2018	05.06.2019
2.	Indian Constitution Day	25.11.2016	25.11.2016	25.11.2017	25.11.2018	25.11.2019
3.	Youth Day	12.01.2016	12.01.2016	12.01.2017	12.01.2018	12.01.2019
4.	Gandhi Jayanthi	02.10.2016	02.10.2016	02.10.2017	02.10.2018	02.10.2019
5.	Yoga Camp, CoA, Mandya	-	-	21.06.2017	-	-
6.	Swaccha Pakhwada	-	-	01.08.2017 to	-	-

	College of Agriculture, V.C farm, Mandya & Adopted village (Kannahatti)			15.08.2017		
7.	Sadbhavana Divas	-	-	18.08.2017	-	-
8.	Parthenium eradication day College of Agriculture, KVK & ZARS surroundings of V.C farm, Mandya	-	-	21.08.2017 to 23.08.2017	-	-
9.	Lal Bhahaddur Shastri Jayanthi, NSS day	-	-	02.10.2017	-	-
10.	Cleaning activities Playground adopted, Park maintained, Class room surrounding cleanliness, collection of solid waste materials etc.	-	-	Once in a week	-	-
11.	Special Guest lecture was organized for first year B.Sc. Agri. NSS Volunteers on importance of NSS and Activities, Guest lecture delivered by the State award winner for Social Activities	-	-	-	-	07.09.2019
12.	Environmental Awareness programme at Srirangapatna	-	-	-	-	26.10.2019
13.	Participated and poster presented at workshop on tobacco control at GKVK Bangalore	-	-	-	-	05.03.2020

Participation of Volunteers in Off-Campus activities, CoA., Mandya

Sl. No.	Programme / Camp	Date
1.	NSS youth Festival at SDM, College, Ujire	09.04.2016 to 13.04.2016
2.	Republic Day pre-parade training camp at Gnanabharathi campus, Bangalore University, Bangalore	14.09.2016 to 15.09.2016
3.	Three days' Workshop on Role of Yoga on Wellness and Healing	19.06.2017 to 21.06.2017
4.	Second State Level NSS Youth Festival at M.G. Stadium, Ajjarakadu, Udupi	18.08.2017 to 22.08.2017
5.	Republic Day prepare training camp at GKVK, Bangalore	14.01.2018 to 26.01.2018
6.	NSS National Integration Camp – 2018, Bangalore	01.03.2018 to 07.03.2018
7.	National Integration Camp, Bangalore	03.09. 2018 to 09.09.2018
8.	Republic Day pre-parade training Camp – 2018-19 at Visveswaraya Technical University, Belgaum	03.10.2018 to 04.10.2018
		06.10.2018 to 07.10.2018

9.	State Level Youth Festival at Karnataka University, Dharwad 2018-19	12.10.2018 to 16.10.2018
10.	Acharya Thulasi Commerce College, Shivamogga National Youth Festival 2018-19	06.06.2019 to 10.06.2019
11.	Tenth Bharathiya Chhatra Sansad (Indian Student Parliament)	23.02.2020

Details of Sports and Extracurricular events organised by College of Agriculture Hassan

Sl. No.	Year	Type of Event (Sports/ Games/ Cultural activities/ NSS/ NCC/ PED / ICAR Agri.-Unifest / ICAR Agri.- sports/any other)	Name of the event	Event Organised / Participated	Award/ Medals received in the events	
1	2016-17	Inter-Collegiate	Volleyball Table Tennis (M&W)	Organised 23 rd to 25 th Oct2016	Volleyball (W) Winners , Table Tennis, (M) Third Place,(W) Third Place	
Cultural Activities						
During Academic Year 2016-17 Decennial celebration was organised and intercampus Youth festival was hosted						
2		NSS Unit, CoA Hassan	National Integration camp	Organized	-	
3			Observed plastic free campaign	Organized	-	
4			Organized Yoga camp	Organized	-	
5			Blood Donation Camp	Organized	-	
6			Farmers Day	Organized	-	
7		World Environmental Day	Organized	-		
	2017-18	Inter-Collegiate	Kho-Kho Shuttle Badminton Table Tennis(M&W)	Organised 9 th to 11 th Dec2017	Kho-Kho (W) Winners (M) Winners Shuttle Badminton (M) Winners (W) Runners Table Tennis (M) Third Place	
Cultural Programme:						
		Inter Campus Youth festival conducted at CoA, Hassan	Youth festival “ Idani-2018 ”	Organized	-	
			One act play	Organized	I	
			Skit	Organized	I	
			Patriotic Song		III	
			Quiz	Organized	I	
			Extempore	Organized	II	
			Debate	Organized	I	
			Cartooning	Organized	I	
			Mime	Organized	III	
			Mono acting	Organized	I	
			Poster making	Organized	I	
NSS						
	NSS	NSS special camp	Organized			
		Yoga camp	Organized			
		Swaccha Pakhwada	Organized			

			Sadbhavana Divas	Organized		
			Parthenium eradication day	Organized		
			Gandhi Jayanthi, Lalbahadur Shastri Jayanthi, NSS day	Organized		
			Cleaning activities	Organized		
			NSS Annual special Camp	Organized		
	2018-19	Inter-Collegiate	Foot-ball (Men) Athletic & Chess (M&W)	Organised 30 th Aug to 01 st Sep 2018 20 th to 21 st Mar 2019	Foot-ball-(M) Participated Athletics Participated (M&W) Chess (M&W) Runners	
		Cultural - NIL				
		NSS	Tree plantation, animal and human health camps	Organized	-	
	2019-20	Inter-Collegiate	Kho-Kho (M&W)	Organised 31 st Oct & 1 st Nov 2019	Winners (M&W)	
		Cultural - NIL				
		Camps organized under NSS activity	Free animal health, dental, blood donation and eye camps at Anathi village	Organised		
			“Plastic-Waste Free’ Campaign as a part of “Swachhata Hi Seva – 2019”	Organised		
	2020-21	Due to covid-19 No Sports, Games and cultural activities are conducted				
		NSS	“World AIDS Day” and World Human Rights Day” programmes are conducted in association with Youth Red Cross Society	Organised		

Details of Extracurricular events, participated by College of Agriculture, Hassan

Sl. No.	Year	Type of Event (sports/ games/ cultural activities/ NSS/ NCC/ PED / ICAR Agri.- Unifest/ ICAR Agri.-sports/ any other)	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2016-17	South-Zone	South Zone Inter University, Ball Badminton tournament	Participated	Chidananda.K III B.Sc. Agri. Chandrashekar

		held at Mangalore university, Mangalore		III B.Tech. FS & T Bhargava III B.Sc. Agri.
	South-Zone	South Zone Inter University, Chess tournament at Tamilnadu		Vinayak Meti IV B.Sc. Agri. BT Deepak Raj III B.Tech. FS&T
	South-Zone	South Zone Inter University, Football tournament at Karla		Yathish G IV B.Sc. Agri. BT
	South-Zone	Volleyball South zone Inter University Tournament 2016-17 held at Mahatma Gandhi Kottayam, Kerala from 3 rd to 7 th of October 2016		Sagar Prakash Kamaldinni III B.Sc. Agri.
	South-Zone	South Zone Inter University Cricket tournament at Tamil Nadu		Saheb Gowda Vijay Raj DM IV B.Sc. Agri.
	South-Zone	South Zone Inter University Kabaddi tournament at Tamil Nadu		Shivappa Ashok Petlur III B.Sc. Agri.
	South-Zone	South Zone Inter University		Shiva Kumar B S IV B.Sc. Agri. Prabhakar V Goni III B.Sc. Agri. Nandeesh T R III B.Sc. Agri.
	South-Zone	South Zone Inter University Basketball tournament at Kerala		Usha H R (I B.Sc. Agri.) Kavya M R N IV BTech FS&T
	<p>Kiran Kumar (IV B.Sc. Agri.): Gold Medal in 4x100 m. relay, Bronze medal in 4x400 m. relay Kavya M R (IV BTech FS&T):Silver Medal in High Jump Usha H R (I B.Sc. Agri.): Gold Medal in 4x100 m. relay, Silver Medal in 100 m. Hurdles, Bronze medal in Triple Jump Umamaheshwari (III BTech FS&T): Gold Medal in Kabaddi Dhanyatha P D (I BTech FS&T): Gold Medal in Kabaddi 17th All India Inter Agriculture Sports and Games Meet held at CCS, HAU, Haryana from 25th to 29th March 2017</p>			
	Cultural Activities, CoA, Hassan			
	Cultural Unifest	– Group Song (Folk Indian), Patriotic Song (Indian), Light Vocal (Indian), Group Dance (Folk), Skit, One Act Play ,Mime Mono Acting, Painting on the spot, Rangoli, Collage, Cartooning, Clay Modeling, Poster Making ,Speeches Extempore, Debate Elocution, Quiz	Participated	Gold Medal, Silver, Bronze
	NSS- NIL			

2	2017-18	South – Zone:			
		South zone Inter University, Cricket tournament at Vishakapatnam			
			Usha H R	4X400 m. 4X100 m. Kho-Kho	Gold Medal Gold Medal Gold Medal
			Chandhana L	4X100 m. 1500 m.	Bronze -Medal Silver Medal
			Punyashree	Kho- Kho	Gold Medal
			Suprabha	Kabaddi	Gold Medal
			Shashikala B Dalawai	Kabaddi	Gold Medal
			Dhanyatha P D	Kabaddi	Gold Medal
			Varshitha K V	Basketball	Gold Medal
			Sinchana J K	Kho- Kho	Gold Medal
			Shylaja H	Kho- Kho	Gold Medal
			Umamaheshwari C	Kabaddi	Gold Medal
	Prabhakar V Goni	Kho- Kho	Silver Medal		
	Nandeesh J R	Kho- Kho	Silver Medal		
	Sagar T N	Badminton	Silver Medal		
18 th All India Inter Agriculture Sports and Games Meet held at UAS, GKVK, Bangalore from 30 th January to 03 rd February 2018					
Cultural Programme					
	Cultural programme	National Level	Participated		
	Debate			III	
	Patriotic Song			III	
3	2018-19	South Zone	Kabaddi (Women) Bangalore North University at Government First Grade College, Devanahalli	Participated	Shashikala Dalawai FLH5042 Suprabha FLH5044 Lekhana ALH8044
		South Zone	Volleyball (Men) SRM Institute of Science and Technology, Kattankulathur, Chennai (T .N)	Participated	Ajay Hiremath ALH7003
		South Zone	Cricket (Men) Jawaharlal Nehru National College of Engineering, Navile, (JNNCE) Shivamogga, Karnataka	Participated	Vinayaka B N FLH5016 Praveen Kumar M B ALH5049
		19 th All India Inter Agriculture Sports and Games Meet	19 th All India Inter Agriculture Sports and Games Meet held at Punjab Agricultural university , Ludhiana Punjab from 02 nd to 05 th January 2019	Participated	
			Name of the student	Events	Position
			Usha H R	4X400 m. 4X100 m. Kho-Kho	Gold Medal Gold Medal Silver Medal
			Varshitha K V	Basketball	Gold Medal
			Rakshitha B S	Basketball	Gold Medal
			Lerissa Sweety D Silva	Basketball	Gold Medal
			Meghana	Volleyball	Participated

			Rakshitha K R	Volleyball	Participated
			Manoj N S	Shuttle Badminton	Participated
		Cultural programme			
		Cultural	Inter Collegiate youth festival	Participated	Overall championship
4	2019-20	South Zone	Volleyball (Women) South Zone Inter University, Volleyball (Women) Tournament at SRM IST Campus, Kattankulathur , Chennai Kancheepuram District(T.N)	Participated From 06 th to 10 th December 2019	Yuktha D V (ALH7088) Rakshitha K V (FLH7037) Meghana G (ALH8050) Rakshitha K R (ALH8075)
		South Zone	Basketball (Men) South Zone Inter University, Basketball (Men) Tournament at SRM IST Campus, Kattankulathur , Chennai Kancheepuram District(T.N)	Participated From 06 th to 10 th December 2019	Abhishek M K (BLH7001) Nithish Shetty P (FLH6039) Sandesh B C (ALH6067)
		South Zone	Basketball (Women) South Zone Inter University, Basketball (Women) Tournament at SRM Arts and Science College, Kattankulathur , Chennai from 15 th to 19 th December 2019	Participated From 15 th to 19 th December 2019	Varshitha K V ALH7083 Rakshitha B.S ALH8074 Meghana G ALH8050 Usha H R ALH6084
		South Zone	Football (Men) South Zone Inter University, Football (Men) Tournament at Vellore Institute of Technology, Vellore (T.N)	Participated From 09 th to 18 th December 2019	Chandan L FLH6012 Shivan Gouda Haranal BLH8047
		South Zone	Badminton (Men) South Zone Inter University, Badminton (Men) Tournament at SRM IST Campus, Kattankulathur , Chennai	Participated From 16 th to 20 th December 2019	Manoj N S ALH7044
		South Zone	Kho-Kho (Men) South Zone Inter University, Kho-Kho (Men) Tournament at Kuvempu University, Jnanasahyadri Shankaraghatta, Shivamogga District Karnataka from 23 rd to 26 th December 2019	Participated From 23 rd to 26 th December 2019	Yallappa BLH7054 Darshan Y B FLH7014 Mahesh B Keri FLH7024
		AIU	Athletics (Men) All India Inter University, Athletics (Men) Championship at Alva's College of Physical Education	Participated from 02 nd to 06 th January 2020	Chandan L FLH6012

		20 th All India Inter Agriculture Sports and Games Meet 2019-20	20 th All India Inter Agriculture Sports and Games Meet 2019-20 held at Sri Venkateshwara Veterinary University, Tirupati, Andhra Pradesh	from 01 st to 05 th March 2020	Position
			Varshitha K V	Basketball	Gold
			Rakshitha B S	Basketball	Gold
			Lerissa Sweety D Silva	Volleyball	Gold
			Yuktha D U	Volleyball	Gold
			Meghana G	Volleyball	Gold
			Usha H R	Kho-Kho	Silver
			Sindhu P	Kho-Kho	Silver
			Shilpashree M A	Kho-Kho	Silver
			Chandan L	Athletics	Silver
5	2020-21	No events conducted due to Covid 19 Pandemic			

Sports Activities of College of Sericulture Chintamani

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2016-17	Sports/ games	Kho-Kho(M)	Organised	12 Winners
		Sports/ games	Football(M&W)	Organised	15 Runners
2	2017-18	College of Sericulture, Chintamani	Basketball(M)	Organised	12 First
			Basketball(W)	Organised	12 Second
3	2018-19	College of Sericulture, Chintamani	Kabaddi (M)	Organised	12 Participated
			Kabaddi (W)	Organised	12 Participated
			Kho-Kho(M)	Organised	12 First
			Kho- Kho(W)	Organised	12 First
4	2019-20	College of Sericulture	Football (M)	Organised	15 Participated
			Chess (M)	Organised	4 Participated
			Chess (W)	Organised	1 Participated
5	2020-21	No events conducted due to Covid-19 Pandemic			

Details of extracurricular events participated by the College of Sericulture, Chintamani (National level) are furnished below.

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2016-17	Sports/ games	4x100m (W)	Participated	1 Gold
			100 m(W)	Participated	1 Silver
			200 m(W)	Participated	1 Silver
			4x100m (M)	Participated	2 Gold
			4x400m relay (M)	Participated	3Bronze
			Volleyball(W)	Participated	1 Represented
			Basketball (W)	Participated	3 Represented
Athletics	Participated	8 Represented			
2	2017-18	Sports/ games	4 x 100 m. (W)	Participated	1Gold
			4 x 400 m relay (W)	Participated	1Gold

			4 x 400 m relay (M)	Participated	3 Bronze
			Basketball (W)	Participated	3 Gold
			Kho-Kho (M)	Participated	4 Silver
			Kho-Kho (W)	Participated	1 Silver
			Hand ball (M)	Participated	3 Gold
			Korf ball (M &W)	Participated	8 Represented
			Shooting ball (M)	Participated	9 Represented
3	2018-19	Sports/ Games-	4x400 m relay (M)	Participated	2 Silver
			Basketball (W)	Participated	2 Gold
			Kho- Kho (W)	Participated	3 Silver
			Athletics (M & W)	Participated	3(M) & 2 (W) Represented
4	2019-20	Sports/ Games-	Basketball (W)	Participated	2 Gold
			Basketball (M)	Participated	1(M) Represented
			Kho-Kho (W)	Participated	2 Silver
			Athletics (M & W)	Participated	2(M) & 1 (W) Represented
5	2020-21	No events conducted due to Covid 19 Pandemic			

Cultural activities Participated, by the CoA, Chintamani (Zonal level) are furnished below

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2016-17	Sports/ games	Chess (W)	Participated	1 Represented
			Volleyball (M)		3 Represented
			Basketball (W)		4 Represented
			Basketball (M)		2 Represented
			Ball Badminton(M)		2 Represented
			Kho-Kho(M)		3 Represented
			Football(M)		5 Represented
			Kabaddi (M)		2 Represented
2	2017-18		Basketball (W)	Participated	4 Represented
			Basketball (M)		5 Represented
			Cricket (M)		3 Represented
3	2018-19		Volleyball (M)	Participated	1 Represented
			Basketball (W)		3 Represented
			Basketball (M)		2 Represented
			Kho-Kho(M)		5 Represented
			Kho-Kho(W)		5 Represented
			Football(M)		3 Represented
			Cricket (M)		4 Represented
			Kabaddi (M)		2 Represented
			Kabaddi (W)		2 Represented
			4		2019-20
Volleyball (W)	2 Represented				
Basketball (W)	3 Represented				
* Basketball (W)	1 Represented				
Basketball (M)	2 Represented				
Kho-Kho(M)	3 Represented				
Football(M)	3 Represented				
Kabaddi (M)	3 Represented				
Kabaddi (W)	3 Represented				
Cricket (M)	2 Represented				
Karate (W)	1 Represented				

			Athletics (M)		1 Represented
5	2020-21	No events conducted due to Covid 19 Pandemic			

Note: *The Third Khelo India Youth Games was held from 10-22 January 2020 hosted by Guwahati, Assam, India.

International Level: Three students of College of Sericulture, Chintamani have participated in international level handball (Men) tournament held at Colombo, Srilanka during 2018-19 and won gold medal

Details of Student Co-curricular activities at College of Sericulture Chintamani.

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events	
1	2016-17	Cultural activities	-	-	-	
2	2017-18		Clay modelling	Participated	1 Represented	
			Rangoli	Participated		
			Light vocal	Participated	1 Represented	
			Patriotic song	Participated		
			Group song	Participated		
3	2018-19		Rangoli	Participated	1 Bronze	
			One Act Play	Participated	5 Silver	
			Skit	Participated	3 Represented	
			Mime	Participated		
			Group song	Participated	1 Represented	
			Patriotic song	Participated		
			Folk dance	Participated		
4	2019-20		Cartooning	Participated	1 Represented	
			Clay modelling	Participated	1 Represented	
			Debate	Participated		
			Extempore	Participated		
			Folk dance	Participated	1 Gold	
5	2020-21		Due to Covid-19 Pandemic no events conducted			

The details of student participation at Zonal Level Cultural activities, College of Sericulture Chintamani

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2019-20	Cultural activities	Rangoli	Participated	1 representation
			Clay modelling	Participated	1 representation
			Cartooning	Participated	1 Bronze
2	2020-21	No events conducted due to Covid 19 Pandemic			

The Details of Student participation in different NSS Events, College of Sericulture Chintamani

Sl. No.	Year	Type of Event	Name of the event	Event Organised / Participated	Award/ Medals received in the events
1	2016-17	NSS Events	-	-	-
2	2017-18		NIC	Participated	Best volunteer
3	2018-19		RD parade	Participated	Naveen N Participated
4	2019-20		NIC	Participated	Participated
5	2020-21	No events conducted due to Covid 19 Pandemic			

6.6.6.3. Health Facilities

To ensure good health of the students and the staff of the University. The University has established Dispensary with two resident doctors, with availability of basic medicines, equipment and ambulance to meet the health emergencies at the campus.

A. Head Quarter, GKVK (Health Facilities)

University is providing minimum medical facilities to the students and staff at all the campuses for the treatment of common ailments. Cases of a severe nature are referred to major hospitals for diagnosis and advice. There are well-qualified medical, paramedical and assisting staffs, who coordinate well for smooth delivery of health care. In addition to Government Hospitals, some well-established private hospitals are also recognised for providing treatment. Multi-speciality hospitals are available within a radius of 5 km. Hired services of doctors are provided at all constituent colleges at scheduled days.

All students are covered by health Insurance of Rs.2 Lakh (in case of death) by United India Insurance Company Ltd., Malleshwaram, Branch, Bangalore. The centre is delivering health care facilities to the students (UG, PG, Ph.D., International students and their families residing in the campus), staff, faculty and their dependents of the employees residing in the quarters of the campuses.

Medical reimbursement is provided for all students with maximum to Rs, 50000/- per student through Student Aid Fund.

In the University headquarters, health facility is provided to the UG, PG, Ph.D., International students and their families, staff, faculty and the families of the employees residing in the quarters of the campuses.

Medical Facilities

There is seven bedded Main Health Centre (UAS dispensary) at GKVK Campus, Bangalore, measuring about 2500 sq. ft. It has sufficiently equipped Laboratory, pharmacy, Casualty/first aid room, Medical record room, observation room, two consultation rooms for consultation for examining the patient and waiting lounge for patients, besides, separate washrooms for collecting urine/stool samples.

There is sub-centre situated at Hebbal - providing first aid services to the staff working at MRS, Bakery training unit, trainees attending BTU programmes, families of UAS employees residing at quarters and the students studying in campus school/college (Nursery/primary/high school/PU college).

Staff position: This Centre has one Chief medical officer/Lady medical officer, one Asst. Medical officer (Male), one Sr. Pharmacist, one Pharmacist, one Pharmacist (on contract), one Sr. Assistant, one



Lab technician, one Attender, one Ward boy, one Ward girl, one D group employee, Two Ambulance drivers, one Housekeeping staff.

Equipment: The UAS Dispensary, GKVK has major equipment like, 12 Lead ECG machine for basic investigation for heart diseases; Biothesio meter (VPT) to find out the sensitivity in the foot (diabetic neuropathy); Otoscope for examination of the external ear; Direct Ophthalmoscope for retinal examination (posterior segment of the eye); glucometer- for estimation of capillary glucose; tuning forks for basic hearing tests (Rennes /Weber's), autoclave for sterilization of wound dressings, instruments for wound management, etc., Nebulizer for nebulizing acute bronchial asthma; X-Ray viewer; and vein viewer used for locating veins in obese individuals and children for finding vein.



Apart from the above we have facility for giving basic CPR (Ambu bag with face mask); Oxygen and AED- Automated External Defibrillator for reviving the patients having cardiac arrest. From 2012, 24x7 Ambulance facility is available. Designated ambulance drivers work in shifts. Apart from ambulance, an alternative vehicle is spared exclusively for students, for utilization during emergencies. Wheel Chairs are also made available at dispensaries as well as in the hostels (girls/ boys) and key places of the campus for use during emergencies.



There is home visit facility to the bed ridden/very sick patients is available. There are permanent and general health cards, arranged in a serial order for easy and quick service. Separate Health record books are maintained for the patients working on contract basis requiring long term follow up. This has helped the patients for follow up as well as treatment during emergencies (past medical history aids in the management of emergencies.). apart from above facilities, a first aid kit is provided to boys and girls (UG/PG) hostels and international hostel for utilisation during odd hours.



Clinical Laboratory facility: Established in the year 2008 with qualified lab technicians and staff. Laboratory is also enrolled into external quality assessment Scheme (EQAS), CMC-Vellore for the purpose of maintaining accurate and quality reports aiding in diagnosis and treatment of diseases. Laboratory & Diagnostic services are free of cost to the students, nominal charges to the employees, on par with the CGHS rates, which are reimbursed by the University.



1. Equipped with-Erba Fully automated biochemistry analyser for biochemistry analysis, (Blood sugar, Lipid profile, Liver function test, Renal function test etc.,)
2. Automated sysmex cell counter for Haematology (Complete blood count)
3. Facility for other tests - ESR, Peripheral smear.,
4. Smear for MP, Blood grouping & Rh Typing etc.,
5. Serology (Widal, HBsAg, VDRL etc.,)
6. Urine analysis
7. Stool Examination (Microscopic, Macroscopic, Occult blood etc.,)
8. Microscope, Centrifuge, Blood Rotators,
9. Made provision for the Glycaemic Index and studies on effect of plant-based foods in control of diabetes, HTN, Hyperlipidaemia, obesity, conducted by the students of the Dept. of Food Science and Nutrition, UAS, GKVK.
10. Provision is also made for practical classes of estimation of Hb%, lipid parameters, Blood sugar etc. to the students of Dept. of Food Science & Nutrition, UAS, GKVK.

Pharmacy

Experienced pharmacists are available. ensuring availability of essential medicines throughout the year. Medicines are issued to the students, staff & faculty at free of cost. Special provision is made to the students, wherein the medicines prescribed by the specialists for the illnesses which are not available in the dispensary are procured and issued at free of cost. Vaccines are procured for the benefit of patients (Anti rabies, Tetanus toxoid). Medicines necessary to treat Diabetes, Hypertension, Hyper lipidemia, chronic illnesses, allergic reactions due to insect bites, pollen, food substances or allergy due to any others; acute coronary syndrome (loading dose), Hypoglycaemia are made available to keep the disease under control in turn preventing the complications due to the said diseases. Medicines required for the management of mild to moderate form of Covid -19 (as per the guidelines) are made available.

Year wise Medical Services

2016-17:

The UAS Dispensary at GKVK campus provides medical consultation and prescription as outpatient to all the bonafied students and employees of the University. During 2016-17, consultation was rendered to a total of 20,607 patients at Bengaluru. Besides, 2,963 samples laboratory tests and analysis were conducted based on requirement and results were provided to the concerned along with medical prescription. Besides, all the students admitted to the University including Foreign Nationals are covered under compulsory Group Health Insurance Scheme (GHIS) to meet the emergent medical expenses.

A multi-speciality medical camp for the students and staff of UAS (B) has been conducted on 26.7.2016 at Kuvempu Sabangana by the Apollo Hospital, Bengaluru. Dr. H. Shivanna, Hon'ble Vice-Chancellor, UAS GKVK, Bengaluru inaugurated the medical camp. All the Officers of UAS are present on this occasion. Nearly 200 students and staff availed the benefits of this camp.

2017-18:

During 2017-18, consultation was rendered to a total of 19,563 patients at Bengaluru. Besides, 3,345 samples laboratory tests and analysis were conducted based on requirement and results were provided to the concerned along with medical prescription. Besides, all the students admitted to the University including Foreign Nationals are covered under compulsory Group Health Insurance Scheme to meet the emergent medical expenses.

2018-19:

During 2018-19, consultation was rendered to a total of 18,012 patients at Bengaluru. Besides, 2,183 samples laboratory tests and analysis were conducted based on requirement and results were provided to the concerned along with medical prescription. At satellite College campuses visiting doctors' services are arranged. Besides, all the students admitted to the University including Foreign Nationals are covered under compulsory Group Health Insurance Scheme to meet the emergent medical expenses.

2019-20:

During 2019-20, consultation was rendered to a total of 19,296 patients at Bengaluru. Besides, 2,234 samples laboratory tests and analysis were conducted based on requirement and results were provided to the concerned along with medical prescription. At satellite College campuses visiting doctors' services are arranged. Besides, all the students admitted to the University including Foreign Nationals are covered under compulsory Group Health Insurance Scheme to meet the emergent medical expenses.

The following medical services were provided during Indian Science Congress held from 03.01.2020 to 07.01.2020 at GKVK campus:

- Established temporary main health centre at ISC venue and sub-centres at Exhibition Area, North block, South block & Kuvempu Sabhangana
- Main health centre had facilities such as 6 beds ECG, AED, Nebulisation wound treatment, Suturing etc.
- Total no. of 1685 Delegates/participants are treated
- No. of emergencies treated on day care basis, IV Medication/ Fluids, Suturing: 46
- Admitted & treated at outside hospitals
- Arranged 108 Ambulances, with supportive staff, Deputed Govt. Medical Staff (Medical Officers, Staff Nurses) at various sub health centres
- Provided hired services from ASTER CMI & Madhumeha Health Centre to cope up with medical emergencies.

COVID-19 Pandemic Activities:

- Medical services continued even during lockdown period as part of essential service. In the first week of March 2020, educative posters related to prevention and spread of corona issued by the WHO to the public were displayed at hostels, North block, South block, Nayak Bhavan, ZARS- GKVK, Canara bank, Canteens, MRS Hebbal and other departments of UAS, GKVK campus. PDF format of the posters is mailed to the heads and Deans of all the colleges, research stations, KVKs for display at their respective centres.
- Educative video's related to Covid -19 were shared through WhatsApp. groups of GKVK.
- Awareness on Covid -19 hygiene was given to all the patients attended Dispensary. Hand sanitation, Social distancing in the waiting lounge of the patients, wearing mask & thermal screening are made mandatory.
- Advisory posters on social distancing, hand washing technique is displayed at key places of the dispensary for patient education.
- Disinfection measures were adopted as per the guidelines laid down by the ministry of health and family welfare, Govt. of India. Copy of Guidelines was mailed to all the Deans and Heads of Colleges/Research stations/KVKs. to adopt the same at their respective centres
- Regular updates related to Covid -19 were taken from Health and family welfare dept. Govt. of Karnataka, and BBMP health officials.
- Review meetings are conducted daily to ensure disinfection measures and preventive measures. Necessary PPE's are being used by the hospital staff. Chemoprophylaxis was initiated to the hospital staff as per the guidelines.



2020-21:

Covid preventive activities / measures continued in the campuses of the university

- Continued thermal screening at UAS dispensary.
- Continued usage of PPEs, their proper disposal, cleaning /disinfection of dispensary and other preventive measures for Covid- 19 are strictly followed as per the guidelines. Regular short meetings were conducted to ensure bio medical waste disposal and to ensure smooth functioning of dispensary works
- Covid-19 related services- Advice on Covid preventive measures, referral for Covid-19 testing, management of suspects, positive cases are being continued.
- RT PCR result reports of Covid-19, of the students who came to the campus to carry out their research activities/training, were verified and attested
- Continued the care of Covid-19 suspects/positive cases with respect to isolation/quarantine measures. Concerned hostel wardens'/office heads were communicated to take necessary measures with respect to disinfection / sanitation measures at offices and ensured Covid-19

testing of all primary contacts. Covid positive patients and primary contacts were issued medications. Appropriate Investigations were suggested and monitored.

- Provided Ambulance service to the employees and students for shifting to the hospitals for emergency management.
- Emergencies are attended 24/7
- During 2020-21, consultation was rendered to a total of 20, 029 patients at Bengaluru. Besides, 2,674 samples laboratory tests and analysis were conducted based on requirement and results were provided to the concerned along with consultation and medical prescription.

Covid Care Center at GKVK Campus

- WHO declared COVID 19 as a global pandemic in the month of March 2020. The Government of Karnataka with the advice of Govt. of India has undertaken meticulous measures to contain the spread of Covid-19. In this regard, the Government had established a Covid Care Center (CCC) in the Girls' Hostel at GKVK Campus to quarantine Covid-19 positive cases from June to October 2020. The CCC had capacity of around 700 beds, in which mild and asymptomatic cases were admitted. The center was provided with life support Ambulances with oxygen support available for 24×7 basis. The center has also had facility for safe transport of the patients who progressed from mild symptoms to moderate or severe symptoms, to the dedicated Covid Health Centers. The team of Doctors and Paramedical Staff worked in eight hourly shifts. The University under the leadership of Hon'ble Vice-Chancellor along with Officers extended the fullest cooperation to the Government in smooth functioning of CCC, thus shouldering the social responsibility of the state.

Laboratory tests conducted from 2016 to 2021

Sl. No.	Particulars	No. of tests conducted								
		2016-17	2017-18		2018-19		2019-20		2020-21	
			ST	SF	ST	SF	ST	SF	ST	SF
1.	Blood Sugar	1109	93	1151	31	591	41	718	30	919
2.	CUS	21	-	-	-	-	-	-	-	-
3.	Lipid profile	98	01	78	-	06	14	33	14	35
4.	Blood grouping & Rh Typing	163	85	28	8	86	34	26	40	30
5.	Widal	102	63	39	46	23	57	23	65	30
6.	Malaria Test	104	29	29	31	24	42	36	25	50
7.	Blood routine	139	10	66	02	22	09	37	12	43
8.	CBC	151	248	148	160	92	226	120	266	152
9.	HB%	194	74	51	90	53	57	33	62	38
10.	Urine Routine	294	185	176	120	130	123	101	234	109
11.	Urine Analysis	63	-	-	-	-	-	-	0	0
12.	B.Urea	25	02	01	8	29	01	24	0	20
13.	S Creatinine	40	09	29	8	38	04	07	2	5
14.	Uric Acid	33	03	12	13	31	06	38	2	35
15.	Other Tests	134	139	146	21	31	66	47	75	56
16.	Bilirubin Total	85	07	10	04	02	06	04	5	6
17.	Bilirubin Direct	-	06	10	05	01	06	04	8	6
18.	LFT	-	06	62	07	62	03	18	1	23
19.	RFT	-	04	83	01	47	01	01	1	3
20.	SGOT	-	21	31	16	14	08	06	8	6
21.	SGPT	-	21	32	16	14	08	06	6	6
22.	HbA1c	-	-	-	-	235	16	162	12	172

23.	No. of GRBS conducted at Hebbal	-	-	157	4	61	12	50	12	50
	Sub Total		1,006	2,339	591	1592	740	1494	880	1794
	Grand Total	2755	3,345		2183		2234		2674	

Health facilities at College of Agriculture, V.C. Farm, Mandya

Dispensary with a Doctor is available from 8:30 AM to 4:00 PM and also available during emergencies. Medical officer is assisted by staff nurse and group employee. Facilities available: Consultation and treatment of common ailments, first aid, ambulance 24X7 basis with basic life supportive facilities.

Government Primary health care centre is located within 2kms away from the campus. Private health care clinic and medical shop are available at the entrance of College gate. Every year around 2500 to 3000 patients were treated including students and staffs.

- Students are enrolled under Students Health Insurance Scheme.
- All the students are eligible to claim medical expenses incurred by both group insurance as well as student aid fund.

Health facilities at College of Sericulture, Chintamani

The college campus has a dispensary unit for providing medical facility to the students and staff. Doctor is available from 12.00 pm to 5.00 pm with one Attender and also during emergencies. Medical officer is support by an attender. The equipment like ECG machine, BP apparatus, Sugar testing kit, glucometer, wheel chairs, stretchers and ambulance facility is available at dispensary. Oriental health insurance scheme is made available to the students by University. Every year around 2500 patients were treated.



- Students are enrolled under Students Health Insurance Scheme.
- All the students are eligible to claim the insurance for medical / surgical treatments

College of Agriculture, Karekere, Hassan

In this campus dispensary unit is available for providing medical facility to the students and staff, a Doctor with an assistant from 10:00 am to 2:00 pm are available. Basic equipment's like Bp Check-up, Nebulizer Machine, glucometer for glucose check-up, and ambulance with oxygen facility is made available. Every year around 2000 to 2500 patients were treated.

- Students are enrolled under Students Health Insurance Scheme.
- All the students will be eligible to claim the insurance if they are required for any medical treatment like surgery and medical related issues.

6.6.6.4 Sports and Cultural Facilities

The facilities for sports and cultural activities are adequate for the students and faculty, that make them physically and mentally fit. This has culminated in students bringing laurels to the College. The details of the sports and cultural facilities are furnished below.

Sl. No.	Campus wise list of Sports and Cultural Facilities Available
1	College of Agriculture, GKVK Sports Facility: <ul style="list-style-type: none"> • Athletics (Track & field): Eight lanes 400mt. Standard Track of red earth, jumping pits, jumping and throwing equipment • Football /Hockey: Standard Football field which can also be also used for Hockey • One Basketball court with flood lights

	<ul style="list-style-type: none"> • One Ball –Badminton court of Red earth • Kho-Kho court: for both Men & Women • Kabaddi/Interlocking Kabaddi mat facility for both Men & Women • Cricket: Athletic track is used for Cricket • Volleyball: standard court is available for both Men & Women • Eight Station Multigym facility Installed at Boys Hostel • Outdoor Open Gym facility is installed at both Boys and Girls Hostel • Indoor Sports Complex Two Synthetic Badminton courts • Two Table –Tennis boards (Men & Women) • Gymnasium and Indoor games (Carom & Chess) Four station Multi-gym installed in the indoor hall. • Outdoor Sports Pavilion Seating Capacity of 50-75 Nos, the pavilion includes restrooms, store rooms and office <p>Cultural Facility: Three auditoriums such as Kuvempu Auditorium, North Block Auditorium and Dr. Babu Rajendra Prasad International Convention Centre are provided for cultural activities with high end audio systems and instruments like Tabala, Keyboard, Hand Gel, Dholak along with Portable Speaker with Mic systems are provided for practice during their leisure</p>
2	<p>College of Agriculture, Mandya Sports Facility: Sports complex with Rest room, Basketball court, Cricket practice net, Kabaddi court, Volleyball court, Throw ball court, Football ground, Ball Badminton court, Kho-Kho court, and 400 m. Athletic Track Cultural Facility: In order to organize special events like student’s programmes and cultural events, the college has a well-equipped auditorium with open air theatre with an area of 582.30 sq.mt. with seating capacity of 408 people. It was constructed in the year 2018 with two green room facility.</p>
3	<p>College of Agriculture, Hassan Sports facility: College has a ground and outdoor stadium used for outdoor games viz., 400 m Athletics track, Ball Badminton, Basketball, Cricket, Football, Kabaddi, Kho-Kho, throw ball, Volleyball, well-furnished indoor hall is available for indoor games such as Badminton, Chess, Table Tennis, Multi Gym, and Yoga Practices. The ground maintenance is done by two sports helpers. Cultural Facility: Well-furnished auditorium with good sound system and side wings and basic lighting. Different costumes and instruments for different stage events such as Tabala, Harmonium, Dollu set, kamsala costume, Kango, Gong, Chanda, Guitar, Tambur Trumpet, Dolak, Darbuka, Folk dance and Mime costumes are provided to facilitate students to take part in different cultural and literary events organized by different organizations at different places.</p>
4	<p>College of Sericulture, Chintamani Sports Facilities: Gym (Men), Gym (Women), Faculty House, Open Gym, Table Tennis (Men), Table Tennis (Women), 400 Meter Athletic Track, Basketball Court (M & W) fitted with flood light., Basketball Court (Women), Ball Badminton Court, Cricket Ground, Cricket Practicing Net, Football Ground, Football Ground, Kabaddi Court (Men), Kabaddi Court (Women), Kho-Kho Court (Men), Kho-Kho Court (Women), Volleyball Court (Men) and Volleyball Court (Women) Cultural facilities : Auditorium, Multipurpose hall, Open air theatre, Harmonium, Dolak, Casio Key board, Mrudangam, Jambe, Nagari, Kanjara, Tamate, Dollu, Folk dance costumes and properties and Mime costumes</p>



Sports facilities at College of Sericulture



Sports facilities



400M Standard Athletic Track



400M Standard Athletic Track



Javelin Throw Sector



Shot Put Ring



Football Field



Basketball Court



Kabaddi Court



Kabaddi Court



Kho-Kho Court



Kho-Kho Court



Volleyball Court



Cricket Ground



Indoor Synthetic Badminton Court



Table Tennis Arena



Multi Gym at Boys Hostel



Multi Gym at Boys Hostel

Cultural:

Sufficient opportunities and facilities are provided to the students at each college to participate in Campus/ Inter Campus/ Inter University/ Inter Zone/ National level Cultural activities to improve their talents. Apart from sports, different clubs viz., Adventures, Fine arts, Science, Social Service and Literary are functioning at different Colleges of the University. The instruments like Tabala, Keyboard,

Hand Gel, Dholak, Portable Speaker with Mic system are provided to the students to practice and participate in the cultural events.

Auditoriums:

The College has two auditoriums in the premises, one at the north block and another at south block of the college to organize various events/programmes. Since the college is located in the main campus of the University, the faculty/students have an opportunity to organize and attend events at Dr. Babu Rajendra Prasad International Convention Centre. The details of the facility available are as follows.

Sl. No.	Name of the Auditorium	Year of Construction	Sitting Capacity	Facilities available	Frequency of Use for college functions (Programmes /yr.)
1	North Block Auditorium (North block)	1975	250	Mini Auditorium, Digital Projection	20-25
2	Kuvempu Sabhangana (South block)	1995	400	LCD projection, Sound System, Green Rooms Rest Rooms.	15-20
3	Dr. Babu Rajendra Prasad International Convention Centre	2016	2500	Main Auditorium has balcony and fully equipped with high end surround audio system and internet facility. Besides main auditorium, 6 conference halls each with 100 seating capacity having Projection facilities. Entire building is provided with centralized air-conditioning system	5-6



Kuvempu Auditorium, GVKV.



International Convention Centre, GVKV.



Cultural highlights at GKVK Campus

College of Agriculture, V.C Farm, Mandya, Mandya District

Sl. No.	Name of the facility		Capacity (No.)	Space (m ²)
1.	Outdoor Sports Facility	Athletics(Track &Field)/ Football/ Cricket	01	20125
		Basketball Court with flood lights	01	1125
		Ball –Badminton Court	01	600
		Kho-Kho Courts	02	1075 each
		Kabaddi Courts and Interlocking Kabaddi mat	02	780
			01	750
		Volleyball/ Throw Ball Courts	02	700 each
2.	Indoor Sports Facility	Gym facility in Boys Hostel & Girls Hostel	02	120 each

Auditorium:

In order to organize special events like students programmes and cultural events. The college has a well-equipped auditorium with open air theatre in an area of 582.30 sq.m. and a seating capacity of 408 people, constructed in the year 2018 with two green room facility, two podiums and two rotating fans.

College of Agriculture, Karekere Campus, Hassan District

Sl. No.	Name of the facility		Capacity (No.)	Space (m ²)
1	Indoor Sports facility	Synthetic Badminton Courts	02	660
		Table –Tennis Boards	02	
		Indoor games (Carom & Chess)	02	
		8 Station Gymnasium	01	120
2	Outdoor Sports Facility	Athletics (Track & Field)/ Football/ Cricket	01	20125
		Basketball Court with flood lights	01	1125
		Ball –Badminton Court	01	600
		Kho-Kho Courts	02	1075 each
		Kabaddi Courts and Interlocking Kabaddi mat	02	780 750
		Volleyball/ Throw Ball courts	02	700 each
		Outdoor open Gym facility	02	120 each
		Boys hostel & Girls hostel		

Sports area maintenance is done by two sports helpers, so that students can practice / play regularly. The Facilities of equipment required for game will be issued to the students are monitored and guided frequently by Physical Education teachers during the practice session to enhance their performance and improve their skills, techniques and tactics related to their respective games. Apart from this, 10days coaching camps are conducted for the improvement of their performance during intercollegiate competition.

Cultural:

College of Agriculture, Hassan has a facility of Auditorium, wherein instruments required for performing various cultural events is kept viz., Tabala, Harmonium, Dollu(Traditional Drums) sets, kamsala costume, Kango, Gong, Chanda, Guitar, Tambur Trumpet, Dolak, Darbuka, etc., which are dedicated to the students and teachers to perform different cultural events during college day and inter college youth festival programme every year, where in students and teachers are participating with great enthusiasm.

University is organizing Inter collegiate youth festival programmes annually to showcase the talents of students in exchange and sharing the different cultures of the country. Different cultural and literary events are organized. The students are trained by the professional artists in this regard to perform different events. Our college secured overall championship in inter-collegiate youth festival during 2018-19. Some of the students who are excellent in most of the events conducted are selected by the university to take part in National Level Agri. youth festival every year. These activities provide an opportunity for a healthy interaction thereby imparting awareness of our historical and multi-cultural heritage among the students.

The College is also facilitating students to take part in diverse cultural and literary events organized by different organizations at different places.

List of facilities available

- Well-furnished auditorium with good sound system, side wings and basic lighting
- Different set of properties required for different stage events
- Musical instruments like Tabala, Harmonium, Dollu set, Kamsala costume, Kango, Gong, Chanda, Guitar, Tambur Trumpet, Dolak, Darbuka are available.

College of Sericulture, Chintamani Campus, Chikkaballapura District.

Sl. No.	Name of the facility		Capacity	Space (m ²)
1	Indoor Sports facility	Six station Gymnasium	01	660
		Table –Tennis Boards	02	
		Indoor games (Carom & Chess)	02	
		Eight station Gymnasium	01	120
2	Outdoor Sports Facility	Athletics (Track & Field)/ Football/ Cricket	01	20125
		Basketball Court with flood lights	01	1125
		Ball –Badminton Court	01	600
		Kho-Kho Courts	02	1075 each
		Kabaddi Courts and Interlocking Kabaddi mat	02	780 750
		Volleyball	02	700 each
		Outdoor Open Gym facility	02	120 each
		Boys Hostel & Girls Hostel		

Cultural:

College of Sericulture, Chintamani has a facility of Auditorium, Multipurpose Hall, Open Air Theatre with necessary musical instruments like Tabala, Harmonium, Traditional drums, kamsala costume, Kango, Gong, Casio Key board, Chanda, Jambe, Nagari, Kanjara, Dolak, Darbuka, Mime Costumes etc., to practice regularly and to perform different cultural events of the college and youth festivals

College of Agriculture, Chamarajanagar district.

Sl. No.	Name of the facility		Capacity	Space (m ²)
1	Indoor Sports facility	Six station Gymnasium	01	660
		Table –Tennis Boards	02	
2	Outdoor Sports Facility	Ball –Badminton Court	01	600
		Kho-Kho Courts	02	1075 each
		Kabaddi Courts and Interlocking Kabaddi mat	02	780 750
		Volleyball	02	700 each

Cultural:

Facilities are being provided for students to participate in cultural activities within the college and also for inter-collegiate youth festival programmes.

SPORTS ACTIVITIES

DETAILS AND ACHIEVEMENTS OF INTER COLLEGIATE TOURNAMENTS

Sl.No.	Men or Women	2016-17				
1		Ball Badminton (Men) tournament held at GKVK Campus from 31 st Aug. to 2 nd Sept. 2016 at COA (PGS), GKVK.				
		CoA, UG	CoA, PG	CoA, Mandya	CoS, Chintamani	CoA, Hassan
		-	III	I	II	-
2		Chess (Men & Women) tournaments held at COS, Chintamani from 14 th to 16 th Sept. 2016				
		I	III			II
3		Football (Men) tournaments held at COS, Chintamani from 14 th to 16 th Sept. 2016				
				I	II	III
4	M	Volleyball Men & Women tournaments held at COA, Hassan from 23 rd to 25 th Oct. 2016				
			I	III	II	

	W		II	III		I
5		Tennis Men & Women tournaments held at COA, Hassan from 23 rd to 25 th Oct. 2016				
	M	I	III	II		
	W	II	I		III	
6		Basketball (Men & Women) tournaments held at COA, Mandya from 12 th to 14 th Nov. 2016				
	M		I	II	III	
	W		I	II		III
7		Cricket (Men) tournament held at COA (UG), GKVK from 22 nd to 24 th Dec. 2016				
		I	II		III	
8		Kabaddi (Men & Women) tournaments held at COA, GKVK from 7 th to 9 th January 2017				
	M	II	I		III	
	W	III	I			III
9		Shuttle Badminton (Men and Women) tournaments held at COA, GKVK Bengaluru from 12 th and 13 th January 2017				
	M	II	I			III
	W	I	III			II
10		Kho -Kho (Men and Women) tournaments held at COA, GKVK Bengaluru from 27 th to 29 th January 2017				
	M	II			I	III
	W	II			III	I
11		Athletic Meet (Men & Women) held at COA (PGS), GKVK from 4 th to 6 th March 2017				
	M		III		I	II

Action photos of Inter Collegiate Athletic Meet held at GKVK Campus



Hon'ble Vice-Chancellor, UAS (B) visited to Indoor Games Hall, GKVK Campus



Kabaddi (Men & Women)



B. SOUTH ZONE / ALL INDIA INTER UNIVERSITY TOURNAMNETS

- 1) South Zone Inter University Badminton (M) tournament held at Ayya Nadar Janaki Ammal College, Sivakasi, Virudhunagar from 3rd to 7th October 2016.
- 2) All India Inter University Ball Badminton (M) tournament held at SRM University Campus, Kattankulathur-603 203 (Chennai) from 29th December 2016 to 2nd January 2017.
- 3) South Zone Inter University Basketball (M) tournament held at University of Madras, D.G. Vaishnav College, Arumbakkam, Chennai – 600 106 from 26th to 31st December 2016.
- 4) South Zone Inter University Basketball (W) tournament held at University of Calicut, Kerala- 673 635 from 10th to 14th December 2016.
- 5) South Zone Inter University Chess (M) tournament held at Vel-Tech Dr. RR & DR. SR Technical University, Avadi, Chennai from 12th to 15th October 2016.
- 6) South Zone Inter University Cricket (M) tournament held at Hindustan Institute of Technology, Chennai from 2nd to 11th January 2017.
- 7) South Zone Inter University Football (M) tournament held at Gulbarga University, Kalburgi – 585 106 from 11th to 21st January 2017.
- 8) South Zone Inter University Kabaddi (M) tournament held at Veltech Dr. RR & Dr. SR University, Chennai – 600 062 (Tamil Nadu) from 18th to 22nd January 2017.
- 9) South Zone Inter University Kabaddi (W) tournament held at Bharathiar University, Coimbatore, Tamilnadu from 14th to 17th December 2016.
- 10) South Zone Inter University Kho-Kho (M) tournament held at Mangalore University, Mangalore from 10th to 13th January 2017.
- 11) South Zone Inter University Volleyball (M) tournament held at Mahatma Gandhi University, Kottayam, Kerala - 686 560 from 2nd to 6th December 2016.

Around 100 students have participated in the above tournaments.

C. ALL INDIA INTER AGRICULTURAL UNIVERSITY SPORTS AND GAMES MEET

The University teams participated in the 17th All India Inter Agricultural University Sports & Games Meet held at CCS Haryana Agricultural University, Hissar - 125 004 (Haryana) from 25th to 29th March 2017 and achievements are listed below.

Sl.No.		Athletics (Women) Result
1	Athletics Overall	Winners
2	Kabaddi	Winners
4	4 x 100 m. Relay	Gold Medal
5	100 m	Gold and Silver Medal
6	Javelin Throw	Gold Medal
7	Discuss Throw	Gold Medal
8	High Jump	Silver Medal
9	100 m. Hurdles	Silver Medal
10	200 m.	Silver and Bronze Medal
11	Triple Jump	Bronze Medal
12	Long Jump	Bronze Medal
13	Shot Put	Bronze Medal

Athletics (Men)

Sl.No.		Athletics (Men) Result
1	4x100m. Relay (Men)	Gold Medal
2	110m. Hurdles (Men)	Silver Medal
4	4x400 m. Relay (Men)	Bronze Medal

Overall Athletics Championship (Women) Overall Sports and Games Championship (Women)

- UAS (B) Secured Overall Runners-Up Championship in Sports and Games (Men & Women) - 2017 with 66 points
- Action photos of UAS (B) students at the 17th All India Inter Agri.l. University Sports and Games Meet held at CCS Haryana Agricultural University, Hissar - 125 004 (Haryana) from 25th to 29th March 2017.



Kabaddi (W)



Volleyball (W)



Shuttle Badminton (M)



UAS (B) Sports & Games team secured Overall Runners-Up Championship in Sports and Games with 66 points in 17th All India Inter Agricultural University Sports & Games Meet held at CCS Haryana Agricultural University, Hissar - 125 004 (Haryana) from 25th to 29th March 2017.

I. CULTURAL ACTIVITIES

A. INTER COLLEGIATE YOUTH FESTIVAL

a) Inter Collegiate Youth Festival held at College of Agriculture, Hassan from 19th to 21st January 2017 and achievements

Sl. No	College & Campus	Results
1	College of Agriculture, Hassan	Winners
2	College of Sericulture, Chintamani	Runners
3	College of Agriculture (UG), GKVK, Bangalore	III Place



Action photos of Inter Collegiate Youth Festival

B. ALL INDIA INTER AGRICULTURAL UNIVERSITY YOUTH FESTIVAL

The 17th All India Inter Agricultural University Youth Festival held at Rajasthan University of Veterinary & Animal Sciences, Bikaner - 334001, Rajasthan (India) from 22nd to 25th February 2017 and achievements

Sl No	Event	Results
1	Rangoli	Gold Medal
2	Skit	Silver
3	Group Dance	4 th Place

C. STATE LEVEL DEBATE COMPETITION ON CO-OPERATION

State Level Debate Competition on Co-operation held at Kuvempu University, Jnana Sahyadri, Shankarghatta, Shimoga – 577 451 on 03.02.2017 and achievements



Mr. Dishant Jojit James, PALB 5138 Sr. M.Sc., COA (PGS), GKVK has secured III place in State Level Debate Competition on Co-operation.

SPORTS ACTIVITIES -2017-18

DETAILS AND ACHIEVEMENTS OF INTER COLLEGIATE TOURNAMENTS

Sl.No.	Men or Women	2017-18				
1	Women	Chess (Men) tournament held at COA, Mandya from 9 th to 11 th Sep. 2017				
		CoA, UG	CoA, PG	CoA, Mandya	CoS, Chintamani	CoA, Hassan
		III		II		I
2		Volleyball (Men & Women) tournament held at COA, Mandya from 9 th to 11 th Sep. 2017				
	M	III	I	II		
	W	III	II			I
3		Basketball (Men & Women) tournaments held at COS, Chintamani from 23 rd to 25 th Sep. 2017				
	M	II			I	III
	W			I	II	III
4		Football (Men) tournaments held at COA (UG), GKVK from 7 th to 9 th Oct. 2017				
		II		I		II
5		Ball Badminton (Men) tournaments held at COA (UG), GKVK from 7 th to 9 th Oct. 2017				
		II	II			I
6		Kabaddi (Men & Women) tournaments held at COA (PGS), GKVK from 16 th to 18 th Oct. 2017				
	M	I	II		III	
	W	II		III		I
7		Cricket (Men) tournament held at COA (PGS), GKVK from 2 nd to 4 th Dec. 2017				
			I		III	II
8		Badminton (Men & Women) tournaments held at COA, Hassan from 9 th to 11 th Dec. 2017				
	M	II	III			I
	W	I	III			II
9		Kho-Kho (Men & Women) tournaments held at COA, Hassan from 9 th to 11 th Dec. 2017				
	M	III			II	I
	W	II			III	I
10		Table Tennis (Men) tournaments held at COA, Hassan from 9 th to 11 th Dec. 2017				
		I		II		III
11		Athletics (Men and Women) tournaments held at COA (UG), GKVK from 8 th and 10 th January 2018				
	M	II	I		III	
	W	II	I		III	

Over all achievements

1. Athletic Women Individual Champion – Miss. Sahana, H.M, CoA, PGS, GKVK, Bengaluru.
2. Athletic Men Individual Champion – Mr. Sanjay, College of Sericulture, Chintamani.
3. Overall Athletic team Winners championship (Men & Women) COA, PGS, GKVK, Bengaluru.
4. Overall Athletic Team Runner up championship (Men & Women) COA, UG, GKVK, Bengaluru.
5. Over all sports and games championship bagged by CoA, Hassan.
6. Overall sports and games Runner up Championship bagged by CoA (UG), GKVK, Bengaluru.

B. SOUTH ZONE / ALL INDIA INTER UNIVERSITY TOURNAMNETS

1. South Zone Inter University Basketball (M) tournament held at Christ University, Bengaluru from 29th October to 3rd November 2017.

2. South Zone Inter University Basketball (W) tournament held at SRM University, Chennai from 25th to 31st December 2017.
3. South Zone Inter University Cricket (M) tournament held at Ragu Engineering college, Vishakapatnam Andhra University, Andhra Pradesh from 25th December 2017 to 1st January, 2018.
4. South Zone Inter University Basketball (W) tournament held at Sri Sai Ram Engineering college, Vishakapatnam Andhra University, Andhra Pradesh from 3rd to 12th January, 2018

C. ALL INDIA INTER AGRICULTURAL UNIVERSITY SPORTS AND GAMES MEET

The 18th All India Inter Agricultural University Sports & Games Meet held at UAS, GKVK, Bengaluru from 30th January to 3rd February 2018 and achievements

SI No	Game	Gender	Result
1.	Basketball	Women	Winners
2.	Kabaddi	Women	Winners
3.	Kho-Kho	Women Men	Winners Runners
4.	Badminton	Women Men	Runners Runners
5.	Athletics	Women	Winners
6.	100 Meter.	Women	Gold & Silver
7.	200 Meter.	Women	Gold & Silver
8.	400 Meter.	Women	Gold & Bronze
9.	Disc Throw	Women	Gold
10.	Javelin Throw	Women	Silver
11.	Shot put	Women	Silver
12.	Triple Jump	Women	Bronze
13.	4x100 Relay	Women	Gold
14.	4x400 Relay	Women	Gold
15.	1500Mtrs	Men	Gold & Silver
16.	4x400 Relay	Men	Bronze
17.	Overall Team Championship	Women	Winners



Inter Campus Kabaddi Inaugural function held at GKVK



Inter Campus Football & Badminton Inaugural function held at GKVK

Inter Campus Football Winners (CoA, Mandya)



Inter Campus Kho-Kho, Shuttle Badminton & Table Tennis Inaugural function held at CoA, Hassan



Inter Campus Volleyball & Chess Inaugural function held at CoA, Mandya



Inter Campus Volleyball



Inter Campus Cricket Winners (PG Students)



Inter Campus Basketball Winners (Men) & Runners (Women)



Inter Campus Basketball Winners Men



18th All India Agri. Sports Meet 2017-18 Inaugural Function



Women Kabbadi Winners



UAS (B) won Overall Contingent Winner



Women Badminton Runners



Men Kho-Kho Runners



Men Badminton Runners



Women Basketball Winners



Women Kho-Kho Winners

UAS (B) Secured Overall Championship in Sports and Games (Men & Women) – 2018.

II. CULTURAL ACTIVITIES

A. INTER COLLEGIATE YOUTH FESTIVAL

a) Inter Collegiate Youth Festival held at College of Agriculture, Hassan from 23rd to 24th January 2018 and its achievements

Sl.No.	Colleges participated	Inter Collegiate Youth Festival-2018 results
1	College of Agriculture, UG, GKVK	Winners
2	College of Agriculture, Mandya	III Place
3	College of Agriculture Hassan	Runners

B. ALL INDIA INTER AGRICULTURAL UNIVERSITY YOUTH FESTIVAL

The 18th All India Inter Agricultural University Youth Festival held at Sri Venkateshwara Veterinary University, Tirupati, Andhra Pradesh from 12th to 16th February 2018 and its achievements

Sl.No.	18 th All India Inter Agricultural University Youth Festival-2018 results	Results
1	Group Song (Patriotic)	Bronze
2	Debate	Bronze
3	Extempore	4 th Place

C. INTER COLLEGIATE DEBATE COMPETITION

Inter Collegiate UG & PG Debate Competition held at College of Agriculture, Department of Agri. Marketing and Business Management & Co-operation on 28.12.2017 and its achievements

Sl.No.	Colleges participated	Results	
		UG	PG
1	College of Agriculture, UG, GKVK	I	-
2	College of Agriculture, PGS, GKVK	-	I
3	College of Agriculture, Mandya	III	II
4	College of Hassan	II	-

D. DIVISION & DISTRICT LEVEL CULTURAL PROGRAMMES

District level Kannada and Samskruthi ilakhe, and Rangayana, Mysuru, at Nalvadi Krishnaraja Kalamandir, Mandya from 11 to 12 Feb 2018 and its achievements

Sl.No.	College	Events	Results
1	College of Agriculture, Mandya	Drama (Ninage Neene Gelathi)	Gold Medal
2	College of Agriculture, Mandya	Folk dance (kamsale)	Silver Medal

Division level Kannada and Samskruthi ilakhe at Rangayana, Mysore on 15 to 17 Feb 2018.

Sl.No.	College	Events	Results
1	College of Agriculture, Mandya	Drama	Bronze Medal



Inter Campus Youth Festival held at College of Agriculture, Hassan on 23rd – 24th Jan, 2018



Drama Performance by PG Team, GKVK in Intercampus Youth Festival 2017-18



Kamsale Performance by PG Team, GKVK in Intercampus Youth Festival 2017-18





Prize winners in National Youth Festival at Tirupati -2018

Photo Gallery: 18th All India Inter Agricultural Universities Youth Festival held at Sri Venkateshwara Veterinary University, Tirupati (A.P) from 12.02.2018 to 16.02.2018.



Miss. Thejashree, H.N, UAS (B) won bronze medal in debate competition and fourth place in extempore competition.



Mr. Anil Kumar .K.R, Miss. Gaganashree.K.P, Miss. Preethi.B, Mr. Sowrav.B.R, Miss. Sunitha .H.K, Mr.Suraj.S.Chiniwal won III Place in Patriotic Song



Team Managers receiving University Participation Mementos



Organizing Sports, Games and Co-Curricular Activities for Students, 2018-19

The students of University of Agricultural Sciences, Bengaluru have participated in various co-curricular activities which include participation in Inter Campus Tournament, Athletic Meet and Youth Festival in addition to participation in Zonal, State and National Level co-curricular activities. The students have also participated in NSS activities. The details are as follows:

Inter-Campus Sports and Games, Events

DETAILS AND ACHIEVEMENTS OF INTER COLLEGIATE TOURNAMENTS

Sl.No.	Men or Women	2018-19				
1	Women	Chess (Men) tournament was held at COA, Hassan from 20 th to 21 st March 2019				
		CoA, UG	CoA, PG	CoA, Mandya	CoS, Chintamani	CoA, Hassan
		I			III	II
2		Volleyball (Men and Women) tournament was held at COA, Hassan from 20 th to 21 st March 2019				
	M	II	I	II		
	W	I		III		II
3		Basketball (Men & Women) tournament was held at COA (UG), GKVK from 12 th – 14 th October 2018				

	M	I			III	II
	W	II			III	I
4		Football tournament (Men) was held at COA, Hassan from 30 th Aug. to 1 st September 2018				
		II	III	I		
5		Ball Badminton (Men) tournament was held at COA (PGS), GKVK 21 st to 23 rd December 2018				
			I	III	II	
6		Kabaddi (Men & Women) tournament was held at COS, Chintamani from 20 th to 22 nd October 2018				
	M	II	I	II	II	
	W	I			III	II
7		Cricket (Men) tournament was held at COA (PGS), GKVK from 21 st to 23 rd December 2018				
		I	III			II
8		Kho-Kho (Men & Women) tournament was held at COS, Chintamani from 10 th -12 th September 2018				
	M	II			I	III
	W	II			I	III
9		Badminton (Men & Women) tournament was held at COA (PGS), GKVK from 3 - 5 November 2018				
	M	I	III			II
	W	I	III			II
10		Tennis (Men & Women) tournament was held at COA (UG), GKVK from 12 th - 14 th October, 2018				
	M	II		III		I
	W	II	III			I
11		Athletics (Men and Women) tournament was held at COA, Hassan from 20 th - 21 st March 2019				
	M	I	III		II	
	W	I	III		II	

Overall achievements

1. Athletic Women Individual Champion: Ms. Ashwitha A.S. Gowda, College of Agriculture (UG), GKVK
2. Athletic Men Individual Champion – Mr. Pramod Hegde and Shivaraju P.B., College of Agriculture (UG), GKVK
3. Overall Athletic Team Winners Championship (Men & Women): College of Agriculture (UG), GKVK
4. Overall Athletic Team Runner up Championship (Men & Women): College of Sericulture, Chintamani
5. Over all sports and games Championship bagged by: College of Agriculture (UG), GKVK
6. Overall sports and games Runner up championship bagged by College of Sericulture, Chintamani

South Zone / All India Inter University Tournaments

Students of UAS-B participated in the following South Zone/All India Inter University Tournaments

1. South Zone Inter University Kho-Kho (Women) tournament was held at Dr. G. Shankar Govt. Women's First Grade College & PGS Centre, Ajjarakadu Udupi, Udupi District from 15th to 18th October 2018.
2. South Zone Inter University Basketball (M) tournament was held at SRM Institute of Science and Technology, SRM Nagar, Kattankulathur (T.N.) from 22nd to 26th October 2018
3. South Zone Inter University Kho-Kho (Men) tournament held at Sri Venkateshwara University, Tirupathi (AP) from 24th to 28th October 2018.
4. South Zone Inter University Basketball (Women) tournament was held at SRM University, SRM Nagar, Kattankulathur (T.N.) from 4th to 8th November 2018.
5. South Zone Inter University Volleyball (Men) tournament was held at SRM Institute of Science and Technology, Kattankulathur, Chennai (T.N.) from 9th to 14th November 2018.

6. South Zone Inter University Kabaddi (Women) Championship was held at Bengaluru North University at Government First Grade College, Devanahalli from 12th to 15th November.
7. South Zone Inter University Football (M) tournament was held at Pondicherry University, R.V. Nagar, Puducherry from 3rd to 11th December 2018.
8. South Zone Inter University Table Tennis (Men) tournament was held at GITAM University, Rushikinda, Visakhapatnam (A.P.) from 3rd to 5th December 2018
9. South Zone Inter University Kabaddi (Men) tournament was held at SRM Institute of Science & Technology, Kattankulathur, Chennai (T.N.) from 19th to 23rd December 2018.
10. South Zone Inter University Cricket (Men) tournament was 2018-19 held at Jawaharlal Nehru National College of Engineering, Navile, (JNNCE) Shivamogga, Karnataka from 14th to 24th January 2019
11. All India Inter University Roller Sports (Men) tournament-2018-19 was held at Maharshi Dayanand University, Rohtak, Haryana, from 27th to 31st January 2019. Mr. Ankith.S. ALB 6011, College of Agriculture (UG), GKVK secured Bronze Medal in Roller Sports (Men) tournament.
12. All India Inter University Karate (Men) Championship-2018-19 was held at Maharshi Dayanand University, Rohtak, Haryana from 20th to 24th February 2019. Mr. Rakshith Reddy. J., College of Agriculture (UG), GKVK secured Bronze Medal in Karate (Men) championship.

All India Inter Agricultural University Sports and Games Meet

The 19th All India Inter Agricultural University Sports & Games Meet was held at Punjab Agricultural University, Ludhiana, Punjab from 2nd to 5th January 2019. UAS-B Secured Overall 3rd position in the event and the details are given below:

Results or achievements

- Ashwitha. A. S. Gowda was awarded as the “Best Athlete” of the Meet and she also secured Athletics Individual Championship Trophy in women section
- UAS, Bengaluru women Athletics team have secured Athletic Championship Trophy in women section
- UAS, Bengaluru women team have bagged Athletic and Games Championship Trophy in women section
- UAS, Bengaluru women have secured Basketball Winners Trophy in women section
- UAS, Bengaluru women have secured Kho-Kho Runners Trophy in women section
- Overall, UAS-B has won 31 medals with 14 Gold medals, 16 silver medals and one Bronze medal.

Cultural Activities

a) Inter Collegiate Youth Festival

Inter Collegiate Youth Festival was held at College of Agriculture, Mandya from 27th to 28th December 2018. The details of winners are as follows

SI No	Participating Colleges	Results
1	College of Agriculture, Hassan	Winners
2	College of Sericulture, Chintamani	Runners
3	College of Agriculture (UG), GKVK	III Place

b) All India Inter Agricultural University Youth Festival

19th All India Inter Agricultural Universities Youth Festival 2018-19 was held at Sardar Krushinagar Dantiwada Agricultural University, Sardar krushinagar (Gujarat) from 3 - 7 February 2019. UAS-B Youth Festival Team secured Overall 5th Place in AGRI.UNIFEST 2018-19 and achievements

Sl. No	Events	Position	Achievement
1	Collage	I Place	Gold Medal
2	One Act Play	II Place	Silver Medal
3	Light Vocal	III Place	Bronze Medal
4	Cartooning	III Place	Bronze Medal
5	Rangoli	III Place	Bronze Medal

c) Inter Collegiate Debate Competition

Inter Collegiate Debate completion on Co-operation of UG & PG students was held at Dept. of Argil. Marketing and Business Management on 28.09.2018. Following are the details of the positions.

Sl. No	Events	Position	
		UG	PGS
1	College of Agriculture, Mandya	I	-
2	College of Agriculture, Hassan	II	-
3	College of Sericulture, Chintamani	II	-
4	College of Agriculture (PGS), GKVK	-	I & II

Inter-Campus Sports and Games, Events-2019-20

DETAILS AND ACHIEVEMENTS OF INTER COLLEGIATE TOURNAMENTS

Sl.No.	Men or Women	2019-20				
		CoA, UG	CoA, PG	CoA, Mandya	CoS, Chintamani	CoA, Hassan
1		Volleyball (Men & Women) tournament held at College of Agriculture, Mandya from 20.08.2019 to 22.08.2019				
	M	III	I		II	
	W	II	III			I
2		Ball Badminton (Men) tournament held at College of Agriculture, Mandya from 20.08.2019 to 22.08.2019				
	M	III	II			I
3		Chess (Men & Women) tournaments held at College of Sericulture, Chintamani from 29.08.2019 to 31.08.2019				
	M	II			III	I
	W	II			III	I
4		Football (Men) tournaments held at College of Sericulture, Chintamani from 29.08.2019 to 31.08.2019				
		I	III	II		
5		Kabaddi (Men & Women) tournaments held at College of Agriculture (UG), GKVK from 12.09.2019 to 14.09.2019				
	M	III	I	II		
	W	I		II		III
6		Badminton (Men & Women) tournaments held at College of Agriculture (UG), GKVK from 12.09.2019 to 14.09.2019				
	M	I	III			II
	W	III	II			I
7		Cricket (Men) tournaments held at College of Agriculture (PGS), GKVK from 03.10.2019 to 05.10.2019				
		I	II	III		
8		Table Tennis (Men & Women) tournaments held at College of Agriculture (PGS), GKVK from 03.10.2019 to 05.10.2019				
	M	II		III		I
	W	I		III		II
9		Basketball (Men & Women) tournament held at College of Agriculture, Mandya from 15.10.2019 to 17.10.2019				
	M	II	III			I
	W	I			III	II
10		Kho-Kho (Men & Women) tournaments held at College of Agriculture, Hassan from 31.10.2019 to 01.11.2019				
	M		II		III	I
	W	II		III		I
11		Athletics (Men and Women) tournaments held at College of Agriculture, Mandya from 10.02.2020 to 12.02.2020				
	M	II			I	III
	W	I			III	II

Over all achievements

- Athletic Women Individual Champion: Miss. Ashwitha. A. S. Gowda, College of Agriculture (UG), GKVK.
- Athletic Men Individual Champion– Mr. Pramod Hegde, College of Agriculture (UG), GKVK.
- Overall Athletic Team Winners championship (Men & Women): College of Agriculture (UG), GKVK
- Overall Athletic Team Runner up championship (Men & Women): College of Sericulture, Chintamani.
- Over all sports and games championship bagged by: College of Agriculture (UG), GKVK.
- Overall sports and games Runner up championship bagged by: College of Agriculture, Hassan.

2.8.2 South Zone / All India Inter University Tournaments

Students of UAS –B participated in the following South Zone/All India Inter University Tournaments

- 1) South Zone Inter University Kabaddi (Women) Championship was held at Vel-Tech Institute of Science and Technology, Chennai from 03rd to 06th October 2019.
- 2) South Zone Inter University Volleyball (Men) tournament held at Krishna University, Machilipatnam, Andhra Pradesh from 26th to 30th November 2019.
- 3) South Zone Inter University Cricket (M) tournament held at University of Mysore, Mysore from 28th November to 11th December 2019.
- 4) South Zone Inter University Volleyball (W) tournament held at SRM University, Chennai from 06th to 10th December 2019.
- 5) South Zone Inter University Basketball (Men) tournament held at Hindustan Institute and Technology, Chennai from 07th to 11th December 2019.
- 6) South Zone Inter University Basketball (Women) tournament held at SRM University, Chennai from 15th to 19th December 2019.
- 7) South Zone Inter University Badminton (Men) tournament held at SRM University, Chennai from 16th to 20th December 2019.
- 8) South Zone Inter University Chess (Men) tournament held at Gandhi gram University, Tamil Nadu from 18th to 21st December 2019.
- 9) South Zone Inter University Kho-Kho (Men) tournament held at Kuvempu University, Shivamogga from 23rd to 26th December 2019.
- 10) South Zone Inter University Athletics (Men & Women) tournament held at Alvas, Moodibidri, Mangalore University from 02nd to 06th January 2020.
- 11) South Zone Inter University Karate (Men & Women) tournament held at Satyabhama University, Chennai from 08th to 13th January 2020.
- 12) South Zone Inter University Ball Badminton (Men) tournament held at Alvas Moodibidri, Mangalore University from 29th January to 02nd February 2020.
- 13) South Zone Inter University Roller Sports (Men & Women) tournament held at RIMT University, Punjab from 11th to 14th February 2020.

All India Inter-Agricultural University Sports and Games meet

The 20th All India Inter Agricultural University Sports & Games Meet was held at Sri Venkateshwara Veterinary University, Tirupati from 1st to 5th March, 2020 UAS-B Secured Championship for the year 2019-20 and the details are given below:

Sl.No	Sport		Athletics (Women)		Athletics (Men)	
1	Basketball (Women)	Winners	100 Mt.	Gold Medal	800 meters	Gold Medal
2	Volleyball (Women)	Winners	200 Mt.	Gold Medal	1500 meters	Gold & Silver Medal
3	Kho-Kho (Women)	Runners	4X100 Mt. Relay	Gold Medal	-	-

- Ms. Ashwitha.A. S. Gowda won Individual Athletic Women Championship
- Mr. Pramod Hegde won Individual Athletic Men Championship.
- Overall Women Games Championship
- Overall Men & Women Athletic Championship
- Overall Contingent Championships for the year 2019-20 by securing 59 points.

Cultural Activities

a) Inter Collegiate Youth Festival-2020

Inter Collegiate Youth Festival was held at College of Agriculture (PGS), GKVK, Bangalore from 13.01.2020 to 14.01.2020.

Sl.No.	College	Result
1	College of Agriculture (UG), GKVK	Winners
2	College of Sericulture, Chintamani	Runners
3	College of Agriculture (PGS), GKVK	III Place
4	College of Agriculture, Chamarajanagar	Fair Play Award

b) All India Inter Agricultural University Youth Festival

The 20th All India Inter Agricultural University Youth Festival was held at Indira Gandhi Krishi Vishwavidyalaya, Raipur from 8th to 12th February, 2020. Following are the details of medals and position

Sl. No	Events	Position
1	Folk Dance	1 st Place
2	Mono acting	1 st Place
3	Skit	2 nd Place
4	One Act Play	3 rd Place

The team One Act Play bagged Eleven Gold, Six Silver and Nine Bronze medals in addition to overall winning trophies in Theatre and Dance events.

c) Inter Collegiate Debate Competition

Inter Collegiate UG & PG Debate Competition was held at Department of Argil. Marketing, College of Agriculture, UAS, GKVK, Bengaluru on 03rd October 2019 Following are the details of the positions.

Sl. No	Events	Position	
		UG	PGS
1	College of Agriculture, Hassan	I Place	-
2	College of Sericulture, Chintamani	II Place	-
3	College of Agriculture, Mandya	III Place	II Place
4	College of Agriculture, GKVK, Bangalore		I Place



20th AIIAU Sports and Games Meet 2019-20 Overall Champions



20th All India Inter Agri. Universities Youth Festival team 2019-2020 overall winning trophies in Theatre and Dance events.

2020-21: Sports & Cultural activities were not conducted for the year 2020-21 due to COVID-19.

UNIVERSITY NSS ACTIVITIES

The University adopted the National Service Scheme. At the university level, it has NSS-Coordinator and Assistant Coordinators at University level including 4 NSS Programme Officers and 2 Programme Officers at each College level to organize the defined and identified mandated programmes, to nurture the patriotism and inculcate service moto among students.

Following are the important achievements / activities under NSS including all the constituent colleges of the University.

NSS -Activities during the year 2016-17

- Training of Trainers (TOT) was organized on Social Harmony and Human Rights for NSS functionaries of Southern States of Karnataka from 17th to 31st July, 2016 at UAS, Bangalore in collaboration with Rajeev Gandhi National Institute of Youth Empowerment, Sriperumbudur and NSS Regional Directorate, Govt. of Karnataka.
- Organized National Young Leader Award programme – 2016-17 and Interaction meeting of NSS volunteers with Vietnam Country youth volunteers and Cultural Youth Exchange Programme on 04.04.2017

NSS -Activities during year 2017-18

- Organized National Integration Camp at College of Agriculture, Hassan Campus, UAS (B), Karnataka from 27.02.2017 to 05.03.2017. Totally 171 Volunteers and 15 NSS Programme Officers participated from Andhra Pradesh, Tamil Nadu, Kerala, Pondicherry, Maharashtra and Karnataka.
- Organized National Young Leader Award Programme (NYLP) at Kuvempu Auditorium, University of Agricultural Sciences, GKVK, Bengaluru-65 on 04.04.2017. 900 NSS Volunteers. Staff & Programme Officers participated.
- Organized Interaction of NSS Volunteers with Vietnam Youth Delegates and Cultural Youth Exchange Programme on at Kuvempu Auditorium, University of Agricultural Sciences, GKVK, Bengaluru-65 on 04.04.2017, about 900 NSS Volunteers, Staff & Programme Officers participated in the programme.
- NSS Special Camp – 2017 organized from 05.05.2017 to 11.05.2017 at Nandi village, Chikkaballapura Taluk & District and Samandoor village of Anekal taluk, Bengaluru Rural District. DoE, Dean (Agri.), DE, ADE, State & National Level NSS Officers, NSS Prog. Coordinator and Programme Officers, Asst. Director of Animal Husbandry, Administrative Officer and other local leaders and trainers participated in the programme.
- Personality Development Programme organized from 05.05.2017 to 11.05.2017 at Nandi village, Chikkaballapura Taluk and District, about 125 NSS Volunteers participated in the programme.
- College of Agriculture, GKVK, Bengaluru in collaboration with State NSS Cell and UAS, Bengaluru has organized Swachhata Pakhwada Programme from 1st to 15th August 2017 as an educative and illustrative Programme for the mass so as to make them understand the importance of cleanliness. The inauguration and Oath Pledging Ceremony were organized on 01.08.2017 at 9.15 AM at the Entrance of Naik Bhavan, GKVK Campus. Dr. Gananatha Shetty, State NSS Officer, Dept. of Youth Empowerment and Sports GOK and Sri. A.N. Pujar, Regional Director, Regional Directorate of NSS, GoI witnessed the programme.
- The third International Yoga Day was celebrated in a grand manner at Dr. Babu Rajendra Prasad Convention Centre, University of Agricultural Sciences, GKVK, Bengaluru, on 21st June 2017. The yoga classes were run for a period of seven days from 15th June to 21st June every day from morning 6.30 to 8.00 am and also in the evening.

- Training of Trainers (TOT) Programme on “Social Harmony, National Unity & Human Rights” was organized for the N.S.S functionaries of Southern States from 27th to 31st July 2016 at University of Agricultural Sciences, GKVK, Bengaluru in collaboration with Rajiv Gandhi National Institute of Youth Development, Ministry of Youth Affairs & Sports, Govt. of India, Sriperumbadur-602 105.
- Conducted Swatchta Abhiyana, Tree plantation and Health camp programmes, NSS volunteers are actively participated in this programme.
- Organized Republic day pre-parade selection camp at University of Agricultural Sciences, GKVK, Bengaluru-65 in collaboration with NSS Cell, Dept. of Youth Empowerment and Sports, GOK to select the volunteers for Republic day parade on 3rd and 4th of October 2017 for female Volunteers and 6th to 7th of October 2017 for male volunteers.
- The personality development programme was conducted by Smt. Jyothi Singh & Sri. Tirendra Kumar, The Prem Rawath Foundation, Bengaluru, India from 20th Oct. To 25th Nov. 2017 to all I & II-year B.Sc. (Agri.) B.Tech.(Ag. Eng.) and B.Sc. (Ag. Maco.) NSS Volunteers.
- Organized Republic day parade training camp from 14th to 26th January 2018 at University of Agricultural Sciences campus, GKVK, Bengaluru-65 in collaboration with NSS Cell, Dept. of Youth Empowerment and Sports, GOK to select the volunteers for Republic day camp held in Manikshaw parade ground, Bengaluru.
- Conducted University level NSS Advisory committee meeting to review the NSS activities and financial sanction for the academic year 2017-18 under the Chairmanship of Honourable Vice-Chancellor, UAS(B) on 19th January 2018 at Board Room, Naik Bhavan, University of Agricultural Sciences, GKVK, Bengaluru.

NSS -Activities during year 2018-19

- Organized Republic Day Pre-Parade Training Camp-2018 from 03rd-09th September 2018 in collaboration with State NSS Cell, Department of Youths Empowerment and Sports, Government of Karnataka, Bengaluru. In total, 190 volunteers from Tamil Nadu, Telangana, Andhra Pradesh, Pondicherry, Rajasthan and Karnataka participated in the vent.
- Organized Republic day parade training camp from 14-26 January 2019 at University of Agricultural Sciences, GKVK, Bengaluru-65 in collaboration with Department of Youth Empowerment and Sports, Government of Karnataka.
- The NSS cell was accorded with ‘NSS Best University Award’. The Co-ordinator of NSS received the Best NSS Co-ordinator State Award from Hon’ble Minister of State for Youth Empowerment and Sports, Govt. of Karnataka on 18th March 2018 for outstanding contribution in the field of National Service Scheme in the University.
- In all the constituent colleges several programmes like Blood donation camps, Tree plantation, health check-up camps, AIDS awareness programme, Rain water harvesting demo, Cleaning and levelling of school grounds, Parthenium eradication programme, Plastic free zone, Establishment of park and Construction & cleaning of drainages were organized.
- Implemented ‘Swachhata Abhiyana Mission’ wherein awareness about cleanliness and hygiene in the campus premises and also at adopted villages was carried out.
- Organized National/International important days viz., World food day, Environmental Day, Women’s Day, Youth Day, World Tobacco Day and others in collaboration with concerned Departments/ Organizations

- Celebrated National Festivals viz., Independence Day, Republic Day, Gandhi Jayanthi, World Tobacco Day, World Food Day, NSS day, Kannada Rajyostava.

NSS -Activities during year 2019-20

- Mr. Praveen Kumar Gowda & Ms. Aishwarya, D. B., College of Sericulture, Chintamani participated in State RD Parade held at B.M.S. Engineering College, Bengaluru from 14-01-2020 and 27-01-2020.
- Ms. Hamashree, College of Agricultural Engg., GKVK, Ms. Bharathi Dayanand Naik, College of Sericulture, Chintamani, Mr. Sumanth, College of Agriculture, Mandya, Mr. Tejas Prabhakar, College of Agriculture, Hassan participated in Third National Integration (NIC) Camp (Ek Bharath Shretha Bharath) held at Bangalore University, NSS Bhavan, Jnanabharathi Campus Bengaluru from 24.01.2020 to 30.01.2020. Ms. Hamashree won I prize in Skit & II prize in Singing and Mr. Tejas Prabhakar won I prize in Skit & II prize in Singing & Dance.
- Ms. Rakshitha Ram, M.R., College of Agriculture, GKVK, Bengaluru represented University in NSS South Zone Republic Day Parade held at New Delhi on 26th January, 2020.
- Mr. Vishwanath Dooganavar & Mr. Adarsh Padmaram. P, College of Agriculture, GKVK, Mr. Abhshek Hirewodyer, & Mr. Karthik. N, College of Agriculture, Mandya, Ms. Shailaja Godara, & Ms. Naba Fathima, College of Agriculture Hassan, participated in 10th Bhartiya Chhatra Sansad (Indian Student Parliament) held at Vigyan Bhawan, New Delhi from 20.02.2020 to 23.02.2020.
- In total 13 NSS teachers from the University, GKVK (7), Hassan (3), Mandya (1) and Chintamani (2) were deputed to undergo training on “Life Skills” programme at NIMHANS, Bengaluru.
- Mr. Gururaj Dasannavar, Mr. Vishwanath. U. Renake, Mr. Santosh, Ms. Shrirashmi, Ms. Yamuna. D.U, & Ms. Pournami Nadka, College of Agriculture, GKVK and Mr. Yashwanth Gowda. M. V & Ms. Nethravathi.B.N, College of Agriculture, Chamarajanagara participated in the National Integration Camp at Hazaribagh, Jharkhand on 28-02-2020 and 05-03-2020.
- NSS Volunteers actively involved and participated in organizing at Blood donation camps, Tree Plantation, National Integration camps, Swachh Bharat, Cultural activities.
- One-day workshop on 'Tobacco Control' was organized at College of Agriculture, UAS, GKVK, Bengaluru in coordination with Sambandh Health Foundation, New Delhi on 5.3.2020 in order to create awareness about harmful effects of tobacco.

NSS -Activities during year 2020-21

“FIT INDIA FREEDOM RUN-2020” Programme was organized by NSS Unit, College of Agriculture, UAS, GKVK, Bengaluru on 03.09.2020 to encourage fitness and help people to get freedom from obesity, laziness, stress, anxiety, diseases etc. The concept behind this run was that “It can be run anywhere, anytime.” You can. The programme was inaugurated by Hon’ble Vice Chancellor of UAS, Bangalore Dr. S. Rajendra Prasad. In his introductory remarks he stressed on the importance of keeping our body fit and also stressed the need of physical exercise like walking, running to infuse positivism in our mind. He also gave a call to participants not to run today, besides make it routine in our part of life.

Result of “Fit India Freedom Run” programme

Winners of the event	Men	Women	
Mr.Subramanya.S.Shetty	I st Prize	Mrs. Suprabha Bhat	I st Prize
Mr.Shambu.Gowda.R	II nd Prize	Miss. Shritam Kondu	II nd Prize



Vigilance Programme on Anti-Corruption week on 28th October 2020 under “Satark Bharat, Samridh Bharat” organized by NSS Unit of College of Agriculture, UAS, GKVK, Bangalore



Activities in collaboration with Red Cross Society 2018-19

- A world environmental day programme was jointly organized by Youth Red Cross Society, CoA, Mandya and National Service Scheme, CoA, Mandya on 5th June 2018 and 6th June 2018.
- On 5th June 2018 mass tree planting programme was organized at the college campus. The programme was presided by Dean (Agri.). The teaching and non-teaching staffs are requested to adapt the plants which were planted on world environmental day. Students requested the officers to provide a land for planting the saplings. This land will be called as Birthday Green zone where students can plant the saplings to celebrate their birthdays.



“Plastic ban programme Campaign” launched on 6th June 2018 jointly by Youth Red Cross Society and NSS Scheme, CoA, Mandya.



- Fund raising campaign organized by Youth Red Cross Society, CoA, Mandya for flood affected Kodagu district under the title “Namma Kodagu Namma Usiru” in collaboration with NSS Volunteers
- Blood donation camp was organized by Youth Red Cross Society, CoA, Mandya in collaboration with Indian Red Cross Society, Mandya Taluk on 27.09.2018. About 150 blood donors came voluntarily to donate blood. Total of 126 blood units were collected.
- “International Volunteers Day-2018” was organized by Youth Red Cross Unit (PG) from 5th December 2018 by the Directorate of Post Graduate Studies, North Block, UAS, GKVK, Bengaluru in the event of celebration of International Volunteers Day, which was inaugurated by Honourable Vice Chancellor, UAS, GKVK, Bengaluru. A special lecture by Dr. Hosakere Suresh on “Volunteers build resilient Communities” was organized by Youth Red Cross unit (PG) in the programme during the occasion
- Blood donation and Eye testing camp was organized by Youth Red Cross Society, CoA, Mandya in collaboration with Grace Blood Bank, A Nagashankara Charitable Trust, Bengaluru on 06.02.2019, about 120 blood donors donated 91 blood units voluntarily. Besides students, teaching and non-teaching faculty utilized the eye testing camp conducted on the same day.

Activities in collaboration with Red Cross Society 2019-20

University of Agricultural Sciences, Bangalore in association with Indian Red Cross Society organised a “Volunteer Blood Donation Camp” on 29th November 2019 at GKVK, Bengaluru. Hon’ble Vice Chancellor Dr. S. Rajendra Prasad inaugurated the camp and created awareness on the benefits of blood donation to one’s health and society. Dr. Nagashekar, Director, Blood Bank, Dr. M. Byregowda, Dean Student Welfare, Dr. A.G. Shankar, Dean Post Graduate Studies, Dr. KM. Harinikumar, Youth Red Cross Nodal Officer were present during the occasion. More than 250 students participated and around 150 students donated the blood.

Activities in collaboration with Red Cross Society 2020-21

Youth Red Cross Unit, UAS, GKVK in association with Pushpaganga Academy, Bengaluru organized two days personality development programme on “Getting Ready for Future” at Conference Hall, Department of Biotechnology, UAS, GKVK between 9th -10th February 2021. Around seventy-four students from different departments participated in the programme. The programme was inaugurated by Hon’ble Vice Chancellor Dr. S. Rajendra Prasad followed by Dr. Narendrappa, Dean of Student Welfare, Dr. N. Srinivasa, Dean (PGS), Dr. K.M. Harinikumar, Nodal Officer, Youth Red Cross, UAS, GKVK and Shri. C.S. Dilip, Youth Red Cross Coordinator and Media In-charge, IRCS, Karnataka State. The training programme was concluded by Dr. D.L. Savithamma, Dean(Agri.).



INTERNATIONAL CENTRE ACTIVITIES:

International Centre established on 1st July, 2019 in the Directorate of Student Welfare, GKVK, Bengaluru to facilitate the students and faculty to exchange different International Organizations. Dual degree programme has been initiated with Western Sydney University supporting 2 students for Doctoral Research. As a part of Centre for Advanced Agriculture Science and Technology (CAAST) project 13 PG students are been facilitated for International Exposure Training. The student exchange programme is also being implemented between the University of Agricultural Sciences, Bengaluru & Gottingen, Germany.



NATIONAL LEVEL FESTIVALS

a) Republic and Independence Day Celebration

Every year 26th of January Republic Day and 15th of August, Independence Day is celebrated in the University Campus, GKVK Bangalore and other sub campuses. In the headquarter Hon'ble Vice-Chancellor used to garland the statues of renowned and late personalities and scientists such as Mahatma Gandhiji, Dr. Kuvempu, Dr. Puttarudraiah, Ragi Lakshmanaiah and Dr. K.C. Naik before hoisting the National flag, along with different cultural programmes (UG and PG). Hon'ble Board Members, Key officers, Faculty, Non-Teaching Staff and Students use to participate in the function. Similar programme was also celebrated in the sub-campuses by the respective Deans, Faculty and students



International Yoga Day

Every year 21st of June, International Yoga Day is organized at Dr. Babu Rajendra Prasad International Convention Centre GKVK, Bangalore, in the chairmanship of Hon'ble Vice-Chancellor. Well-known yoga specialists are invited for the programme. Key officers, Teachers, Non-Teaching staff and students used to attend the function.



6.6.6.5. Student Counselling and Placement Cell

Student Counselling at College of Agriculture, GKVK, Bangalore

Dedicated students' counsellors at the ratio of 1:12 (one counsellor for 12 students) are periodically reviewing the academic performance of the students. In a monthly meeting, counsellor provides academic guidance, emotional support and also advice the students on the finance, scholarship matters and carrier. One-to-one mentoring is also facilitated if students approach the counsellor. Semester grade cards is being distributed to the students during counselling. A separate student counselling record is being maintained by the counsellor where in counsellor can monitor the performance of the student

Student counselling at College of Agriculture Mandya

Teaching faculty is involved in conducting regular counselling meetings two times in a semester during convenient day at the rate of 18-20 students per counsellor. During counselling counsellors review the academic performance and distribute grade cards to the students, provides academic guidance and advice and carrier guidance.

Student counselling at College of Agriculture, Karekere, Hassan

Student counselling is carried out effectively in the College. At the time of admission of students to the first-year degree program, they are assigned to a particular teacher who would be their Counsellor during the entire duration of their degree program. Six to eight students of a batch are assigned to a particular teacher. Students are encouraged to constantly interact with their Counsellors for all matters related to academic, co-curricular and extra-curricular activities. Counsellors keep a track of the academic progress of the counselees and also help in addressing their concerns.

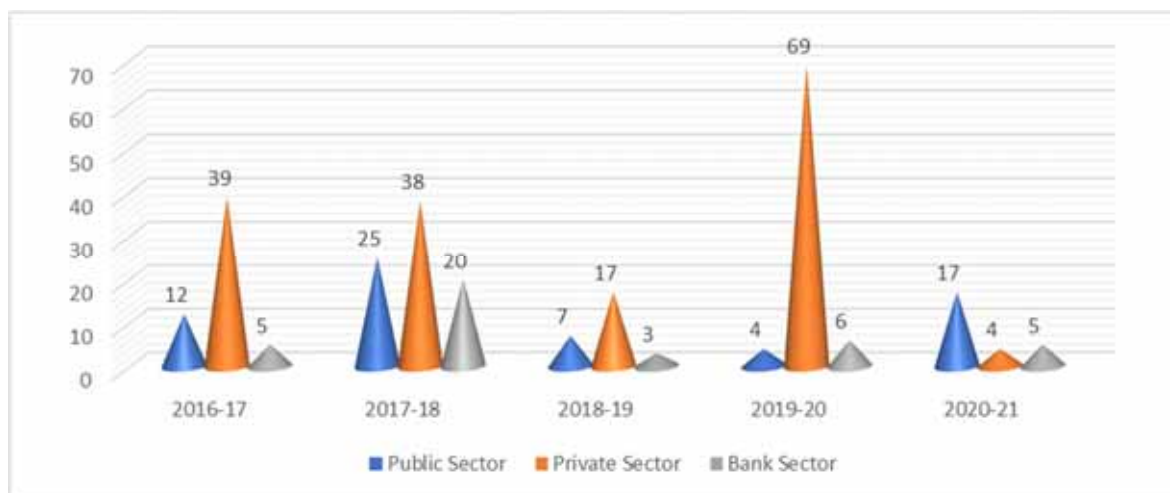
Student Counselling at College of Agriculture, Chintamani

Regular student counselling is being done every week. Their progress in academic, sports and cultural activities is reviewed and necessary suggestions were made. Each student's progress is assessed and informed to their parents for improvement. The required guidance for advice is given to the students for their better overall performance.

Placement Cell College of Agriculture, G.K.V.K

The placement cell functions under Dean (Student Welfare). It has been established for arranging frequent Institute-Industry interface for career counselling and placement of outgoing students in the jobs of their choice. A WhatsApp Group for Placement Cell has been created, job notifications are also available in the University website to assist the students with information regarding job opportunities. Hard copies are circulated to all the Departments, Library, Canteen, Hostels. During the last five years, nearly 271 students got employment through placement cell. Most of these candidates are placed in different public sector, private companies and organization like Commercialized Banks, Seeds Companies, Fertilizer Companies, R & D Institutions etc., However, majority of the students will go far Higher studies and have been getting job on their own, without the help from the Placement Cell.

Year	Number of students placed through campus selection			
	Public Sector	Private Sector	Banking Sector	Total
2016-17	12	39	5	56
2017-18	25	38	20	83
2018-19	7	17	3	27
2019-20	4	69	6	79
2020-21	17	4	5	26
Total	65	167	39	271



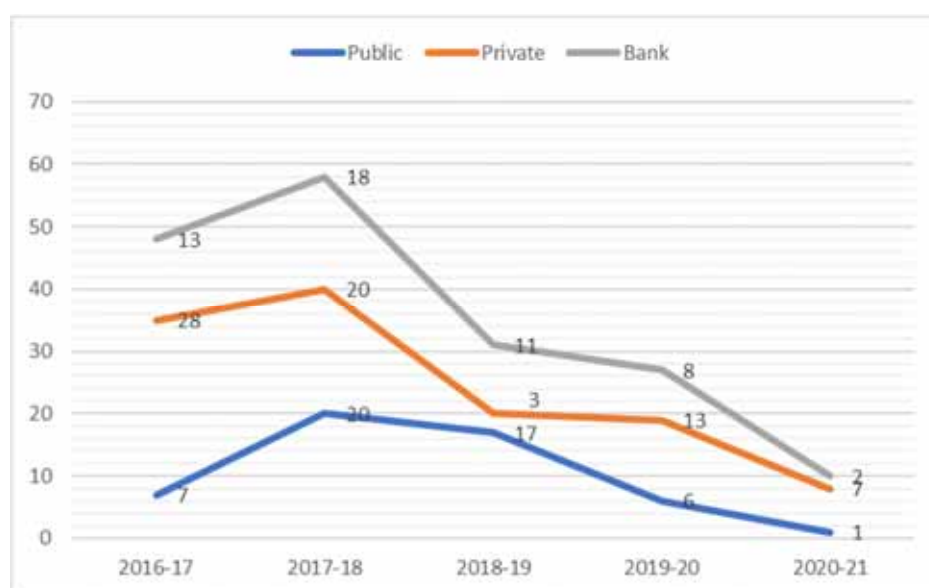
Some of the Public, Private and Banking sectors visited the Campus in the past five years

Sl. No.	Name of the Companies/Organization	Sl. No.	Name of the Companies/Organization
1	Camson Bio Technologies Ltd.	24	Captain Tractors Ltd.,
2	Yara Fertilizers Ltd.	25	Aquascape Technologies Pvt. Ltd.,
3	Mahindra and Mahindra	26	Modicare Ltd.,
4	Swastik Infrastructures Ltd.	27	More Retail Ltd.,
5	ICCOA	28	NABARD
6	Mansanto Co. Ltd.,	29	Sharavathy Conductors Pvt. Ltd.,
7	Coromandel Nutri Solution	30	Q and Q Research Insights Pvt. Ltd.,
8	AK Surya Power Ltd	31	Finolex Passion Industries Pvt. Ltd.,
9	Grey-river Technologies	32	Ninjakart
10	ITC Co.	33	Bachfun Pvt. Ltd.,
11	Ujjivan Financial Services	34	Dexler Agro Pvt. Ltd.,
12	Sundaram Finance Ltd	35	Sudarshan Pipes
13	Flybird Farm Innovation Pvt. Ltd	36	Sujay Irrigation
14	Ecocert India Pvt. Ltd	37	MTR Foods Pvt. Ltd.,
15	ICRISAT	38	Nestle India Ltd.,
16	Axis Bank	39	Citicorp Analytics & Information Management
17	Ujjivan Small Finance Bank	40	HDCF Bank
18	Rallis India Ltd.,	41	IFFCO Kisan Sanchar Ltd.,
19	Jain Irrigation Systems	42	Louis Dreyus Company
20	On Field in Private Ltd.	43	Desert Group
21	Mangalore Chemicals and Fertilizers, Hassan	44	UNG Agros
22	BAIF, Tiptur	45	Kisan Kraft
23	Global Pest control services, Bengaluru	46	VNR Seeds Pvt. Ltd.,

Placement Cell CoA, Mandya

The Placement Cell at College of Agriculture Mandya is inviting number of companies besides advising students towards taking competitive examinations and higher studies, some of the students placed in public sector, private and banking sectors are detailed below

Year	Number of students placed through campus selection			
	Public Sector	Private Sector	Banking Sector	Total
2016-17	7	28	13	48
2017-18	20	20	18	58
2018-19	17	3	11	31
2019-20	6	13	8	27
2020-21	1	7	2	10
Total	51	71	52	174



Placement of students in public sector, private and banking sectors

Detailed Placement Details of College of Agriculture, Mandya

Sl. No.	Name of the Placement	Subject /Discipline	No. of Students Employed	Positions / Ranks achieved	Organisation employed
2016-17					
1	ARS	GPB	1	Scientist	ASRB
2	National Exams	Spice Boards, Tobacco board, IFFCO	-	Field Officer, inspector, Subject Matter Specialist.	GOI
3	State Exams	Agriculture	6	Agriculture Officer, Assistant Agriculture Officer, Horticulture, Sericulture.	GoK
4	Bank Exams	Agriculture	13	Specialist Officer, Agriculture Officer, RDO	IBPS
5	Private Companies	Agriculture	4	Seeds and fertilizer companies	Seeds and fertilizer companies

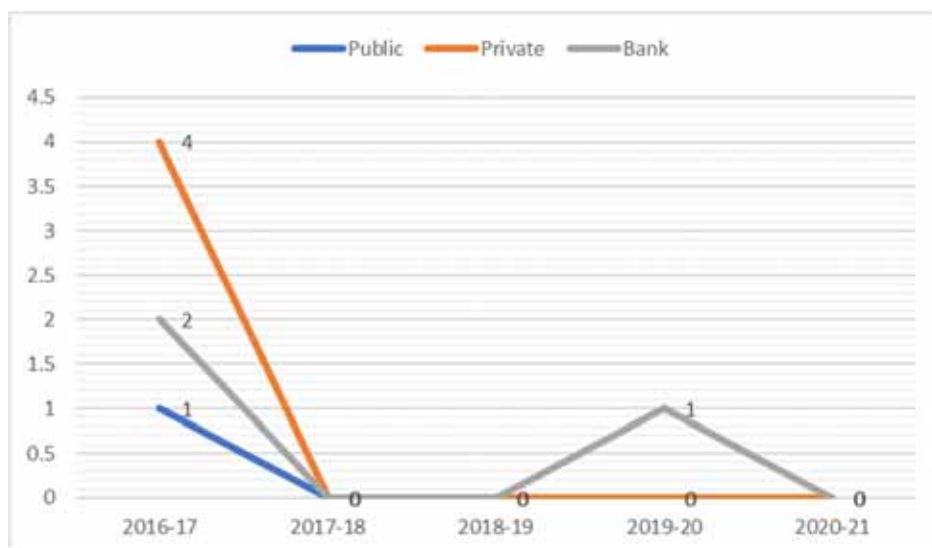
6	Any other	Agriculture	24	Assistant Professor, ATMA, NAREGA, Agro based Industries	University, Agriculture Departments, Projects, schemes
2017-18					
1	National Exams	Agriculture	1	Field Officer, inspector, Subject Matter Specialist.	GOI
2	State Exams	Agriculture	19	Agriculture Officer, Assistant Agriculture Officer, Horticulture, Sericulture.	GoK
3	Bank Exams	Agriculture	18	Specialist Officer, Agriculture Officer, RDO	IBPS
4	Private Companies	Agriculture	11	Seeds and fertilizer companies	Seeds and Fertilizer companies
5	Any other	Agriculture	9	Assistant Professor, ATMA, NAREGA, Agro based Industries	University, Agriculture Departments, Projects, schemes
2018-19					
1	National Exams	Agriculture	1	Field Officer, inspector, Subject Matter Specialist.	GOI
2	State Exams	Agriculture	2	Agriculture Officer, Assistant Agriculture Officer, Horticulture, Sericulture.	GoK
3	Bank Exams	Agriculture	11	Specialist Officer, Agriculture Officer, RDO	IBPS
4	Private Companies	Agriculture	14	Seeds and fertilizer companies	Seeds and fertilizer companies
5	Any other	Agriculture	3	Assistant Professor, ATMA, NAREGA, Agro based Industries	University, Agriculture Departments,
2019-20					
1	ARS		-		
2	National Exams	Agriculture	5	Field Officer, Police inspector, Subject Matter Specialist.	GOI
3	State Exams	Agriculture	1	Agriculture Officer, Assistant Agriculture Officer, Horticulture, Sericulture.	GoK
4	Bank Exams	Agriculture	8	Specialist Officer, Agriculture Officer, RDO	IBPS
5	Private Companies	Agriculture	11	Seeds and fertilizer companies	Seeds and fertilizer companies
6	Any other	Agriculture	2	Asst. Professor, ATMA, NAREGA, Agro based Industries	University, Agriculture Departments, Projects, schemes
2020-21					
1	ARS		-		
2	National Exams	Agriculture	1	Field Officer, inspector, Subject Matter Specialist.	GOI

3	State Exams	Agriculture	-	Agriculture Officer, Assistant Agriculture Officer, Horticulture, Sericulture.	GoK
4	Bank Exams	Agriculture	2	Specialist Officer, Agriculture Officer, RDO	IBPS
5	Private Companies	Agriculture	5	Seeds and fertilizer companies	Seeds and fertilizer companies
6	Any other	Agriculture	2	Asst. Professor, ATMA, NAREGA, Agro based Industries	University, State Dept. of Agriculture Projects & schemes

Placement Cell at CoA Hassan: The College is made up of faculty from all the three-degree programs. A WhatsApp Group for Placement Cell has also been created to assist the students with information regarding job opportunities. Students are also informed about the job notifications received from the University Placement Cell, GKVK, Bangalore. However, majority of the students have been getting job on their own, without the help from the Placement Cell. Very few on-campus recruitments have taken place at the College.

Student Placement Cell, CoA, Chintamani: The placement cell is actively working in guiding the students about, higher studies, job opportunities and different competitive examination. General meetings are conducted by placement cell coordinator to discuss and inform about job opportunities in Public and Private Agricultural Sectors. The campus is also inviting companies for campus interviews and records are maintained for placement of students are furnished below.

Sl. No.	Year	College / University	Type of recruitment Positions	Type of the employer	No. of recruitments made	Mode and mechanism of counselling followed
1	2016-17	CoS, Chintamani	Asst. Manager	Canara Bank	02	Exam & interview
			Sales executive	Pvt. Sector	04	
			Department of youth empowerment and sports Govt. of Karnataka	GoK	01	
4	2019-20		Asst. Manager	Canara Bank	01	



Placement of students in public sector, private and banking sectors

6.6.6.6. Disabled Friendly Facilities

Disabled Friendly Facilities at GKVK Campus

Various facilities are provided for the disabled persons at the following areas of the Institute:

- Ramps at major buildings of the university like south block and north block of the college, Administrative block (Naik Bhavan) and university library.
- Lift facility at both South and North blocks of the college where classes are held and also at the administrative block.
- Wheel-chair facility with an assistant is made available in all major buildings.
- In the hostels disabled friendly washrooms and toilets were made by altering the existing toilets and wash rooms.
- Special room for writing exams in the Ground floor of College of Agriculture

Disabled Friendly Facilities at Mandya Campus

At the entrance of college and class room steps, staircases are designed exclusively for disabled persons at college of Agriculture Campus Mandya



Facilities provided for the disabled persons at College of Agriculture, VC Farm Mandya

Disabled Friendly Facilities at College of Sericulture, Chintamani

Two wheelchairs (2Nos) are provided in the college campus for disabled students. Anti-slip concrete ramp is designed and constructed at auditorium (Used for Medical emergency and easy mobility purpose for students)

Disabled Friendly Facilities at College of Agriculture, Karekere, Hassan

Wheel chairs in all three the college buildings including library are provided. Separate platform for wheelchair (Wheel chair Ramp) in all three the building including library. Special room facility for writing exams at the Ground floor. In library for the benefit of disabled students all reference books made available in Ground floor



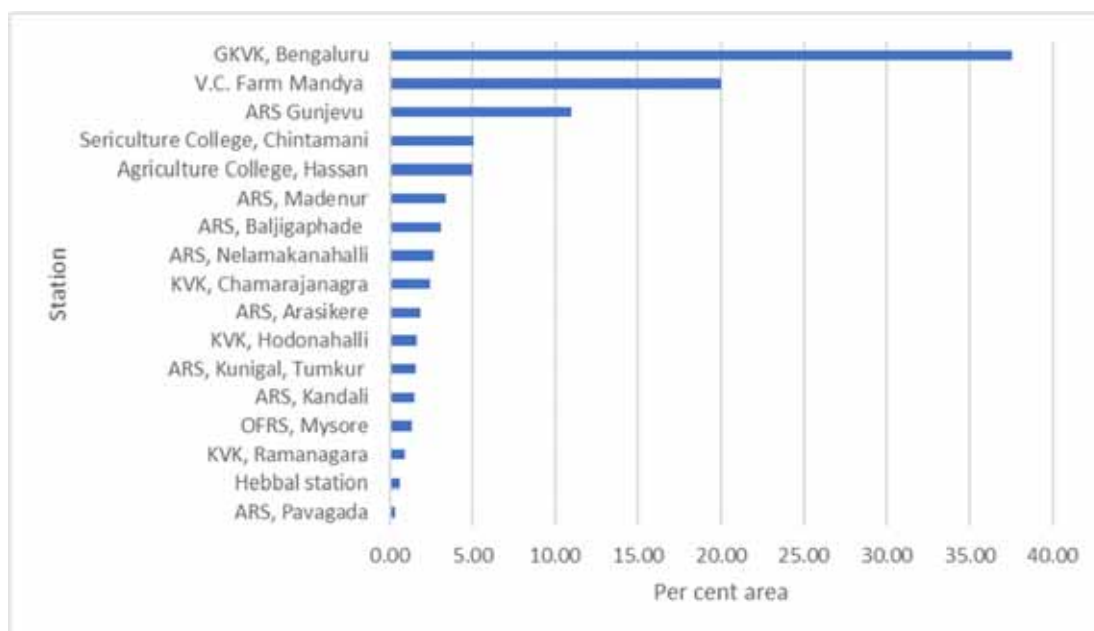
Facilities provided for the disabled persons at Head Quarter, GKVK, Bengaluru

6.6.7.1 Physical facilities including administrative building and lands

The University of Agricultural Sciences, Bangalore was established in 1964 and it has five teaching campus and 11 research stations. Total area under UAS Bangalore is around 3206.62 acres. The area under different colleges, KVKs and research stations are presented in following table.

Area under the jurisdiction of UAS, Bangalore

Sl. No.	Location	Area (in acres)
1	Gandhi Krishi Vignana Kendra (GKVK)	1205.18
2	V.C. Farm Mandya	640.30
3	College of Agriculture, Hassan	160.11
4	College of Sericulture, Chintamani	163.18
5	Main Research Station, Hebbal	20.00
6	Agriculture Research Station, Balajigapade	100.00
7	Agriculture Research Station, Arasikere	59.60
8	Agriculture Research Station, Madenur	108.23
9	Agriculture Research Station, Kandali	49.00
10	Agriculture Research Station Gunjevu	352.00
11	Agriculture Research Station, Pavagada	10.00
12	Agriculture Research Station, Kunigal	50.00
13	Agriculture Research Station, Nelamakanahalli,	84.10
14	Organic Farming Research station, Nagenahalli	44.30
15	Krishi Vignana Kendra, Chamarajanagara	77.20
16	Krishi Vignana Kendra, Ramanagara	30.21
17	Krishi Vignana Kendra, Hadonahalli	53.21
Total Area (acres)		3206.62



Per cent share of land under different Colleges, KVKs and Research stations of UASB

The Head Quarters of the University is at Gandhi Krishi Vignana Kendra (GKVK), Bengaluru. The Administrative Block (Naik Bhavan) has a plinth area 46920 ft² houses the Directorate of Education, office of the Registrar, office of Comptroller, administrative office, Directorate of research, Directorate of extension, office of Dean (Student Welfare), Estate Office and Board room. The academic block of the University houses the well-designed class rooms and laboratories. The detailed physical facilities the HQ of the University is presented in the following table.

Details of physical facilities available at the University Head Quarters

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
Administrative Building		
Naik Bhavan	46920.00 ft ²	1974-75
Examination centre	3710.64 ft ²	1974-75
Academic blocks		
CoA North block	101934.20 ft ²	1974-75
CoA South block	88105.8359 ft ²	1974-75
laboratory building for soil science	11302.11 ft ²	2016-17
Laboratory building for entomology	8783.35 ft ²	2018-19
Department of Sericulture	13304.19 ft ²	1984-85
Department of Agricultural Economics	5088 ft ²	2017-18
Horticulture building	20839 ft ²	1981-82
Agricultural Engineering building (block I, block II, main building)	19396.57 ft ²	1995-96
Agri. Engineering Class room and work shop	3562.85 ft ²	2009-10
Agri. Engineering Examination hall (FF)	1453.13 ft ²	2013-14
Agri. Engineering Class room (FF)	1969.80 ft ²	2016-17
Department of Agriculture Marketing & ABM	24673.68 ft ²	2009-10
Examination Hall	4394.90 ft ²	2018-19
Class Room Building	11560.44 ft ²	2019-20
Colleges Research Units		
Bio technology building	36513.55219 ft ²	2009-10
Organic Farming building	12366.6567 ft ²	2009-10
Bio Fuel building	3552.09 ft ²	2018-19
K block GPB	2185.07 ft ²	2019-20
Instructional Farms		
Agromony	20.1 ha	
Agricultural Engineering	1.601ha	
Apiculture	882.641ft ²	
Soil science and Agriculture chemistry	3 ha	
Crop Physiology	3.75 ha	
Forestry & Environmental Sciences	6.2 ha	
Genetics &Plant Breeding	8.41 ha	
Horticulture	50 ha	
Plant Pathology	0.4 ha	
Sericulture	1.36 ha	

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
Seed science and technology	1.5 ha	
Seed Production Units		
National Seed Project: Seed processing plant	6619.8ft ²	1984-85
NSP: Seed Technology Building	1140.97 ft ²	1984-85
NSP: Storage godown	355.209ft ²	1984-85
NSP: Seed storage at NSP	2690.98ft ²	1999-2000
NSP: Seed godown and work space	6596.6625 ft ²	2010-11
NSP: Seed drying yard	2411.12 ft ²	2020-21
Laboratories		
1. Laboratories at the Department of Agricultural Entomology		
i. Soil Biology Lab (ICAR)	4 Nos. / 50 Students each	1966-67
ii. Niche area of excellence for taxonomy of insects and mites Lab (ICAR)		
iii. Insect Molecular Biology Lab (DBT)		
iv. Insect Chemical Ecology Lab(DST-FIST)		
2. Laboratories at the Department of Agricultural Engineering		
i. Food Processing Lab	7 Nos. / 50 students each	1996-97
ii. (UASB)-UG & PG		
iii. Soil and water conservation lab (UASB)- UG & PG		
iv. Computer lab (UASB)- UG & PG		
v. Pilot Plant (MFPI)- UG		
vi. Engine lab-UG		
vii. Engineering physics lab-UG		
3. Laboratories at the Department of Agricultural Microbiology		
i. Bio-control Lab (DBT- DST Hub)	6 Nos. / 50 students each	1966-67
ii. Food Processing & Value addition Lab (RKVY)		
iii. Mushroom Lab (RKVY)		
iv. Bio-fertilizers mass production and quality control lab (GoK-Revolving fund)		
v. DST Hub Laboratory		
vi. Molecular Biology Lab (DST-FIST)		
4. Laboratories at the Department of Apiculture		
i. Honey processing-cum-Testing Lab (NAIP)	1 No./50 students each	1996-97
5. Laboratories at the Department of Agronomy		
i. Water Management lab	3 Nos/ 50 students each	2016-17
ii. Soil Testing lab		1974-75
iii. Plant analysis lab		
6. Laboratories at the Department of Plant Biotechnology		

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
i. Biotechnology Studies- UG & PG	4 Nos. / 50 Students each	2009-10
ii. Bio Chemistry lab - UG & PG		
iii. Tissue culture lab - UG & PG		
iv. Computer lab – PG, 25 systems		
7. Laboratories at the Department of Crop Physiology		
i. Tissue Culture Lab - PG	4 Nos. / 50 Each	1976-77
ii. Plant Physiology (Markers) Lab - PG		
iii. Plant molecular biology lab		
iv. Stress physiology lab- PG		
8. Laboratories at the Department of Food Science & Nutrition		
i. Food Processing Lab - UG	2 Nos. / 50 Each	2002-2003
ii. Food Science Chemistry Lab – PG		
9. Laboratories at the Department of Forestry & Environmental Sciences		
i. Bio-Fuel Lab (GoK) - PG	2 Nos. / 50 Each	1973-74
ii. Tissue culture Lab (GoK) – PG		
10. Laboratories at the Department of Genetics & Plant Breeding		
i. Marker Assisted Lab (Rock Feller Foundation)- PG	5 Nos/ 50 students each	1974-75
ii. Kirk House Trust Lab - PG		
iii. Tissue Culture Lab (GoI)- UG		
iv. Molecular Biology Lab- PG		
v. Common MAS lab – PG		
11. Laboratories at the Department of Horticulture		
i. Tissue culture lab	3 Nos/50 students	2007-08
ii. Quality Studies, Essential Oils, Aromatic & Medicinal Lab		1985-86
iii. Molecular lab		
12. Department of Agricultural Statistics Applied Mathematics & Computer Science	1 No. = 77 students	1974-75
13. Laboratories at the Department of Plant Pathology (South block)		
i. Mycology Lab (DST-FIST)	3 Nos. / 50 students each	1974-75
ii. Bacteriology Lab (RKVY)		
iii. Virology Lab (RKVY)		
14. Laboratories at the Department of Sericulture		
i. Silk Technology Lab (World Bank) – UG & PG	4 Nos./ 50 student each	1980-81
ii. Silk worm pathology Lab (World Bank)-PG		
iii. Rearing Lab (World Bank)		
iv. Genera lab – PG		
15. Laboratories at the Department of Soil Science & Agricultural Chemistry(South block)	1 No./50 students each	1971-72
16. Department of Agricultural Economics	1 No./ 19 students each	1970-71

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
17. Department of Animal science	1 No./50 students each	1971-72
18. Department of Seed Science and Technology	1 Nos /50 students each	1985-86
Others		
Library	43378.56 ft ²	1976-77
Farm Superintendent Office	2852.44 ft ²	1977-78
Post office	678.10 ft ²	1978-79
Bank	1 No of 2408.42 ft ²	-
Dispensary	2594.10 ft ²	1981-82
UAS Canteen	5305.20 ft ²	2008-09
Farmer's Hostel	16145.87 ft ²	2008-09
Store purchase office	1108.68 ft ²	2009-10
Indoor games hall	7534.74 ft ²	2010-11
Agriculture Technology Information Centre	5995.5 ft ²	2010-11
Agriculture Museum Building	9940.50 ft ²	2011-12
Bio gas based power generation unit	581.25 ft ²	2011-12
SAMETHI Building	3918.06 ft ²	2014-15
Dr Babu Rajendraprasad International Convention Centre	95219.60 ft ² (2000 members capacity)	2014-15
Sewage Treatment Plant (150 KLD)	1054.86 ft ²	2011-12
Suvarna Raitha Bhavan Guest House	GF-23200.10 ft ² FF-11947.94 ft ²	GF-2016-17 FF-2018-19
Sports Pavilion	3996.10 ft ²	2018-19
Solar Farming Unit (Near Bio-technology)	100 KWP	2008-09
Solar Farming Unit (Old International Students Hostel)	10 KW	2018-19
Solar Farming Unit (New International Students Hostel)	10 KW	2018-19
Solar Farming Unit (UG girls Hostel)	3 KW	2018-19
Farm pond(1 No) at J Block	300.00lakhs litre capacity	2020-21
Farm pond near quarters, pump house, horticulture(3 Nos)	451.60lakhs litre capacity	-
Hostel Buildings		
PhD Boys Hostel with 102 Room for 204 PhD Scholars (G+2)	Phase I: 27850.00 ft ²	2013-14
	Phase II: 20199.10 ft ²	2017-18
	Phase III: 7482.10 ft ²	2018-19
PG Boys Hostel 68 rooms for 204 PG Scholars (G+2)	29557.60 ft ²	1974-75
UG Boys Hostel: Block I 68 rooms for 204 Members (G+2) UG Boys Hostel: Block II 68 Rooms for 204 Members (G+2)	29556.73 ft ² +29557.37 ft ²	1974-75
UG Girls Hostel: Block I 40 rooms for 200 Members (G+3)	20300.30 ft ²	2007-08
UG Girls Hostel: Block II 28 Rooms for 140 Members (G+2)	16138.80 ft ²	2008-09
UG Girls Hostel: Block III 36 Rooms for 144 Members (G+2)	24109.00 ft ²	2008-09

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
PhD Girls Hostel with 85 Rooms for 170 Members (G+4)	12184.75 ft ² +17663.58 ft ²	2009-10 second, third & fourth floor was during 2017-18
PG Girls Hostel(old) of 55 Rooms for 222 members	40902.86 ft ²	1984-95
International Students' Hostel (Old Block) Ground Floor: 6 Rooms for 12 members	4413.20 ft ² 4413.20 ft ²	2000-01 2003-04
International Students' Hostel (New Block) 44 Rooms for 44 members	20236.15 ft ²	2010-11
Working Women's hostel 33 Rooms for 99 members	26866.72 ft ²	2018-19
Quarters at CoA, GKVK Campus		
C Type (6 Nos.)	2Nos. of 861.10 ft ²	1978-79
	2 Nos(GF) of 2475.70 ft ²	2007-08
	2Nos (FF) of 2495.70 ft ²	2009-10
D Type (28 Nos.)	D1 to D6 of 613.543 ft ² each	1978-79
	D7 to D24 of 19375.04 ft ²	1978-79
E Type (14 Nos.)	E-1 to E6 of 613.50 ft ² each	1978-79
	4 No. of 2820.14 ft ²	2007-08
	4 No. of 2394.75 ft ²	2009-10
F Type (14 Nos.)	6 No. of 376.80 ft ² each	1978-79
	4 No of 1937.5 ft ²	2007-08
	4 No of 1937.5 ft ²	2009-10
G Type (26 Nos.)	4 No. of 3121.50 ft ²	2007-08
	8 No. (2 units of each 4 Nos.) of 3300.00 ft ²	2009-10
NSP Quarters	3 No. of 1808.3 ft ² each	1983-84
Sports ground	5.60ha	
Botanical garden	25.00ha	
Krishimela Ground	18 acres	2007-08
Demonstration plots	13 acres	2007-08
Krishimela Sabhangana	17600.00 ft ²	2016-17
Staff quarters and guest house at Hebbal Campus		
A Type(10 Nos)	2608.90 ft ² each	1971-72
B Type(20 Nos)	2010.70 ft ² each	1971-72
C Type(40 Nos)	1474.50 ft ² each	1971-72
F type(4 Nos)	2211.10 ft ²	2007-08
Kaveri Guest house Hebbal Old building	4768.10 ft ²	1971-72
	New (4 rows) 5072.80 ft ²	2006-07
VC Bungalow	3698.5 ft ²	2006-07



Naik Bhavan (Administrative Building)



Main Entrance Gate



Main Road to GKVK campus



Agricultural College (North Block)



Agricultural College (South Block)



Department of Sericulture



Department of Agricultural Economics



Department of Bio-technology



Research Centre for Organic Farming



Advanced Centre for Bio-energy Research



Farm Threshing Yard



UAS Library



University of Agricultural Sciences Canteen



Dr Babu Rajendraprasad International Convention Centre



Suvarna Raita Bhavana



PG Boys Hostel



Working Women's Hostel



Ph.D. Girls Hostel



Postgraduate Girls Hostel



Staff Quarters at Hebbal



Hon'ble VC Residence

Cauvery Guest House

Mandya Campus

VC farm Mandya is one of the oldest campus of the University and it is also a Zonal Agricultural Research Station (ZARS) of the University for Zone-6. VC farm Mandya has a college of agriculture, Krishi Vignana Kendra and agricultural research station. The details of the physical facilities available at the college of Agriculture Mandya is presented in following Table.

Details of physical facilities available at the College of Agriculture, Mandya

Type of Infrastructure	Capacity / Area / No.	Year of Establishment
Academic blocks		
Agriculture College Building	30521.10 ft ²	1993-94
Plant Health Clinic, AV Hall, Examination Hall (FF)	5314.35 ft ²	2007-08
Engineering Section (SF)	829.25 ft ²	2010-11
Diploma Administrative Building (Phase I)	10645.50 ft ²	2012-13
Diploma Administrative Building (Phase II)	25440.50 ft ²	2017-18
KVK Administrative Building	5920.15 ft ²	2011-12
Zonal Agricultural Research Station, VC Farm Mandya	553.50 acres	
Instructional Farms		
Wet Land Crop Production B Block	10 acre	
Experimental Technique Plots A Block	2 acre	
Plant Pathology Experimental Plots	0.05 acre	
Department of Genetics and Plant Pathology	2.5 acre	
Department of Soil Science	2 acres	
Seed Production Unit	5178.10 ft ²	2009-10
Laboratories		

Department of Agronomy		
Post graduate Laboratory	836.80 ft ² capacity of 25 students	1993-94
Undergraduate Laboratory	836.80 ft ² capacity of 25 students	1993-94
Department of Plant Pathology		
Post graduate Laboratory	836.80 ft ² capacity of 10 students	2018-19
Undergraduate Laboratory	1840.63 ft ² capacity of 40 students	1993-94
Department of Genetics and Plant Breeding		
Post graduate Laboratory	550.04 ft ² of 50 students capacity	1993-94
Undergraduate Laboratory	1840.63 ft ² of 20 students capacity	2013-14
Plant Biotechnology Laboratory	836.7864 ft ² of 50 students	2018-19
Department of Entomology		
Post graduate Laboratory	1329.30 ft ² of 5 students	2018-19
Undergraduate Laboratory	1840.63 ft ² of 50 students	2013-14
Poly house	2597.44 ft ²	2015-16
Department of Soil Science		
Post graduate Laboratory	5 Nos. / 1131.50 ft ²	2013-14
Undergraduate Laboratory	53 Nos./ 844.65 ft ²	1993-94
Central instrumentation Lab	5 Nos. / 844.6 ft ²	2013-14
Water Technology Centre	5812.51 ft ²	2014-15
f) Others		
Guest House	3100 ft ² 142 ft ²	1972-73 2010-11
Library(GF) + (FF)	4427 ft ² +4427 ft ²	1996-97 & 2018-19
Farm pond	1213.1lakhs (14 No)	-
Sports Ground	5.5 acres	1993-94
Bank building	1168 ft ²	1935-36
Post Office	1 Nos	-
Dispensary	666.60 ft ²	1996-97
Trainees Hostel and training hall	2603 ft ²	1993-94
College Teachers hostel	2133 ft ²	1996-97
Pilot plant for Jaggery park	14198 ft ²	2010-11
Bio gas-based power generation plant	1327 ft ²	2011-12
Canteen building	817.62 ft ²	2013-14
Water technology museum	5812.51 ft ²	2014-15
Grid solar power system	3(No's)95Kw	2019-20
Auditorium	410 members/ 6268 ft ²	2019-20
Hostels		
Kuvempu Boys Hostel, 36 rooms for 144 students	21633 ft ²	1994-95
Negilayogi Boys hostel(Diploma) 45 rooms for 228 students	Phase I of 5403 ft ²	2014-15
	Phase II of 23985 ft ²	2016-17
	Phase III of 8955.50 ft ²	2020-21
Girls Hostel-I, 52 rooms for 156 students	Phase I of 23789 ft ²	2010-11

	Phase II of 7750 ft ²	2013-14
	Phase III of 4273 ft ²	2016-17
Girls Hostel-2, 50 rooms for 100 students	28411.0 ft ²	2019-20
Quarters		
A type Quarters	3 No. of 2000 ft ² each	1971-72 2005-06
B type Quarters (7 Nos)	1650 ft ² each	1972-73 2005-06
C type Quarters (6 Nos)	1900 ft ² 1168 ft ² 1100 ft ² each	1935-36 1935-36 1963-64
D type Quarters (20 Nos)	800 ft ² each	1963-65
E type Quarters (19 Nos)	775 ft ² each	1963-65
F type Quarters (40 Nos)	380 ft ² each	1939-65
G type Quarters (44 Nos)	185 ft ² each	1939-40



College of Agriculture, Mandya



Diploma in Agriculture Administrative Building



Plant Pathology Laboratory



Agricultural Entomology Laboratory



Soil Science Laboratory



Genetics and Plant Breeding Laboratory



Auditorium



Bio-gas Plant



Open gym at the students' Hostel



Boys Hostel



Girls Hostel

Hassan Campus

The college of Agriculture Hassan has three Degree programmes viz. B.Sc. (Hon.) Agriculture, B. Tech (Food Technology) and B. Tech. (Bio-technology). The campus also hosts KVK and research station. The details of the physical facilities of the college are presented in Table.

Details of physical facilities available at the College of Agriculture, Hassan

Type of Infrastructure	Capacity / Area / no.	Year of Estd.
Academic Blocks		
College of agriculture Hassan	57500.81 ft ²	2006-07
Food Technology Unit	23799.01 ft ²	2009-10
Agriculture Biotechnology unit	23799.01 ft ²	2009-10
Colleges research units	1.5 ha	2006-07
Instructional farms	8 ha	2006-07
Bio fuel park building	19975.80 ft ²	2008-09
Seed production units	15ha	2006-07
Laboratories		
Agriculture laboratories	12 No. for 60 students	2006-07
Biotech and Biochemistry Laboratory	2 No. for 60 students	
Plant Tissue Culture Laboratory	2 No. for 40 students	
Genetic Engineering Laboratory	1 No. for 30 students	2009-10
Molecular Marker Laboratory	1 No. for 30 students	
Bioinformatics laboratory	1 No. for 60 students	
Food Science Laboratory	08Nos. (total 240 students)	2009-10
Others		
Guest House	20members/8126.75 ft ²	2009-10
Library Building	7750.55 ft ²	2009-10
Dispensary	3821.19 ft ²	2009-10
Sports Pavilion	5597.25 ft ² for 300 students	2009-10
Bank (with ATM Counter)	1 No.	2009-10
Post Office	1 No.	2009-10
Canteen	1 No.	2009-10
Outdoor Pavilion Block	5597.2 ft ²	2009-10
Indoor Games Block	43023.35 ft ² for 600 students	2009-10
Auditorium	32291.73 ft ² for 500 students	2009-10
Shopping Complex Building	10279.50 ft ²	2010-11
Sewage Treatment Plant	150KLD	2015-16
Sports Ground	4.44 acres	-
Hostels		
Boys Hostel Block-I (GF+2 Building)	48 rooms for 138 members of 34035.50 ft ²	2006-07
Boys Hostel Block-II (GF+1 Building)	30 rooms for 90 members of 25291 ft ²	2018-19
Girls Hostel Block-I (GF+1 Building)	38 rooms for 114 members of 9113.48 ft ² (GF) +9113.48 ft ² (FF)	2006-07 (GF) 2009-10 (FF)
Girls Hostel Block-II (GF+2 Building)	41 rooms for 123 members (GF+FF=23228.52 ft ²) second floor 11840.3 ft ²	2010-11 2015-16
New Hostel block	50 Rooms (100 members) 29214.33 ft ²	2020-21
Quarters		
A type Quarters	2365.47 ft ² each (4 No)	2009-10
B type Quarters	1677.77 ft ² each (4 No)	2009-10
C type Quarters	1237.85 ft ² each (6 No)	2009-10
D type Quarters	3911.60 ft ² each (8 No)	2009-10
E type Quarters	1564.10 ft ² each (8 No)	2009-10
F type Quarters	1489.94 ft ² each (8 No)	2009-10
G type Quarters	1092.54 ft ² each (4 No)	2009-10

Farm pond

4 farm pond of 2.50 lakhs lit capacity

-



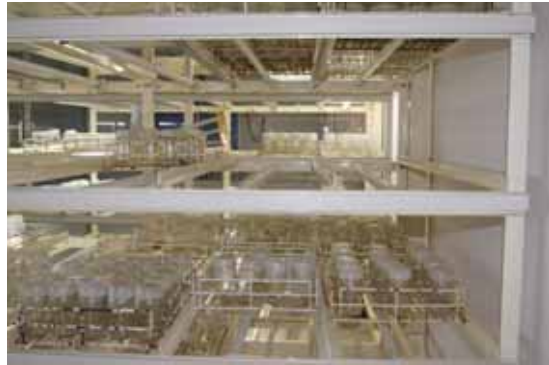
College of Agriculture, Hassan



Food Technology and Bio-technology Building



Bio-fuel Park



Laboratories at the College of Agriculture, Hassan



Bank



Post office



Guest House



Gym facilities at the girls' hostel



Indoor games stadium



Hostel rooms



Staff quarters



Hostel Block



Pavilion Block



Auditorium

Chintamani Campus

The college of Sericulture is located in Chintamani Taluka of Chikballapur District and it has two degree programmes viz. B.Sc.(Hons.) Agriculture and B.Sc.(Hons.) Sericulture the details of the physical facilities available at the College of Sericulture is presented as follows.

Details of physical facilities available at the College of Sericulture, Chintamani

Type of Infrastructure	Capacity / Area / no.	Year of Establishment
Academic Blocks		
College building(GF)	19375.04 ft ²	1995-96
Rear side building(FF)	10656.3 ft ²	2009-10
Balance front portion(FF)	7158 ft ²	2018-19
Colleges Research Units		
1. Bio-fuel unit	1No. 1334.72ft ²	2010-11
2.Experimental Technique Plot	1No 86111.28 ft ²	2009-10
Instructional Farms/ Units		
Demonstration of horticultural crops & Nursery unit	8363.56 ft ²	2007-08
Crop production unit	115173.84 ft ²	2007
Experimental technique plots	86111.28 ft ²	2011
Mulberry Garden (Variety S-36)	59201.51 ft ²	2011
Bush Mulberry Garden (Variety V-1)	86111.28 ft ²	2009
Different planting system V1 mulberry	21527.821 ft ²	2020
Fruit Mulberry Garden	16145.866 ft ²	2014
Tree mulberry (Variety V-1) garden	21527.82 ft ²	2016
Crop museum	80729.33 ft ²	2007
Threshing yard	5381.96 ft ²	2010
Irrigation museum	2152.78 ft ²	2012
Sericulture working unit (RKVY funded)	3616.67 ft ²	2009-10
Scion bank of cashew, mango, Jamun & tamarind	430556.42 ft ²	1995
Integrated Farming System Unit	107639.1 ft ²	2012
Fodder museum	5381.96 ft ²	2018
Animal husbandry unit	2690.98 ft ²	1995
Agro-forestry unit	107639.1 ft ²	1995
Chandanavana (Sandal wood plantation)	43055.64 ft ²	2019
Weaving unit	430.556 ft ²	2007

Bio-craft Unit	1506.95 ft ²	2006-07
Chawki Rearing Centre (CRC)	1388.54 ft ²	2007-08
ARS Seed Production Units	2.5 ha	2009-10
Laboratories		
Grainage laboratory	1130.21 ft ²	1994-1995
Agricultural Micro-biology laboratory	1130.21 ft ²	
Agricultural engineering laboratory	1130.21 ft ²	
Soil science laboratory	1130.21 ft ²	
Genetics and Plant Breeding Laboratory	1130.21 ft ²	2006-07
Entomology Laboratory	1130.21 m ²	2006-07
Plant Pathology Laboratory	1130.21 ft ²	2006-07
Centralized Laboratory	1130.21 ft ²	2017-18
Handloom weaving unit	430.556 ft ²	1995
ICAR-ELP commercial Chawki rearing centre	1388.54 ft ²	2019
Silk reeling technology	398.265 ft ²	1995
Silk work egg production technology	430.556 ft ²	1995
Silkworm breeding and genetics	495.14 ft ²	1995
Silk reeling and post reeling technology	3616.67 ft ²	1995
Late age silkworm rearing centre	1657.64 ft ²	1995
Others		
Dispensary	301.389 ft ²	2004-05
Library building	3993.41 ft ²	2005-06
Canteen	1 No	2006-07
Farmer's Hostel	3767.37 ft ²	2010-11
KVK building	5920.15 ft ²	2010-11
Auditorium	5812.51 ft ² /103members	2020-21
Sports Ground	6.96 acres	-
Hostels		
Boys Hostel	Phase I of 26705.26 ft ²	1994-95
	Phase II of 16016.7 ft ²	2016-17
Girls Hostel	Phase I of 10397.9 ft ²	2010-11
	Phase II of 7713.9564 ft ²	2010-11
	Phase III of 13203.80 ft ²	2016-17
Quarters		
A Type(1 No)	1345.50 ft ²	1995-96
B Type(1 No)	1324 ft ²	1991-92
C Type(2 No)	861.11 ft ² each	1991-92
D Type(9 Nos)	2421.88 ft ² (1 No)	1983-94
	6458.35 ft ² (6 No)	1994-95
	2152 ft ² (2 No)	1995-96
E Type(2 Nos)	444.01 ft ² each	1977-78
F Type(2 Nos)	452.90 ft ² each	1983-84
Farm pond	6 Nos(134.73lakhs lit)capacity	-



College of Sericulture



Bio-fuel Building



Chawki Rearing Centre



Laboratories in the college of Sericulture



Library



Auditorium



Staff Quarters



Girls Hostel



Boys Hostel

6.6.7.2. IT Infrastructure

Looking into the importance of information technology in academic excellence the University has initiated the process of creating IT infrastructure in the campus during 1997 as a result today University has very good IT infrastructure. Establishment of Agricultural Research Information System (ARIS) cell in the University was a major milestone which has helped the University in installation of modern computers, access to quality of internet, UPS etc. which has enabled the University headquarters to connect with its constituent colleges, different directorates viz., Director of research, Directorate of Extension and Directorate of Education, research stations. Later the ARIS cell was upgraded as Agriculture Knowledge Management Unit (AKMU) in 2010. Presently, AKMU is functional all the campuses of the University. LAN connectivity, Ethernet, WIFI connectivity in hostels, departments, classroom, smart classrooms and video conferencing facility is created in all the campuses of the University.

6.6.7.3. Students and Staff Amenities

Looking into the importance of physical and mental wellness of both the staff and students, the University has created sufficient sports and recreational amenities across the campuses of the University. These amenities are efficiently used and well managed. Other than these sports and recreational facilities the university also provide following career and financial advisory services for both staff and students across all the campus.

- Career and employed advice for the students is being done through various channels viz. office of Dean (Students welfare), skill development centre of the university and individual student counsellors.
- Financial advisory services to the students is being done through the Dean (Students Welfare) especially on the source of scholarships and fellowships connecting the needy students to sponsors and helping the students in preparation of documents for educational loans.
- For the staff, the university provides house building, vehicle loan, children education loans and festival advances.
- The teacher's association of the University arranges assistance in filing annual ITRs and provide advisory services on various savings and invest schemes through the qualified financial advisor.

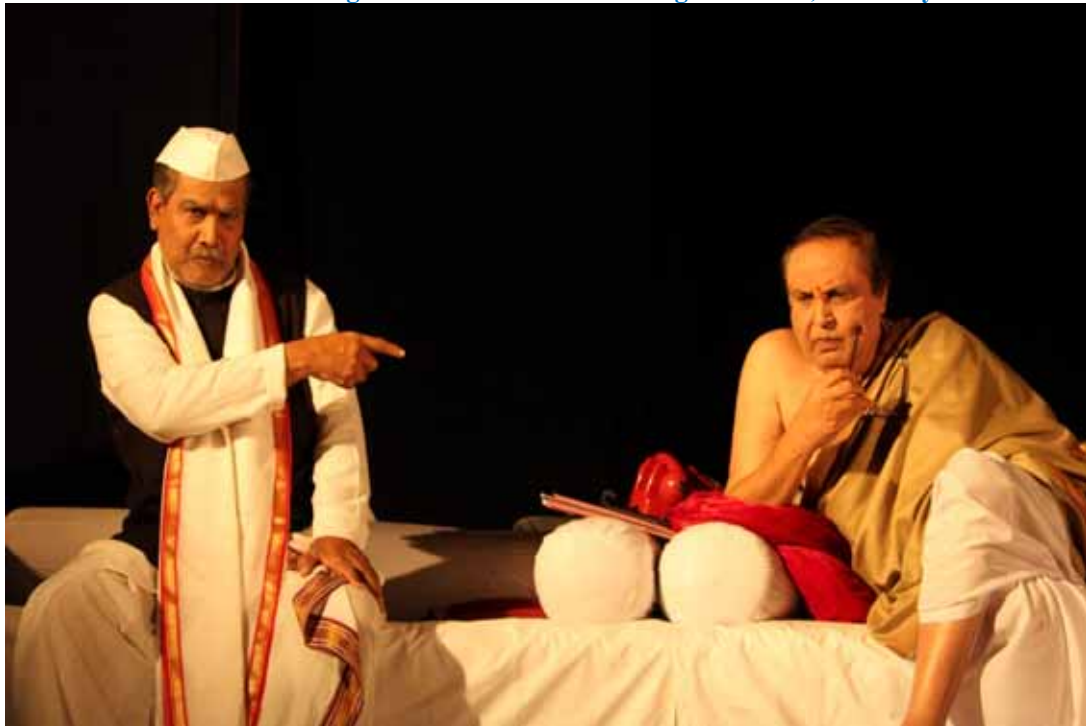
Each campus of the university has uniquely equipped with the sports and recreational facility and has its own autonomy in formation of cultural group at the campus level. Campus wise facilities are presented below.

Bengaluru Campus

- In the well maintained indoor sports complex with two badminton synthetic courts and two table tennis courts are created. Multi-gyms facility is created for the use of both students and staff.
- The outdoor sports complex has athletics track, standard football and hockey field, basketball court with flood lights, ball-badminton courts, kho-kho courts, kabaddi courts with Interlocking mat, volley ball court and outdoor gym at boy's and girls' hostels.
- The campus has well maintained canteen and cafeterias in the shopping complex. To safeguard the interest of the students and the staff food quality, prices and food quantity is being periodically reviewed by canteen committee of the University.
- Students cultural group '*Bhoomica*' is managed by the students and mentored by the faculties performs periodically in all the major events of the campus like annual day, send-off parties and inter-campus cultural fest.
- *GKVK Kannada Thingala Habba* (GKVK Kannada Monthly Festival) is being organized by Dr. P.S. Srikantha Murthy, Professor of Agricultural Economics with active participation by the students and financial support by faculty, staff, students and well-wishers and with logistic facilities by the campus. The program was started in January 2012, with the purposes of creating awareness, among the students and staff, about the cultural richness of our land and help them in shaping their overall personality. Wide variety of cultural extravaganza that included Bansuri concert by Padma Vibhushan Pandit Hariprasad Chaurasia, Bihu dance by artists from Assam, Mayur bhanj dance by artists from Odisha, film festival of world renowned director Dr. Girish Kasaravalli's movies, *samvad* with literary luminaries like Sri Jayanth Kaykini, Dr. H.S. Venkatesh Murthy, Dr. B.R. Lakshman Rao, Ashtavadhana by Dr. Shatavadhani Ganesh, Folk arts like Yakshagana and Kathakkali, Music concerts by famous artists that included Mysore brothers (violin), Vidwan Vidyabhushan (Vocal), Pandit Pravin Godkhindi (Flute), Dr. Jayanthi Kumaresh (Saraswathi Veena), One act plays like Mysuru Mallige, Mukhya Mantri and so on. Till today 98 monthly programmes were organized.



Oudh and Tombak Music concert by Sri Issa Murad from Palestine and Sri Fakruddin Ghaffari of Persian origin – GKVK Kannada Thingala Habba, February 2017



Dr. Rajaram and Sri Chandru in a scene from the play, “Mukhya Mantri” – GKVK Kannada Thingala Habba, November 2017



“Bihu Dance” by Sri Ranjith Kumar Gogoi and team from Assam – GKVK Kannada Thingala Habba, November 2016



“Shraddha and Stainless Steel Paatre” a satire – GKVK Kannada Thingala Habba, November 2013



“Nriya Vaibhava” classical dance by GKVK students – GKVK Kannada Thingala Habba, January 2017



A scene from the play, “Anabhijna Shakuntala” – GKVK Kannada Thingala Habba, May 2019



**“Bansuri Vaadana” by Padmavibhushana Pandit Hariprasad Chaurasia – GKVK
Kannada Thingala Habba, January 2016**



**Yakshagana “Moha Menake” by Sri Mantapa Prabhakara Upadhya and Sri
Prashanthavardhana – GKVK Kannada Thingala Habba, March 2016**

Mandya Campus

- This campus has well managed outdoor games complex for basketball court (420 m²), cricket practice net (61 m²), kabaddi court (130 m²), volleyball court (198 m²), throw ball court (223 m²), football ground (7040 m²), Ball Badminton court (288 m²), Kho-Kho court (432 m²) and 400 metre athletic track for both staff and students.
- Indoor sports complex is well maintained and has facility for playing chess and table-tennis.
- In both girls’ and boys’ hostel, outdoor gymnasium facility has been created for exclusively for the use of students.

- Canteen facility in the campus is being managed by the boy's Hostel Management Committee and serves the food and refreshment for visitors, students and faculty.
- Students cultural group, 'Natana' performs periodically in all the major events of the campus like annual day, send-off parties and inter-campus cultural fest.



Basket Ball Court



Outdoor Gymnasium



400 metre athletic track



Volleyball court

Hassan Campus

- College of Agriculture, Hassan has well established outdoor sports facility like athletic (400 metre), ball badminton, basketball, cricket, football, kabaddi, Kho-Kho, throw ball and volleyball for both students and staff
- Faculty lounge in the academic block of the college has soft games facility like carom, board football. The faculty lounge also has microwave, refrigerator and dining facility.
- Outdoor gymnasium facility for students at both boys and girls hostel is effectively used by the students.
- The indoor gymnasium of the college has multi gym, cross trainer, treadmill and cycling facility.
- Campus has well auditorium with very good acoustics and AV aids which is regularly used cultural activities of the campus.
- Food services to the visitors, guests and faculties is being met through the guesthouse kitchen.
- Cultural group of the campus 'Hoysala kala tanda' regularly perform in all the major events of the University and campus.



Auditorium at the Hassan Campus



Indoor badminton

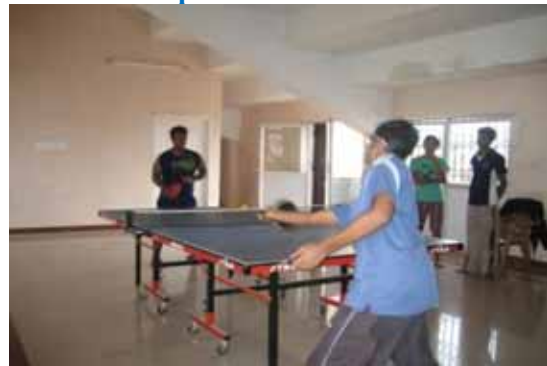


Table Tennis



Basketball court



Outdoor games



Student and staff amenities in Hassan Campus

Chintamani Campus

- College of Sericulture has well maintained multipurpose playground spread over 2.5 ha. The ground is regularly used to conduct athletic events, cricket and football matches for students.
- Campus has two basketball courts, one fitted with flood lights which are being used by the students and staff.
- College also as the distinction of well-maintained netted mesh cricket turf for net practice.
- Along with sports facilities college has indoor and open gym facilities, which is being used by students.
- Indoor game facility of table tennis, carrom and chess are available round the clock at both boys' and girls' hostels.
- Separate indoor game facility is available for faculty at college.
- The campus is well equipped with modern acoustics and state of art auditorium which is being used to conduct cultural programmes, seminars, workshops for students, faculty and farmers.
- Campus cafeteria is being managed by the boy's hostel and accrued profits from the cafeteria is being shared to the boarders of the hostel.



Cultural activities in the Chintamani campus



Outdoor sports facility in the Chintamani campus

6.6.8. Financial Resource Management

6.6.8.1. Budget Allocation

The University has allocated Rs.13100.57, 13954.65, 14539.05, 11161.80 and 17758.26 lakhs towards salaries, contingency and ICAR development grants to the constituent Colleges and the University headquarters during last five years as detailed in the below mentioned table.

Budget allocation to the constituent Colleges and the University headquarters during 2016-17 to 2020-21

Sl. No.	Campus / University HQ	Budget Allocation	2016-17	2017-18	2018-19	2019-20	2020-21
1	College of Agriculture, GKVK	Salary	4012.01	4322.04	4192.06	4862.62	5338.50
		Contingency	163.30	231.38	180.26	198.29	229.70
		Amount Received through the ICAR Development Grant	92.10	204.00	68.00	26.00	21.50
2	College of Agriculture, Hassan	Salary	625.72	659.37	700.70	865.25	934.08
		Contingency	200.85	257.64	248.77	276.02	270.58
		Amount Received through the ICAR Development Grant	133.50	186.00	357.00	86.00	24.00
3	College of Agriculture, Mandya	Salary	595.25	633.42	665.36	738.49	785.89
		Contingency	85.48	133.43	153.45	155.32	179.16
		Amount Received through the ICAR Development Grant	134.00	205.00	358.00	81.00	26.50
4	College of Sericulture, Chintamani	Salary	528.67	574.55	444.67	537.09	590.27
		Contingency	129.60	146.13	142.33	166.12	167.50
		Amount Received through the ICAR Development Grant	131.56	191.00	66.00	26.00	19.00
5	University HQ	Salary	3969.57	3839.84	4564.60	577.95	5595.06
		Contingency	2023.04	2025.08	2281.80	2484.65	3538.31
		Amount Received through the ICAR Development Grant	275.92	345.77	116.05	81.00	38.21
Total			13100.57	13954.65	14539.05	11161.80	17758.26

Note: The sufficiency of the fund to meet the academic requirement in last five years

- There is a need of increasing the Contingency grants to all the Colleges by the ICAR, since the amount received is very meagre and it needs to be considered keeping in view of imparting quality education and also for providing research experience to the students. Further, it is worth mentioning that the number of students admitted to the colleges is increasing significantly and there is a need to strengthen the infrastructure including the residential facilities to the students. The girls' accommodation facilities need to be expanded keeping in view of the strength of girl students in each college campus. However, the contingency and infrastructure are also given sufficient care by providing grants from the University internal receipts to meet the urgent demands of the college campuses.
- The capital grant supported the University in construction of hostel for students. The Grant also supported programmes related with personality development of the students, faculty development,

creating student amenities, strengthening of library, e-resources, e-grant, information and communication technology and preparation of quality instructional material.

6.6.8.2 Finance Committee

As per the statutes of the University the Board shall constitute a Finance Committee consisting of the following members, namely:

1. The Vice-Chancellor - Chairperson
2. The Principal Secretary to Government, Finance Department or his nominee not below the rank of a Deputy Secretary.
3. The Principal Secretary or Secretary to Government, Agriculture Department or his nominee not below the rank of a Deputy Secretary.
4. One member of the Board of Management nominated by the Vice-Chancellor
5. Registrar- Member
6. The Comptroller – Member Secretary

The Finance Committee shall have the following functions, namely:

1. To examine the annual accounts and budget estimates of the University and to advise the Board thereon;
2. To review the financial position of the University from time to time;
3. To make recommendations to the Board on all matters relating to the finances of the University;
4. To make recommendation to the Board on observing utmost economy, bringing out austerity measures and suggesting curbs on wasteful expenditure.
5. To make suitable recommendations to the Board for cost recovery mechanism for both research and teaching to further improve the financial strength of the University

As per the provision of the Statues of UAS(B) the sanctions exceeding Rs. 10 lakhs need to be approved by the finance committee observing utmost economy in utilisation of funds released and also, bringing in austerity measures wherever it is required. Due care is also taken to ensure in procurement procedure dully following the KTCP Act. During the reporting period the 17 Finance Committee Meetings were held for discussion and approval of various issues related to the financial aspects of the University.

Sl. No.	Year	Dates of Meeting	Major Recommendations	Major Action Taken
1	2016-17	11 th January 2016 130 th FC meeting	Thirteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTCP Act of 1999 worth about Rs. 3483.58 lakhs	<ol style="list-style-type: none"> 1. Sanction for Rs.50.00 Lakhs towards purchase of GC-EAD Equipment at Department of Entomology” sanctioned to UAS, GKVK, Bangalore. 2. Sanction of additional grants of Rs.400.00 lakhs for completion of certain interior works at Convention Centre, UAS, GKVK. 3. Construction of administrative building with class room and laboratory phase-II (balance portion) for Diploma College at VC Farm, Mandya for Rs.575.00 lakhs under NABARD grants. 4. Construction of Boys Hostel for Diploma College at VC Farm, Mandya for Rs.425.00 lakhs

			<p>under NABARD assisted RIDF-XX grants.</p> <p>5. Sanction for Rs.26,00,000/- towards purchase of Multina Microchip Electrophoresis System for High-Speed DNA/RNA under GOI Project on “FIST Programme, at Department of Genetics and Plant Breeding” sanctioned to UAS, GKVK, Bangalore</p> <p>6. Sanction for Rs.45,00,000/- towards purchase of Portable EDXRF under GOI Project on “FIST Programme, at Department of Soil Science and Agricultural Chemistry” sanctioned to UAS, GKVK, Bangalore</p>
	10 th March 2016 131 st FC meeting	Thirteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 461.00 lakhs	<p>1. Sanction for Rs.73.50 Lakhs towards purchase of Integrated Mini-lysimeter, Automatic Drought Simulator System under ICAR Scheme to the Department of Crop Physiology, UAS, GKVK</p> <p>2. Sanction for Rs.55.00 Lakhs towards purchase of ICP-OES under GOI Project at Department of Soil Science and Agricultural Chemistry”</p>
	16 th April 2016 132 nd FC meeting	Six items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 435.66 lakhs	<p>1. Sanction for Rs.190.00 lakhs towards the establishment of expert centres (9 Nos.) with video-conferencing facilities and purchase of video-conferencing equipment to the 7 KVKs & one Extension Education Unit and Main Centre at GKVK Campus under GOK (RKVY) Project at Director of Extension, UAS, Hebbal.</p> <p>2. Sanction for Rs.18.50 lakhs towards the construction of Farm Machinery and Implements Shed under GOK (RKVY) Project at Department of Agricultural Engineering, UAS, GKVK.</p> <p>3. Sanction for Rs.27.17 lakhs-towards purchase of Universal testing machine for texture analyzer (with all accessories) & purchase of spray dryer under GOI Project, at Department of Agricultural Engineering</p>
	19 th October 2016	Thirty-one items for procurement and civil works were presented and it was	<p>1. Furnishing of concurrent meeting halls of Convention Centre at</p>

		133 rd FC meeting	approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 1849.88 lakhs	<p>GKVK, Bangalore for Rs.200.00 lakhs.</p> <ol style="list-style-type: none"> 2. Furnishing for Audio/Video system to concurrent meeting halls of Convention Centre at GKVK, Bangalore for 81.00 lakhs. 3. Construction of Guest house at ARS, Nagenahalli for Rs.140.00 lakhs. 4. Construction of Auditorium at Agriculture College, VC Farm, Mandya for Rs.180.00 lakhs. 5. Construction of Sports Pavilion at GKVK, Bangalore for Rs.85.00 lakhs. 6. Construction of Examination hall at UAS, GKVK, Bangalore for Rs.122.00 lakhs. 7. Construction of working women's / girl's hostel at GKVK Campus for Rs.780.00 lakhs.
		28 th December 2016 134 th FC meeting	Nineteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 853.78 lakhs	<ol style="list-style-type: none"> 1. Sanction of Rs.58.10 Lakhs towards purchase of portable EDXRF under GOI Project at Department of Soil Science and Agricultural Chemistry. 2. Construction of fourth floor over the existing PG Girls hostel at GKVK, Bangalore for Rs.140.00 lakhs. 3. Construction of Auditorium at Agriculture College, VC Farm, Mandya for Rs.180.00 lakhs. 4. Construction of sports Pavilion at GKVK, Bangalore for Rs.85.00 lakhs. 5. Financial assistance of Rs.100.00 lakhs towards XIII Agricultural Science Congress from 21st to 24th February 2017 at GKVK Campus 6. Sanction of Rs.52.00 Lakhs towards Phenotyping facilities to the Department of Crop Physiology under GOI Project at Department of Crop Physiology sanctioned to UAS GKVK, Bangalore.
2	2017-18	30 th March 2017 135 th FC meeting	Thirteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 478.10 lakhs	<ol style="list-style-type: none"> 1. Construction of 2nd Floor over the existing PG Boys Hostel Block-A at GKVK for Rs.200.00 lakhs. 2. Sanction of Rs.22.00 lakhs towards purchase of HPLC & accessories under ICAR-AICRP (75%) scheme on "AICRP on PHT at GKVK".

		10 th July 2017 136 th FC meeting	Nine items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 431.50 lakhs	<ol style="list-style-type: none"> 1. Construction of Auditorium Building at Sericulture College, Chintamani for Rs.200.00 lakhs. 2. Construction of Laboratory First Floor (Balance Front Portion) at Sericulture College, Chintamani for Rs.135.00 Lakhs
		17 th October 2017 137 th FC meeting	Thirty-six items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 3546.32 lakhs	<ol style="list-style-type: none"> 1. Construction of Class Room at Agriculture College (South Block), GKVK, Bangalore for Rs.375.00 lakhs. 2. Construction of Director of Extension Office Building at UAS, GKVK, Bengaluru for Rs.990.00 lakhs. 3. Construction of Raitha Bhavan for UAS at ZARS, VC Farm, Mandya for Rs.345.00 lakhs. 4. Construction of Ambedkar Study Centre for UAS (B) at GKVK Campus, Bengaluru for Rs.580.00 lakhs. 5. Construction of Bio-fuel Park Building at UAS, GKVK, Bengaluru for Rs.98.00 lakhs. 6. Construction of 2nd Floor over the existing Boys Hostel at Agriculture College, Karekere, Hassan under NABARD Grants for Rs.240.00 lakhs 7. Construction of Boys Hostel (Balance Portion) 2nd Floor for Diploma College at V.C. Farm, Mandya under NABARD Grants for Rs.215.00 lakhs
3	2018-19	01 st June 2018 138 th FC meeting	Eighteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 437.51 lakhs	<ol style="list-style-type: none"> 1. Sanction of Rs.53.00 lakhs towards purchase of Gas Chromatograph-Fid-Mass Spectrometer (GC-FID-MS) under GOK (Ad-hoc) project at UAS, GKVK 2. Sanction for Rs. 58.10 lakhs towards purchase of EDXRF Equipment to the Dept. of SS & AC, COA, Bengaluru
		26 th December 2018 139 th FC meeting	Twenty-three items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 697.57 lakhs	<ol style="list-style-type: none"> 1. Sanction of Rs.55.00 Lakhs towards purchase of Mini-lysimeter Phenomics Platform under GOK (RKVY) Project. 2. Construction of First Floor over the existing Farmer's Hostel at KVK, Chamarajanagar for Rs.82.00 lakhs 3. Construction of First floor over the existing Administrative Building

				at KVK, Chamarajanagar for Rs.100.00 lakhs.
4	2019-20	20 th March 2019 140 th FC meeting	Seven items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 3046.50 lakhs	<ol style="list-style-type: none"> 1. Construction of Girls Hostel at Agriculture College, V.C. Farm, Mandya for Rs.750.00 lakhs 2. Construction of Administrative Building with Class Room and Laboratory at Agriculture College, Chamarajanagar for Rs.1500.00 lakhs.
		21 st May 2019 141 st FC meeting	Twelve items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 1650.50 lakhs	<ol style="list-style-type: none"> 1. Construction of Girls Hostel at Agriculture College, V.C. Farm, Mandya for Rs.750.00 lakhs 2. Construction of Girls hostel at Agriculture College, Hassan for Rs.780.00 lakhs.
		13 th September 2019 142 nd FC meeting	Thirteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1021.55 worth about Rs. 1021.55 lakhs	<ol style="list-style-type: none"> 1. Establishment of Agricultural Science Museum in respect of renewable energy, grain storage and extension technologies at GKVK for Rs. 60.00 lakhs 2. Sanction of Civil and Electrical works pertaining to the 107th Indian Science Congress to be held from 3rd to 7th January 2020 at UAS, GKVK campus for Rs. 710.80 lakhs.
		16 th December 2019 143 rd FC meeting	Eleven items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 478.86 lakhs	Construction of Boys Hostel (Balance portion) 2 nd Floor for Diploma College at Agriculture College, VC Farm, Mandya for Rs 265.00 lakhs.
5	2020-21	29 th January 2020 144 th FC meeting	Eighteen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 667.20 lakhs	Construction of Boys Hostel (Balance portion) 2 nd Floor for Diploma College at Agriculture College, VC Farm, Mandya for Rs 265.00 lakhs.
		21 st April 2020 145 th FC meeting	Two items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 17.33 lakhs	Sanction of Rs.17.33 lakhs towards purchase of Tamarind Concentrate production plant from Deseeded pulp (rind) – 200 kg / day with all necessary equipment, accessories, installation & commissioning under ICAR-AICRP (75%) scheme on “AICRP on PHET at GKVK”

	01 st September 2020 146 th FC meeting	Seventeen items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 1021.23 lakhs	<ol style="list-style-type: none"> 1. Construction of Skill Development Centre at UAS, GKVK, Bangalore for rs 180.00 lakhs. 2. Sanction for construction of record room at GKVK for rs 63.00 lakhs
	21 st January 2021 147 th FC meeting	Twenty-four items for procurement and civil works were presented and it was approved to take up the purchases and works as per KTPP Act of 1999 worth about Rs. 3967.83 lakhs	<ol style="list-style-type: none"> 1. Sanction for providing Chain link fencing to boundary at College of Agriculture, Chamarajanagar for rs.79.00 lakhs 2. Sanction for construction of compound wall at College of Agriculture, Chamarajanagar for rs.78.00 lakhs 3. Sanction for construction of Audio-Visual laboratory building at College of Agriculture, Chamarajanagar for rs. 88.00 lakhs 4. Sanction for construction of Girls Hostel for 125 students and Library building at College of Agriculture, Chamarajanagar for Rs. 1000.00 lakhs. 5. Sanction for construction of Administrative building with Class room and Laboratory at College of Agriculture, Chamarajanagar for Rs.1500.00 lakhs. 6. Sanction for construction of (first floor) HAL-UAS Advanced Centre for Bio-energy Research at GKVK for Rs 110.00 Lakhs 7. Sanction for construction of first floor over existing SAMETHI building at UAS, GKVK, for Rs 100.00 lakhs 8. Sanction for modification and extension of organic farming building (sf) for Agri. Innovation Centre start-up at UAS, GKVK for Rs.145.00 lakhs 9. Sanction for construction of Swimming Pool Complex at University of Agriculture sciences, GKVK campus, Bangalore for Rs 350.00 lakhs 10. Sanction for construction of laboratory for quality testing of Micro Irrigation Components by Precision Farming Development Centre (PFDC) at GKVK for Rs.150.00 lakhs.

6.6.8.3. Internal Resources Generation

The total sum of **Rs. 6985.79/- lakhs** was generated as internal resources by the five constituent colleges for the last five consequent years in the University and it is utilised for various Teaching, Research and Extension activities of the University along with the required infrastructure development. The important activities for which the grants were utilised are varietal development, patenting, publications in highest NAAS rated journals, technology development and equipping labs. The outreach programmes, demonstrations, farm trials, OFT'S, Exhibitions, Campaigns, publications, printing of literatures, use of ICT, farmer trainings, induction and in-service training programmes for faculty are also under taken under Directorate of Extension. Part of the internal receipts were also utilized for creating infrastructure by equipping students' hostels, experimental plots, providing logistics at constitute campus. However, a sum of Rs. 21745.65 lakhs was generated as internal receipts from the university.

Details of Internal Resources Generation through fees

Sl. No.	Year	College	Fee Collection	Sources of Internal Resource (activity)	Total (in Lakhs)	Ways of utilizing internal resource generated for academic programmes and research work of students
1.	2016-17	GKVK	741.26	Student fee, Hands on Training and College Farm and other Receipts	1058.56	The fund is earmarked for Student related activities, Academic, Laboratory practical's, Chemicals and glass wares, Personality Development, Hands on Trainings, RAWE, Educational tours, Sports, Merit scholarship, Support for attend Conferences, Seminar and Publications and Field Experiments
		Hassan	169.89			
		Mandya	76.79			
		Chintamani	70.62			
2.	2017-18	GKVK	660.08	Student fee, Hands on Training and College Farm and other Receipts	1241.83	
		Hassan	253.72			
		Mandya	197.73			
		Chintamani	130.30			
3.	2018-19	GKVK	815.31	Student fee, Hands on Training and College Farm and other Receipts	1576.51	
		Hassan	313.92			
		Mandya	275.72			
		Chintamani	171.56			
4.	2019-20	GKVK	1085.72	Student fee, Hands on Training and College Farm and other Receipts	1959.69	
		Hassan	328.58			
		Mandya	302.57			
		Chintamani	242.82			
5.	2020-21	GKVK	596.21	Student fee, Hands on Training and College Farm and other Receipts	1149.20	
		Hassan	166.64			
		Mandya	191.29			
		Chintamani	195.06			
Total					6985.79	

6.6.8.4. External Funding

The funds received / mobilised from of GOI, GOK, RKVY, Emeritus Scientist / Professor, Foreign funding agencies through competitive mode. It could be observed from the table that there is an increase in number of projects sanctioned and the amount mobilised from external funded projects on competitive mode. However, in the present year the total funds sanctioned are yet to be released. Further, all the scientists are encouraged to submit proposals for new projects for strengthening of research activities by making a mandate that, each scientist should have one externally funded project. The Training programmes on “How to Write Research Project for external fund” is also organised for the benefit of all the technical faculty of the University in order to get more research projects on competitive mode.

External Funding Received During 2016-17 to 2020-21

Sl. No.	Year	Name of the external Resource got through competitive mode	External resources mobilised (Rs. in Lakhs)	Total External resources mobilised
1	2016-17	GoI – 63 Projects	1376.15	1793.77
		RKVY – 02 Projects	113.00	
		Emeritus Professor- 0	0.00	
		Emeritus Scientist – 01	0.91	
		Foreign Funded – 6 Projects	38.92	
		ICAR – 48 - Projects	264.79	
2	2017-18	GoI – 57 Projects	1153.96	1708.26
		RKVY – 05 Projects	307.00	
		Emeritus Professor - 03	9.04	
		Emeritus Scientist – 02	23.52	
		Foreign Funded – 02 Projects	4.15	
		ICAR – 34 - Projects	210.59	
3	2018-19	GoI – 41 Projects	644.36	2340.25
		RKVY – 02 Projects	267.00	
		Emeritus Professor - 07	48.60	
		Emeritus Scientist – 06	55.66	
		Foreign Funded – 02 Projects	3.40	
		ICAR – 41 - Projects	1321.23	
4	2019-20	GoI – 40 Projects	731.88	2810.63
		RKVY – 06 Projects	970.00	
		Emeritus Professor - 07	49.00	
		Emeritus Scientist – 06	60.37	
		Foreign Funded – 0	0.00	
		ICAR – 46 - Projects	999.38	
5	2020-2021	GoI – 44 Projects	664.08	1416.81
		RKVY – 04 Projects	199.30	
		Emeritus Professor - 07	27.59	
		Emeritus Scientist – 09	52.39	

	Foreign Funded – 0	0.00	
	ICAR – 30 - Projects	473.45	
		Total	10069.72

6.6.8.5. Financial Powers Delegation to Deans/Heads

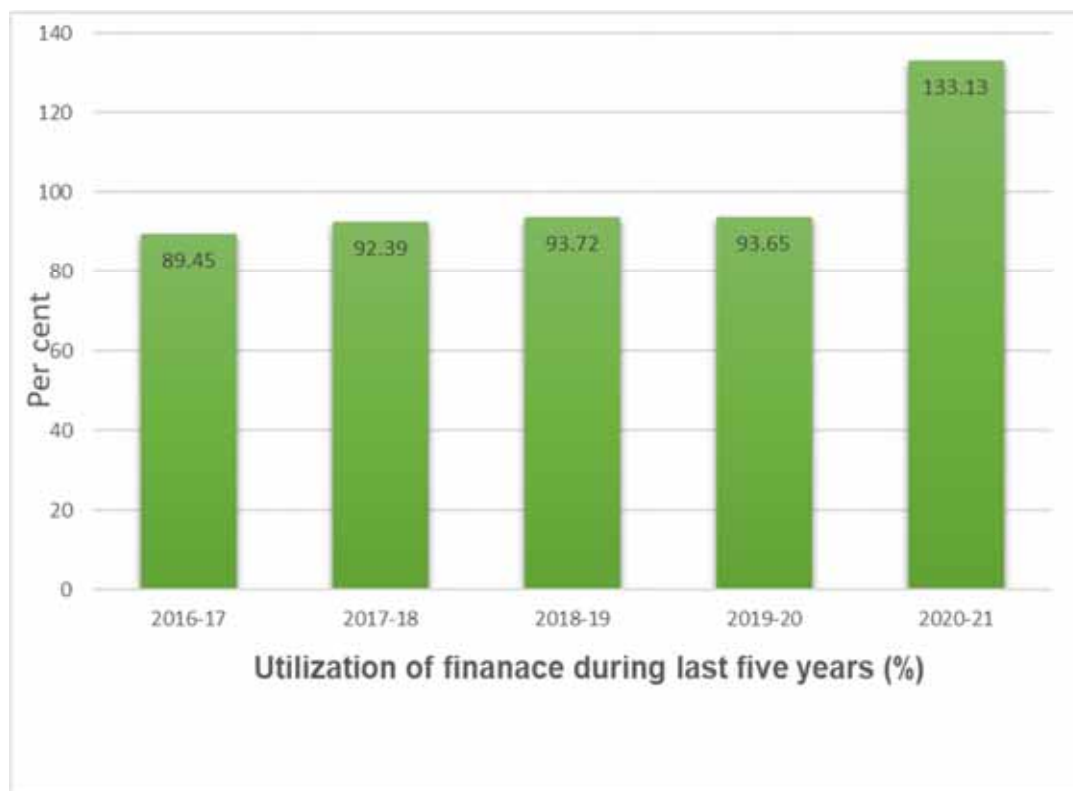
As per the provisions of Statues of UAS(B) delegation of financial sanctioning powers is assigned to the Vice-Chancellor, Officers, Deans & Associate Directors of Research. Principal Investigators of projects / Schemes are also assigned with the financial power as per the University guidelines / Circular.

Sl. No.	Deans/ Head / Officers	Type of financial powers delegated	
1	Officers	• Vice Chancellor	Not exceeding Rs. 10,00,000
		• Registrar	Not exceeding Rs. 2,00,000
		• Director of Research	
		• Director of Extension	
		• Director of Student Welfare	
		• Administrative Officer	
		• Comptroller	
		• Librarian	
2	Deans	• Estate office	
		• Dean (PGS)	Not exceeding Rs. 2,00,000
		• Dean (Agri.) GKVK	
		• Dean (Agri.) Mandya	
		• Dean (Agri.) Hassan	
3	Heads	• Dean (Seri.) Chintamani	
		• Head of the Department, Principal Investigators & Principal (Diploma College)	Not exceeding Rs. 50,000
4	Others	• Senior Scientist and Head (KVK)	Rs. 50,000
		• Associate Director of Research	Rs. 50,000
		• Associate Director of Extension	Rs. 50,000
		• Farm Superintendent	Rs. 25,000

6.6.8.6. Finance Utilization

The grants received from the State Government, ICAR, Government of India and internal receipts of the University amount to the total receipts of the University and expenditure is incurred for the advancement for learning and conducting of research in agriculture including extension activities. It could be observed from the table that there is a maximum utilisation of the funds received for the first four years. The higher side expenditure of 133.13 per cent during 2020-21 is due to the spill over of earlier years of capital grants by revalidation from the subsequent years.

Sl. No.	Year	Total of Finances Received & Mobilised (in Lakhs)	Total of Finances Utilised (in Lakhs)	Per cent of Utilisation (%)
1	2016-17	34212.41	30602.29	89.45
2	2017-18	34997.35	32335.45	92.39
3	2018-19	36514.06	34223.81	93.72
4	2019-20	41816.68	39163.07	93.65
5	2020-21	22271.12 (P)	29650.80 (P)	133.13



6.6.9. Accomplishments

6.6.9.1. Awards for the University

Details of Awards for University

Sl. No.	Year	Regional	National
1	2016-17	-	▪ ICAR-JRF award – 2016 (Second position)
2	2017-18	NSS best University award by Govt. of Karnataka	▪ ICAR-JRF award – 2017 (First position)
3	2018-19	-	▪ ICAR-JRF award – 2018 (First position)
4	2019-20	Karnataka State Higher Education Council Five-Star Education Institute Award	▪ ICAR-JRF award – 2019 (First position)

5	2020-21	-	<ul style="list-style-type: none"> ▪ Excellence in course and curriculum designed by Agriculture Today - The National Agriculture Magazine ▪ ICAR-JRF award – 2020 –First Position
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6.6.9.2. Accreditation Report from ICAR / Other Agencies

Whether the University and its Colleges were accredited by the ICAR and other agencies in the past?

Yes

The University of Agricultural Sciences, Bangalore and its constitute Colleges were accredited by the ICAR, New Delhi and details of accreditation are as below:

- i) Accreditation from 25.08.2004 to 24.08.2009 (27-2/98-Acdn. / Edn. dtd. August 25, 2004)
- ii) Accreditation from 28.03.2016 to 27.03.2021 (F.No. ed. 27/2/98-EQR dtd. 05 May 2016)

University of Agricultural Sciences, Bangalore has implemented all the observations/ recommendations made by the ICAR, NAEAB, New Delhi since 2016-17. Most of the observations / recommendations were satisfactorily undertaken on action mode on point basis. In addition to PRT observations, other issues are also implemented systematically by the University *viz.*, digitalization of examination processes, establishment of COVID testing centres, disposal of hazardous waste, opening of gym units, *etc.*

Recommendation of the accreditation agency- ICAR-NAEAB, New Delhi, 2016.

1. The Constitution of separate Board of Studies for each UG programme
2. Steps to enhance internal revenue generation and commercialization of technologies
3. Incubation of Agri. Business Development Centre
4. Effective linkages with the industries to be forged for transfer of technologies
5. Students need to be encouraged to establish Start-up Units
6. Nomenclature of Colleges to reflect the academic programmes
7. Nomenclature of UG programmes as per the recommendations of V Deans' Committee of ICAR
8. Establishment of Cells & units with dedicated manpower
9. Establishment of separate College of Agricultural Engineering with increasing importance
10. Development of feedback mechanism for evaluation of course teachers
11. Provision of Finishing school
12. Creation of accommodation facility for students in the hostels
13. Creating facilities for constituent Colleges

Whether the University has taken the action taken report and submitted the reply to the accreditation agencies?

Yes, the University has taken the action and submitted the detailed Action Taken Report for each observation for the years 2017, 2018, 2019, 2020 and 2021 (Year-wise PRT-ATR to ICAR, New Delhi, enclosed)

6.6.9.3. Inter Institutional Standings

Status of the University in the ranking announced by agencies for academics, research, extension, sports/games, cultural events etc.

Sl. No.	Year	Ranking Area	Rank achieved
1	2016-17	Academics	ICAR-JRF award – 2016: Second Place
		Research	Certificate of Excellence by the ICAR, New Delhi for Best Performance in Seed Technology Research under AICRP on NSP (Crops) for the year 2015-16

		Sports / Games	Gold medal in 4×100, Kabaddi, Kho-Kho in 16 th Agri. Uni. Fest held at TNAU, Tamil Nadu
		Cultural Events	Over all Championship 3 rd position
2	2017-18	Academics	ICAR-JRF award – 2017: First Place
		Research	<ol style="list-style-type: none"> 1. AICRP-Agroforestry received Best Presentation Award at the National Group meet during 2017 2. AICRP Honey Bee and Pollinators received Best TSP centre during Biennial Group Meeting held at Solan, Himachal Pradesh 14-16th October, 2017 3. Best AICRP centre award by PC unit AICRP on Small Millets (ICAR) at 28th Annual Group Meeting of AICRP on Small Millets at UAS, GKVK 14th & 15th April, 2017.
		Sports / Games	Gold medal in Kabaddi, Athletics, Badminton and Baseball in 17 th Agri. Uni. Fest held at Haryana Agricultural University, Hisar.
		Others	<ol style="list-style-type: none"> 1. NSS best University award by Govt. of Karnataka. 2. Certificate of Appreciation, Valuable contribution to Krishi Kosh 3. Certificate of Appreciation - Commendable contribution to strengthening and sustainability of E-Granth Project
3	2018-19	Academics	ICAR-JRF award – 2018: First Place
		Research	<ol style="list-style-type: none"> 1. Best centre award for the year 2017-18 by ICAR-CRIDA at Biennial workshop of AICRPAM held at Vijayapura, Karnataka during 15th-17th November 2018. 2. Best Centre Award by ICAR for Outstanding research on Forage crops presented during National Group meet Kharif-2018, held at TNAU, Coimbatore on 6th to 7th April -2018.
		Sports / Games	Gold medal in seven events in 18 th Agri. Uni. Fest held at Haryana Agricultural University, Hisar.
		Cultural Events	Over all Championship 2 nd position
		Others	Best Librarian National Award for Outstanding Excellence and remarkable achievement in the field of Teaching, Research & Publication
4	2019-20	Academics	ICAR-JRF award – 2019: First place in two categories Agricultural Sciences and Engineering & Technology
		Research	<ol style="list-style-type: none"> 1. Most Responsive Centre Award” among 31 centres in the country during 26th Biennial Workshop, organized by ICAR-CRIDA, Hyderabad from 16th to 19th January, 2019. 2. Award of Excellence for the year 2019 for outstanding dissemination and outreach of Agromet Advisories by India Meteorological Department, Ministry of Earth Science, Govt. of India on the occasion of 13th Annual Review Meeting of Gramin Krishi Mausam Sewa held from 18th to 20th, December 2019 at RVSKVV, Gwalior, Madhya Pradesh 3. Appreciation certificate from ICAR, IGFR I Jhansi for development and dissemination of production technologies during the year -2019. 4. Best Centre Award of the Year 2018-19 by Project Coordinator Unit, ICAR-CIPHET, Ludhiana on 15-03-2019 during 34th Annual Workshop of AICRP on PHET held at TNAU, Coimbatore.

			5. Excellent performer award for the trials conducted during the year 2019-20 by ICAR-All India Coordinated Research Project on sugarcane at the Annual Group Meeting held at UAS, Dharwad from October 14 th to 16 th , 2019.
		Sports/games	Six Gold medals 19 th Agri. Uni. Fest held at Hariyana Agricultural University, Hisar
		Cultural events	Overall championship in All India Agri. Uni Fest
		Others	Karnataka State Higher Education Council Five Star Education Institute Award.
5	2020-21	Academics	ICAR-JRF award – 2020 : Yet to announce
		Research	Appreciation Certificate from ICAR, IGFR, Jhansi for the development and dissemination of production technologies during the year -2020.
		Sports / games	Gold medal in seven events in 20 th Agri. Uni. Fest held at Shri Venkateshwara Veterinary University, Tirupati
		Cultural events	No participation due to COVID - 19
		Others	Excellence in course and curriculum design, Agriculture Today, The National Agriculture Magazine

6.6.9.4. Socio-Economic Impact

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
1	Demonstration of Direct Seeded Rice (DSR)	<ul style="list-style-type: none"> Average grain yield obtained was 6000 kg/ha over farmers practice with 5300 kg/ha. Income earned was Rs. 48,600/ha over check (Rs. 43,000/ha.) Technology has horizontally spread to 3680 ha. 	<ul style="list-style-type: none"> Yield increased by 13.20 per cent over farmers' practice. Adoption of DSR reduced the cost of cultivation by 12-13 per cent over farmers' practice.
2	Integrated crop management in Red gram variety BRG-5	<ul style="list-style-type: none"> Yield recorded in BRG 5 was 8.83 q/ha. as compared to check (BRG-2), 6.30 q/ha. Income realized was Rs. 37583/ha. compared to check Rs. 13,901/ha. The new variety spread to 7481 ha 	<ul style="list-style-type: none"> Per cent increase in yield was 40.15
3	Drought and Blast Resistant Finger millet var. ML 365	<ul style="list-style-type: none"> Yield recorded in ML 365 was 19.50 q/ha compared to farmers practice (16.90 q/ha). The net returns realized was Rs.32845/ha as against Rs.25097 ha in farmers practice Technology spread to 21,000 ha. 	<ul style="list-style-type: none"> Blast severity was 2.30 per cent in demo plot and 7.50 per cent in check plot. Per cent increase in yield and income was 15.40 and 30.87 per cent, respectively.
4	Management of diamond back moth damage in cabbage through integrated approach.	<ul style="list-style-type: none"> Yield recorded in demo plot was 448.8 q/ha. against check plot, 387.0 q/ha. Realized net returns of Rs. 4,93,753 /ha. as against Rs. 3,82,527 /ha in farmers' practice. 	<ul style="list-style-type: none"> The DBM incidence in demo plot recorded was 1.05 per cent as compared to check 6.94 per cent. Per cent increase in yield over check was 15.96 and income of farmers increased by 22.53 per cent

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
		<ul style="list-style-type: none"> Technology spread to an area of 216 ha. 	
5	Management of late blight disease in potato through integrated approach	<ul style="list-style-type: none"> Yield in demo plot was 24.10 q/ha. against check, 19.10 q/ha. Income earned was Rs. 2,51,000/ha as against Rs. 1,71,296/ha in farmers' practice. Technology spread to 288 ha. 	<ul style="list-style-type: none"> Yield increased over check was 26.80 per cent Income of farmers increased by 31.75 per cent
6	Assessment of local crop waste as substrate for oyster mushroom cultivation	<ul style="list-style-type: none"> The mushroom yield obtained in demo was 251.25 gms/cover against farmer practice (131.5 gms/cover) Realized net returns of Rs.5969/unit as against Rs.3200/unit in farmers practice) Technology was adopted by 100 farmers 	<ul style="list-style-type: none"> Income of farmers increased by 53.61 per cent
7	Integrated crop management in Bengal gram var. JAKI 9218	<ul style="list-style-type: none"> Yield in demo plot was 9.48 q/ha. compared to check, 7.64 q/ha. Realized net returns of Rs.25098/ha as against Rs.17155/ha in farmers' practice Technology spread to 100 ha. 	<ul style="list-style-type: none"> Per cent increase in yield over check was 24.08 Income of farmers increased by 46.30 per cent
8	Integrated crop management in mango (Alphanso)	<ul style="list-style-type: none"> Yield obtained in demonstration plot was 94.50 q/ha compared to farmers practice (75.30 q/ha.). The net returns received was Rs.1,11,500/ha in demo plot compared to check (Rs. 81,040/ha.). Technology spread to 5000 ha. 	<ul style="list-style-type: none"> Improved the quality of produce and yield increased by 25.50 per cent
9	Community based monitoring and management of red palm weevil and rhinoceros beetle in coconut through pheromone traps	<ul style="list-style-type: none"> 995 farmers have adopted the technology covering 322 ha coconut area in 12 villages of Tumkur District. 	<ul style="list-style-type: none"> Reduced 65 per cent palm damage Reduction of 22.50 per cent leaf damage 55 per cent reduction in spindle damage by rhinoceros beetle was observed.
10	Integrated crop management in tomato	<ul style="list-style-type: none"> Yield recorded in demo plot was 773.24 q/ha as compared to check plot 721.76 q/ha. 	<ul style="list-style-type: none"> Yield increased by seven per cent compared to farmers practice contributing to 31 per cent increase in farmers income

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
		<ul style="list-style-type: none"> Net returns in demo plot was 5.31 lakh/ha, while it was 4.02 lakh/ha in check plot. Technology spread to an area of 1600 ha. 	
11	Integrated crop management in rose	<ul style="list-style-type: none"> Yield in demo plot was 135.51 q/ha compared to farmer's practice (121.54 q/ha) Net income of Rs. 9.70 lakh was realized in demo plot compared to 7.87 lakh in check plot. Technology spread to 150 ha. 	<ul style="list-style-type: none"> Yield increased by 14 per cent compared to farmers practice contributing to 23 per cent increase in farmers income
12	Online marketing of agriculture produce	<ul style="list-style-type: none"> Farmers sold 30 tons of produce through online marketing during COVID 19 pandemic Realized 60 per cent additional income 	<ul style="list-style-type: none"> Income of farmers increased by 60 per cent
13	Value addition in millets	<ul style="list-style-type: none"> 30 farm women have adopted value addition activities. The major products prepared and sold were millet- laddu, mixture, malt & chocolate. The profit per month earned was Rs. 8210. 	<ul style="list-style-type: none"> This technology has created employment opportunity to 10 farm women of SHG Increased their family income by 30-40 per cent
14	Popularization of turmeric varieties viz., Alleppy Supreme and Prathibha	<ul style="list-style-type: none"> Yield in demo plot was 332.10 q/ha compared to farmers practice (245.60 q/ha) Realized net returns of Rs. 2,88,100/ha against Rs. 1,68,700/ha in farmers income. The technology has spread to 1200 ha 	<ul style="list-style-type: none"> The yield increased by 35.21 per cent Income of farmers increased by 45 per cent.
15	Introduction and popularization of small onion seeds Co-5	<ul style="list-style-type: none"> Yield obtained in demo plot was 86.70 q/ha against farmers practice (85.70 q/ha). Cost of cultivation in demo plot was Rs. 71,650/ha while it was Rs. 96,180/ha in check plot. Hence, Net reduction in cost of cultivation in demo plot was found to be Rs. 32,250/ha. Technology has spread to 30 ha. 	<ul style="list-style-type: none"> Income of farmers increased by 30 per cent.
16	Introduction of turmeric harvester to reduce drudgery in harvesting	<ul style="list-style-type: none"> 4 Turmeric harvesters (1 from farmer, 2 from FPO, 1 from KVK) are operating in 	<ul style="list-style-type: none"> Income of farmers increased by 50%. Saved

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
		<p>the district. Cost of harvesting in demo was Rs. 8,000/ha</p> <ul style="list-style-type: none"> In farmers' practice it was Rs. 40,000/ha. 	<p>up to Rs. 32,000/ha for harvesting and time saving.</p>
17	Popularization of Gangavathi Sona –a high yielding, salt tolerant paddy variety.	<ul style="list-style-type: none"> Yield in demo plot was observed to be 56.20 q/ha while it was 46.50 q/ha in check plot contributing to net income of Rs.63290/ha. and Rs.37300/ha. in demo and check plots, respectively The horizontal spread to 415 ha 	<ul style="list-style-type: none"> Income of farmers increased by 14 - 16 per cent
18	Popularization of Drumstick var. PKM 1	<ul style="list-style-type: none"> An increase in yield of 22.50 per cent (28 drumsticks per plant) was achieved in demo plot compared to 15 per plant. The net return obtained in demo was RS. 57,701/ha. and in check it was Rs. 31,050/ha. The variety (PKM-1) was adopted in 120 ha. 	<ul style="list-style-type: none"> Income of farmers increased by 22.50 per cent
19	Popularization of micro nutrient mixture ginger special in ginger	<ul style="list-style-type: none"> Yield in demo plot was 146 q/ha as compared to control 122 q/ha. with a net income of Rs.2,52,500/ha. compared to check 1,90,000/ha. Technology spread to 440ha. 	<ul style="list-style-type: none"> Per cent increase in yield was 19.67 and income of farmers increased by 32.89 per cent
20	Popularization of CSR2 silkworm seed production	<ul style="list-style-type: none"> In CSR2 silkworm seed production, farmer got a net income of Rs.26505/crop (100 DFLs) compared to CSR2×5 hybrid production (Rs.14278). 	<ul style="list-style-type: none"> The per cent increase in income was 85.63
21	Integrated Sugarcane Trash Management	<ul style="list-style-type: none"> Yield realized in demo plot was 117.30 ton/ha against the farmer practice 97.10 ton/ha Income recorded in demo was Rs.125122/ha. as against to check (Rs.102168/ha.) Horizontal spread of technology to about 30,100 ha. 	<ul style="list-style-type: none"> Increase in yield observed was 20.80 per cent Income of farmers increased by 22.46 per cent.
22	Establishment of Commodity Based Association of Sericulture Farmers	<ul style="list-style-type: none"> 800 farmers have registered in association covering 560ha. 	<ul style="list-style-type: none"> Income of farmers increased by 15 per cent and also availability of quality inputs in real time

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
23	Popularization of multicut fodder sorghum var COFS-31 as green fodder	<ul style="list-style-type: none"> Yield of Multicut fodder sorghum var. COFS-31 was 1450 q/ha compared to local variety (930 q/ha) Farmers realized net return of Rs.1,04,000/ha in demo plot against local variety (Rs.65,100/ha). The variety has spread to 824 ha. area. 	<ul style="list-style-type: none"> There was 55.91 percent increase in yield and 59.75 per cent increase in net returns.
24	Popularization of Arka Banana Special	<ul style="list-style-type: none"> Yield in demo plot obtained was 296 q/ha compared to control (214 q/ha). Income realized in demo plot was Rs.2,65,600/ha and in check plot Rs. 1,79,600/ha. Technology was spread to an area of 1260 ha. 	<ul style="list-style-type: none"> The increase in average yield and income obtained was 38.31 per cent and 23.79 per cent, respectively.
25	Popularization of Arka Mango Special	<ul style="list-style-type: none"> The yield obtained in demo plot was 52.02q/ha. as compared to farmers' practice 43.29 q/ha. The income realized was Rs.1,31,200/ha. in demo and Rs. 96,144/ha. in farmers' practice. The mango special has spread to 14500 ha. 	<ul style="list-style-type: none"> There was increase in yield upto 20.16 per cent and reduction in fruit drop was 38.22 per cent. The incidence of mango malformation and spongy tissue reduced to 5-8 per cent. Per cent increase in income was 52.30.
26	Impact of Cycle Weeder on Drudgery Reduction and Cost Saving	<ul style="list-style-type: none"> More than 3714 units were sold and covered an area of 2971 ha. The technology resulted in the saving of 18,570 number of man power and estimated cost of Rs.64,99,500/year. 	<ul style="list-style-type: none"> Cycle weeder had reduced 25% of total weeding time, 89% of total labour dependency 87% of total cost of production per ha compared to manual weeding.
27	Training programmes on bakery and value addition, organizing melas and establishment of bakery units in rural areas	<ul style="list-style-type: none"> Developed 397 successful entrepreneurs in bakery and value addition sector The income of entrepreneur ranges from Rs.3,000 – 12,000 per month. Contributed for both social and economic well-being of the entrepreneurs. 	<ul style="list-style-type: none"> The percentage of income increased by 30-48% through adopting better processing opportunities by displaying Marketing their products in platforms such as mela's, exhibitions etc. and also by implementation of new strategic initiatives such as digital marketing, own blogs, websites and direct marketing.
28	Training entitled "Krushikara Kaige Lekhani" (Pen to the farmers)	<ul style="list-style-type: none"> Two trainees started their own newspapers / journals. Two progressive farmers become freelancers and 21 	<ul style="list-style-type: none"> Publishing success stories in newspapers / journals. The success stories / Popular Articles written

Sl. No.	Significant Activities / Recommendations made	Area of upliftment (Economics / social Status)	Impact on farmer's economics / Social status (% increase)
		progressive farmers become Agricultural Writers.	by progressive farmers (trainee) help in speedy dissemination of agricultural technologies

- 1. Demonstration of Direct Seeded Rice (DSR):** The technology was demonstrated in Mandya and Mysore districts. Different technological interventions under this demonstration include, broadcasting of seeds under puddle condition, seed treatment, weed management (application of pre-emergent herbicide Pyrazosulpuran ethyl 250g/ha @ 3-5 days after sowing), balanced nutrition and water management. Because of relative advantage over the traditional practice, area under direct seeded rice has spread to 3680 ha. Further, adoption of technology has resulted in reduction of cost of cultivation by 12-13 per cent over farmers' practice and mean yield was increased by 13.20 per cent over farmers' practice.
- 2. Integrated crop management in Redgram variety BRG-5:** Redgram being one of the important rainfed crop. In demonstration for various technologies viz., wilt resistant variety BRG-5, seed treatment with rhizobium, nipping at 45-50 days crop, use of pulse magic (Micro nutrient mixture), Sex pheromone traps for pest monitoring, microbial pesticide application for pod borers damage and hermetic bags for safe storage was demonstrated in farmer's fields of Tumukuru, Chikkaballapur and Ramanagara districts. The yield recorded in demo plot was 8.83 q/ha. as compared to farmers practice 6.30 q/ha. and income realized was Rs. 37,583/ha compared to farmers practice was Rs.13,901/ha. Technology has spread to an area of 7481 ha.
- 3. Drought and Blast Resistant Finger millet var. ML 365:** Finger millet is one of the important rainfed crop and majority of small and marginal farmers are growing finger millet. Hence, drought and blast resistant finger millet var. ML 365 was demonstrated with interventions like moisture conservation furrows (every 12 rows), Use of blast resistant var. ML 365 and seed treatment with *Azospirillum*. Plant height in demo plot was recorded to be 107.50 cm and in check plot it was 97.70 cm. With respect to number of productive tillers, it was recorded that average productive tillers per plant was 5.2 in demo plot, while it was 4.10 in check plot. Grain yield was found to be 19.5 q/ha. and 16.9 q./ha in demo and check plot, respectively. In demo plot blast severity was observed to be 2.30 per cent, while it was 7.50 per cent in check plot contributing to BC ratio of 1.85 and 1.67 in demo and check plots, respectively. Farmers realized a net return of Rs. 32845/ha in demo plot as against Rs. 25097 ha in check plot. Leading to 30.87 per cent increase in farmers' income. Technology has spread to 21000 ha.
- 4. Management of diamond back moth damage in cabbage through integrated approach:** Cabbage was highly remunerative and one of the important vegetable crops. Diamond back moth is a severe pest in cabbage. Hence, management of diamond back moth in cabbage through integrated approach was demonstrated. Major technological interventions in demonstration include intercropping with mustard (trap crop) (25:2), installation of WOTA-T traps (DBM traps), use of sticky traps, spray of Bt (6ml/l), neem Soap (5g/l), Entomopathogenic fungi (*Beauveria bassiana*) (0.2%), Emamectin benzoate 5SG (0.05%), Chlorfenapyr 10 SC (0.1%), Spinosad 2.5SC (0.15%). It was observed that DBM incidence in demo plot was 1.05 per cent, while, it was 6.94 per cent in check plot. Yield in demo plot was recorded to be 44.88 t/ha while it was 38.70 t/ha in check plot leading to 15.96 per cent increase in yield, contributing to BC ratio of 4.44. Farmers realized a net returns of Rs. 4,93,753 /ha. as against Rs. 3,82,527 /ha in farmers' practice. Income of farmers has increased to 22.53 per cent and technology has spread to 216 ha.
- 5. Management of late blight disease in potato through integrated approach:** Late blight is one of the severe diseases in potato which leads to huge crop damage, its management is very important. Hence, demonstration on management of late blight in potato through integrated approach was

demonstrated with technological interventions viz., Soil application of *Trichoderma* and *Pseudomonas*, Prophylactic–Mancozeb (0.2%), Fenamidone+Mancozeb (0.3%), Cymoxanil + Mancozeb (0.3%), Dimethomorph (0.1%)+ Mancozeb (0.2%). Results showed that, the disease severity in demo plot was 7.40 per cent while it was 28.93 per cent in check plot. Yield in demo plot was found to be 24.10 t/ha while, it was 19.01 t/ha in check plot contributing for 26.80 per cent increase in yield. BC ratio was found to be 2.62 and 2.0 in demo and check plots, respectively. Farmers realized net returns of Rs. 2,51,000/ha in demo plot as against Rs. 1,71,296/ha in check plot contributing to 31.75 per cent increase in farmers' income. Technology has spread to 288 ha.

- 6. Assessment of local crop waste as substrate for Oyster mushroom cultivation:** Agricultural waste is a good source for the cultivation of mushrooms hence, assessment of local crop waste as substrate for Oyster mushroom cultivation was carried out. With respect to yield, it was found that yield in demo was 0.25 kg/cover, while it was 0.13 kg/cover in check. Labour requirement in demo was recorded to be 37.25 and in check it was 54 labour (man days). Further, biological efficiency was found to be 75.19 and 31.25 per cent in demo and check, respectively. Farmers realized net returns of Rs. 5969/unit in demo unit as against Rs. 3200/unit in check contributing to 53.61 per cent increase in income of farmers. Technology has spread to 100 farmers.
- 7. Integrated crop management in Bengal gram:** Integrated crop management in Bengal gram was demonstrated with technological interventions like use of wilt, dry root rot and collar rot resistant var. JAKI 9218, seed treatment with rhizobium, intercropping with coriander (6:1), spray of pulse magic, installation of pheromone traps and use of need-based plant protection chemicals. It was found that yield in demo plot was 9.48q/ha, while it was 7.64 q/ha in check plot leading to 24.08 per cent increase compared to check. Plant height was recorded to be 39.1 cm and 37.8 cm in demo and check plots, respectively. 2.7 per cent wilt incidence was observed in demo plot, while it was 6.8 per cent in check plot. 5.1 per cent pod borer incidence was observed in demo and in check plot it was 9.2 per cent. BC ratio was found to be 2.04 and 1.74 in demo and check plots, respectively. Farmers realized a net-returns of Rs.25098/ha in demo plot as against Rs. 17155/ha in check plot and resulted in 46.30 per cent increase in farmers income. Technology has spread to 100 ha.
- 8. Integrated crop management in mango:** The mango yield obtained in demonstration plot was 94.50 q/ha compared to farmers' practice (75.30 q/ha.). The farmers sold mango at average rate Rs. 1800 per quintal at farmers' field which resulted in net returns of Rs. 1,11,500/ha in demo plot compared to check with Rs. 81,040/ha. The B:C ratio was 2.90 in demo plot. Technologies in mango have spread to an area of about 5000 ha. Further, it was observed that quality of fruits improved and yield increased to an extent of 25.50 per cent.
- 9. Community based monitoring and management of red palm weevil and rhinoceros beetle in coconut through pheromone traps:** Red palm weevil *Rhynchophorus ferrugineus* and Rhinoceros beetle, *Oryctes rhinoceros* are the major pests inflicting severe damage to coconut palms. Due to ineffectiveness of the current practices to control the two important pests on coconut, community approach for monitoring and management to reduce the pest damage in 12 villages of Tiptur taluk, where the pest problem observed. In order to control the outbreak from spreading to neighbouring coconut growing areas and to reduce the pest population, demonstration of pheromone trap technology for 995 farmers covering 322 ha coconut area in 12 villages of Tumukuru District was conducted.

Trapping and destruction of rhinoceros beetle through pheromone traps resulted in the reduction of leaf and spindle damage by 22.50 and 55.00 per cent, respectively. Use of pheromone traps for red palm weevil was found to be effectively reducing the weevil damage by 65 per cent.

The impact of biological control was clearly evident in the affected villages after six months. Where, on an average 8504 Red palm weevils and 3607 Rhinoceros beetles were trapped and further these were destroyed.

10. Integrated crop management in Tomato: Tomato being one of the important vegetable crops, integrated crop management practices in tomato were demonstrated in farmers fields. Technological interventions include use of bio agent enriched FYM, growing marigold as trap crop, spray of vegetable special, use of sticky cards, pheromone traps and neem / pongamia soap. Yield in demo plot was found to be 773.24 q/ha, while, it was 721.76 in check plot. Net returns in demo plot was observed to be 5.31 lakh/ha, while it was 4.02 lakh/ha in check plot. BC ratio was found to be 3.62 and 2.44 in demo and check plot, respectively. Technology has contributed to increased farmers' income to an extent of 31 per cent and has spread to 1600 ha.

11. Integrated crop management in Rose: Rose being important flower crop, price of rose depends on the quality of flowers. Hence, integrated crop management practices in rose were demonstrated in farmers fields. Major technological interventions include soil test-based RDF, application of bio agent enriched FYM, timely pruning, use of sticky cards, foliar spray of micronutrient mixture and timely spraying of plant protection chemicals. It was observed that yield in demo plot was 135.51 q/ha, while it was 121.54 q/ha in check plot. Further, net income of Rs. 9.70 lakh was realized in demo plot compared to 7.87 lakh in check plot contributing to BC ratio of 4.85 and 3.55 in demo and check plots, respectively. Ultimately, technology increased farmers income to the tune of 23 per cent and technology has spread to 150 ha.

12. Online marketing of agriculture produce: Due to outbreak of COVID 19, farmers were unable to market their produce, hence KVKs mobilized the farmers and promoted direct marketing and also online marketing further linking the farmers to agro-based corporate companies. 30 tons of produce was sold to apartments through online mode. This has resulted in increase in income of farmers to an extent of 60 per cent by eliminating the middle men in the market chain. About 65 farmers are selling their produce directly to consumers and to corporate companies.

13. Value addition in millets: Millets are known for their nutritional benefits and value addition in millets is the need of the hour, hence value addition in millets is being promoted by KVKs through method demonstrations. Different millet-based value-added products like millet laddu, mixture, malt and chocolate were demonstrated. About 10 farm women has started the value addition activity and earning a net profit of Rs 8210 per month per person and BC ratio was found to be 1.42. Value addition in millets has created employment opportunity to 10 farm women of SHG and increased their family income of 30-40 per cent.

14. Popularization of turmeric varieties viz., Alleppy Supreme and Prathibha: Turmeric varieties viz., Alleppy supreme and Prathiba were popularized. Yield in demo plot was recorded to be 332.1 q/ha while it was 245.6 q/ha in check plot. Farmers' realized a net income of Rs 288,100/ha in demo plot against Rs. 1,68,700/ha in check plot contributing a BC ratio of 3.08 and 2.40 in demo and check plots, respectively. These varieties have spread to 1200 ha.

15. Introduction and popularization of small onion seeds Co-5: Cost of cultivation in onion is high because of sowing of bulbs, hence, with the intension of reducing the cost of cultivation, demonstration of small onion seeds Co-5 was carried out. Major technological interventions include small onion seeds -variety Co-05, application of FYM @ 25t/ha, soil application of bio-fertilizers (Azospirillum & PSB @ 2 kg/ha each), soil test-based fertilizer application (RDF 60:60:30 Kg NPK/ha – 50 per cent N & 100 per cent P, K as basal dose, remaining 50 per cent N @ 30 DAS). Results showed that cost of cultivation in demo plot was Rs. 71,650/ha while it was Rs. 96,180/ha in check plot. Yield in demo plot was recorded to be 86.70 q/ha and in check plot it was 85.70 q/ha. BC ration was found to be 3.02 and 2.22 in demo and check plots, respectively. Net reduction in cost of cultivation is due to introduction of onion seeds CO5 was found to be Rs. 32,250/ha contributing for 25.50 per cent in farmers income. Technology has spread to 30 ha.

16. Introduction of Turmeric Harvester to reduce drudgery in harvesting: Cost involved in turmeric harvesting accounts for about 50.00 per cent of cost of cultivation and also is laborious.

Hence turmeric harvester was introduced to reduce drudgery in harvesting. Cost of harvesting in demo plot was found to be Rs.8000/ha, while in check plot it was 40,000/-. Farmers were able to save Rs.32000/ha due to mechanical harvesting.

17.Popularization of Gangavathi Sona – a high yielding, salt tolerant paddy variety: Poor performance of local paddy variety (IR - 64) in problematic soil, popularized Gangavathi Sona – a high yielding, salt tolerant paddy variety with different technological interventions like Seed treatment with azospirillum-1 kg/ha. application of gypsum & fertilizer based on soil test, application of ZnSO₄ to the soil-20kg/ha. Yield in demo plot was observed to be 56.2 q/ha, while it was 46.5 q/ha in check plot contributing to net income of Rs.63290/ha. and Rs.37300/ha. in demo and check plots, respectively. BC ration in demo plot was 2.37 and in check plot it was 1.84. Technology has increased the farmers’ income to the tune of 69.67 per cent and has spread to 415 ha.

18.Popularization of drumstick variety PKM 1: The local variety of drumstick is low yielding and the length and size was not acceptable in the market. In this background, Drumstick variety PKM 1 was introduced and popularized. It was observed that, an increase in yield of 22.5 per cent (28 drumsticks per plant) was increased in demo plot compared to 15 per pant with BC ratio of 2.56 in demo plot compared to control (1.6). The net return incurred in demo was Rs. 57701/ha, whereas in local variety the net return was Rs. 31050/-. PKM-1 has spread to 120 ha.

19.Popularization of micronutrient mixture ginger Special in Ginger: Micronutrient mixture in ginger was popularized. The yield in demo plot was 14.6t/ha compared to control 12.2t/ha (19.67% increase) with a net income of Rs. 2,52,500/ha. compared to check 1,90,000/ha. and BC ratio was 3.29 in demo plot compared to control (2.65). Technology has spread to 440 ha.

20.Popularization of CSR2 silkworm seed production: Hassan district has diverse Agro-climatic conditions which is most suitable for seed cocoons production and all the taluks except Arakalagud taluk identified as of Bivoltine Seed Area, but the production is of very low quality and the yield per crop was also mediocre and less preferred in the market. Popularization of CSR2 silkworm seed production in Hassan district resulted in increase in net income of Rs.26505/crop (100 DFLs) compared to CSR2X5 hybrid production (Rs.14278) with BC ratio of 3.6 in demo compared to 2.50 in check. An increase in income of Rs. 12,200 per 100dfls was recorded with an yield of 60.7 kgs/100 DFLs high valued cocoon compared to 61 kgs in CSR2X5. The technology was spread of silk rearing (CSR-2) to 144 ha in the district

21.Integrated trash management in sugarcane: The area under sugarcane in Mandya District accounts for 39845ha and trash burning after the harvest was the practice followed by farmers leading to destruction of soil microflora. Hence, farmers educated through trainings and method demonstrations on integrated trash management, mulching of sugarcane trash in alternate rows done to help in following ratoon cultivation practices in un-mulched rows, later broadcasting of 75 kg/ha urea on sugarcane trash, enhancing nitrogen narrow the wider C:N ratio of trash and helps for faster decomposition. Later application of 500kg of farm yard manure (FYM) enriched with 25kg microbial culture (*Trichoderma viridae*) on sugarcane trash, enhances the decomposition rate. Observations recorded on harvest indicated an increase in yield up to 20.80 per cent (97.10 ton/ha in farmers practice and 117.30 ton/ha in demonstration) and there was increase in income recorded to 22.46 per cent (Rs.102168/- and Rs.125122/-) in farmers practice and demonstration, respectively. The area on sugarcane trash management has spread over 30,100 ha and increasing year wise. In addition to the increase in yield the method has helped in improved soil characteristics.

Parameters	Demonstration	Farmers practice
Sugarcane yield (ton/ha)	117.30	97.10
Gross income (Rs./ha)	125122.00	102168.00
Gross cost (Rs./ha)	42031.00	46931.00
Net income (Rs./ha)	83091.00	55237.00

22. Establishment of commodity-based association of sericulture farmers: A commodity based association of sericulture farmers was established and registered at Kattedoddi village of Mandya district as **Sir M.Vishweswaraiah Reshme Belegarara Sangha under IFSD project** during 09.07.2012 bearing registration No. SOR-MDY/70/2012-13 with 20 farmers as members with a motive to help the sericulture farmers in providing technical guidance on regular basis. The information on nutrient management – soil test-based fertilizer application, use of suitable plant protection chemicals for pest management in mulberry garden, integrated disease management in silkworm rearing, integrated uzifly management through demonstration. An outlet was established in association with farmer members, wherein critical inputs are made available to the farmers at lower cost compared to the retail market. In addition, small agricultural equipment are also made available on custom hiring basis. The number of members in the association has raised to 800 members compared to initial days (20 members)

Sl. No.	Particulars	Sir M. Vishweswaraiah Reshme Belegarara Sangha
1.	Date of registration	09.07.2012
2.	Registration No.	SOR-MDY/70/2012-13
3.	Matching grants by IFSD project	Rs.1,00,000/-
4.	Farmers contribution to Revolving fund	Rs. 1,00,000/-
5.	Total Revolving fund status	Rs. 8,07,229/-

23. Popularization of multicut fodder sorghum var COFS-31as green fodder: Multicut fodder sorghum variety COFS-31 was popularized to overcome the scarcity of fodder especially during summer. Multicut fodder sorghum COFS-31, seed treatment with Azospirillum biofertilizer (500g/ha), application of FYM 10 tons/ha along with recommended inorganic nutrients (90:50:40 kg N: P: K/ha) to multicut fodder demonstration of integrated crop management resulted in higher yield of 1450 q/ha compared to local variety (930 q/ha) and thus availability of quality green fodder increased with higher returns for the dairy farmers. Farmers realized around Rs. 1.56 lakhs/ha gross income with a net return of Rs. 1,04,000/ha against local variety (Rs. 65,100/ha). This includes income realised from sale of 50 tonnes of green fodder and rest of the income from sustainable milk yield. Thus, there was 55.91 percent increase in yield and 59.75 per cent increase in net returns. The variety has spread to 220 ha area.

24. Popularization of Arka Banana Special: Micronutrient play an important role in getting the good quality and quantity of produce. Hence, micronutrient mixture **Arka Banana Special** developed by Indian Institute of Horticulture Research, Bangalore was popularized which resulted increase in yield in demo plot 296 q/ha compared to control (214 q/ha) and income realized in demo plot was Rs.2,65,600/ha and in check plot Rs. 1,79,600/ha. Due to spraying of banana special, there was increase in bunch size and also quality of the bunch. The increase in average yield and income obtained was 38.31 per cent and 23.79 per cent, respectively. The technology was spread to an area of 1260 ha.

25. Popularization of Arka Mango special: Micro nutrient mixture **Arka Mango Special** developed by Indian Institute of Horticulture Research, Bangalore was popularized to increase quality and yield of mango. The yield in demo plot was 52.02q/ha. as compared to farmers practice (43.29 q/ha). The income realized was Rs.1,31,200/ha. in demo and Rs. 96,144/ha. in farmers practice. Due to spray of this mixture reduced fruit drop to an extent of 38.22 per cent and the incidence of mango malformation and spongy tissue reduced to 5-8 per cent. There was increase in yield and income upto 20.16 per cent and 52.30 per cent, respectively. The mango special has spread to 14500 ha.

26. Impact of Cycle Weeder on Drudgery Reduction and Cost Saving: Weeding is one of the important intercultural activity, laborious and time consuming. Hence cycle weeder was refined for drudgery reduction. From 2014, more than 3714 units were sold in Ramanagara district through PPP

mode. Department of agriculture has made provision for its inclusion in rate contract system & subsidy scheme (50%) that facilitated farmers to purchase cycle weeder at cheaper rate. This has resulted in coverage of 2971 ha using cycle weeder. This has resulted in the saving of 18570 number of man power and estimated cost of Rs. 64,99,500/year. The demonstration conducted also showed that cycle weeder had reduced 25% of total weeding time, 89% of total labour dependency and 87% of total cost of production per ha compared to manual weeding.

27. Training programmes on bakery and value addition, organizing melas and establishment of bakery units in rural areas: Bakery training unit has carried out different capacity building programmes related bakery & value addition and has resulted in development of 397 entrepreneurs, which led to increased entrepreneur's income ranging from Rs 3000 – 12,000 contributing for 30-48% increase in farmers' income.

28. Training entitled “Krushikara Kaige Lekhani” (Pen to the farmers): Training programme on Krushikara Kaige Lekhani was organized by Farm Information Unit. This has created a good impact on trainees. Two Trainees have started their own newspapers / journals. Two progressive farmers have become free-lancers and 21 progressive farmers have become agricultural writers. Ultimately, the success stories/popular articles written by progressive farmers (trainees) help in speedy dissemination of agricultural technologies.



Management of Diamond back moth in cabbage



Management of Late Blight Disease in Potato



Oyster Mushroom Cultivation



Integrated Crop Management in Bengalgram





Drought and Blast Resistant Finger millet var. ML 365



Integrated Crop Management – Mango





Community based monitoring and management of red palm weevil and rhinoceros beetle in coconut



Integrated Crop Management - Tomato





Value addition in Millets



Popularization of Turmeric Varieties, Alleppy Supreme and Prathibha



Popularization of Onion variety Co-5



Turmeric Harvester



Rapid Multiplication in Turmeric



Popularization of ARKA banana special



Popularization of Gangavathi Sona





Popularization of micronutrient mixture - Ginger Special in Ginger



Integrated Crop Management in Redgram var. BRG-5





Sugarcane trash management



Commodity Based Association of Sericulture Farmers



Multicut Fodder Sorghum var. COFS-31



Cycle weeder



Training on Krushikara Kaige Lekhani

6.6.9.5. International Collaboration

Collaborative ventures with leading international scientific institutions were made for undertaking collaborative research of mutual interest and Students & Faculty Academic exchange programme. During 2016-2020, UASB has executed 30 MoUs for research and academic collaborations with International Institutions as detailed below

Sl. No.	Year	Name of the international organisation	Name of the agency / University / Institute	Type of collaboration (Academic / Research / Others)
1	2016-17	1. Indo-Swiss Project: Genetic enhancement & Bioavailability – Finger Millet. Sub Project: Nutrient Bioavailability in Ragi	Zürich University	Research
		2. Indo-German Project: Effects of agricultural water and nutrient management on farmers' livelihoods	University of Kassel and George August University, Gottingen, Germany	Research
		3. Indo-French Project: Survey of soil-Si pools and contribution of Si fertilization in sustainable rice cultivation in South India	CEREGE, Aix en Provence, CEDEX, France.	Academic & Research
		4. Sujala-III, Support for improved program Integration in Rainfed Areas	World Bank	Research
		5. Standardize the protocol and to study the influence of seed treatment with bio-stimulants	Novozymes South Asia Pvt. Ltd.	Research

		and beneficial microbes on seed quality parameters		
		6. Hybrid KBSH-41 certified seed supply	East African Seed (U) Ltd Kampala, Uganda	Research
		7. Proficiency Testing of Seed Sample	International Seed Testing Association (ISTA), Zurich, Switzerland	Research
		8. Indo-Swiss Project: Economic feasibility of research investment and policy, Indo-Swiss Collaboration in Biotechnology (ISCB) Phase V	The Institute for Organic Agriculture (FiBL) Frick, Switzerland	Research
		9. Indo-German Project: The rural-urban interface of Bangalore: A space of transitions in agriculture, economics and society. Sub Project: Food insecurity at different stages of urbanization	University of Gottingen, Germany and University of Kassel, Germany	Research
		10. Indo-German Project Rural-urban interface of Bangalore: A space of transitions in agriculture, economics and society. Projects. Sub project: of Coordination of Indian Partner projects	University of Gottingen, Germany and University of Kassel, Germany	Research
		11. Erasmus Mundus IMRD Programme	University of Ghent, Belgium and other 6 European universities	Students & Faculty Academic programme
2	2017-18	1. Project: Integrated genomics assisted breeding for efficient development of superior varieties of Ragi for Karnataka	ICRISAT, Hyderabad	Research
		2. Resist Detect Protect Wide spectrum insect resistance and sound management strategies to sustainably manage insect pests on Solanaceous vegetables in South Asia	World Veg Center (Formerly AVRDC), Taiwan	Academic
		3. Geography of Food (GoF) International Summer School on Designing food value chains to foster the 2020 agenda for sustainable development	Zurich University of Applied Sciences (ZHAW), Switzerland; The institute for Organic Agriculture (FiBL), Frick, Switzerland and University of Ljubljana, Slovenia	Academic
3	2018-19	1. Indo-French Cell of Water Science (IISC Bangalore) Project: Accompanying The Adaptation of Irrigated	French National Institute for Agricultural Research (INRA), France	Research

		Agriculture to Climate Change (ATCHA-INRA - France)		
		2. Indo-German Project: The Rural - Urban Interface: A Space of Transition in Agriculture, Economics and Society, Sub project: Urbanization effects on consumption pattern, dietary diversification and human nutritional status in Bangalore	University of Goettingen, Germany	Research
		3. SWAGATH-International Mobility programme	University of Goettingen, Germany	Students & Faculty Academic exchange programme
		4. Popularization of newly developed high yielding water use efficient varieties of groundnut (<i>Arachis hypogaea</i>) and Cowpea (<i>Vigna unguiculata</i>) under farmer's participatory approach	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad	Research
		5. Maize Double Haploid facility at the Agricultural Research Station (ARS)-Kunigal	CIMMYT, ICRISAT, Hyderabad	Research
		6. Development and standardization of non-invasive method for detection of fruit fly infestation using hyper spectral imaging technique in gherkin	Wipro Limited, Bangalore	Research
4	2019-20	1. Indo-German Project: Rural-Urban Interface: A Space of Transition in Agriculture, Economics and Society, Sub project: Urbanization effects on consumption pattern, dietary diversification and human nutritional status in Bangalore"	University of Goettingen, Germany	Research
		2. NAMASTE+ International Mobility programme	University of Goettingen, Germany	Students & Faculty Academic exchange programme
		3. CeMIS-IN/DE: A new passage to India- Germany	University of Goettingen, Germany Indian Higher Education Cooperation	Students & Faculty Academic exchange programme
		4. India-Australia International Education and Research	WSU water group, Western Sydney University	Academic

			Australia	
		5. Phenotyping water uptake and water use efficiencies of different dual-purpose tomatoes	World Vegetable Center, Regional Centre, South Asia, Hyderabad, India	Research
		6. ASEAN- India Research & Training Fellowship (AIRTf)	University Putra, Malaysia Federation of Indian Chambers of Commerce and Industry (FICCI)	Research & Training
		7. National Seed Project, UAS, Bangalore	Hunan Agricultural University, Changsha city, P.R. China	Teaching, Research, Extension and Seed production
5	2020-21	1. International Virtual Course on Tackling climate change through global learning	Zurich University of Applied Sciences (ZHAW), Switzerland, Federal University of Grande Dourados (UFGD), Brazil and University of Nairobi, Kenya	International Virtual Academic Programme
		2. ASEAN-INDIA Research and Training Fellowship (AIRTf) from Dept. of Science and Technology, New Delhi	Department of Land Management, Faculty of Agriculture, University Putra, Malaysia	Research
		3. Centre for Advances in Agricultural Science and Technology (CAAST)	World Bank	Teaching, Research and Extension

Foreign National Students Admitted

During the reporting period (2016-17 to 2020-21), 40 foreign national students from 16 countries have admitted to various Under Graduate (5 students) and Post Graduate (35 students) programmes. Among the countries, 19 students of Afghanistan have the lion's share in taking the admissions, while three students from Nepal, two students each from South Sudan, Botswana, Srilanka & Uganda and one student each from Bangladesh, Vietnam, Swaziland, Myanmar, Ethiopia, Mozambique, Angola, Kenya, Syria and Ghana have been admitted to different degree programmes in the University.

Year-wise admission of foreign nationals from 2016-17 to 2020-21

Year	No. of Foreign Students Admitted		
	UG	PG	Total
2016-17	-	15	15
2017-18	04	10	14
2018-19	-	04	04
2019-20	-	06	06
2020-21	01	-	01
Total	05	35	40



6.6.9.6. Fund Raising through CSR

The University is concentrating on disseminating the generated technology for the benefit of the farming community in specific and general public in general. As a result, the University is in the limelight of

the media and in turn attracts the attention of many of the corporates. The University is in the process of drawing funds under CSR funds and as a result for the first time HAL, Bangalore provided the funds under its CSR grants during 2020-21. Providing the Research and Extension activities carried out to the advancement and development of technology along with dissemination of generated technology through the extension wing. The efforts are also being made to mobilise more funds under CSR, in the subsequent years from other corporates including the private sector.

Year	Total of Corporate funding received (in lakhs)	Activities carried out (on farm research / extension / others)
2020-21	Establishment of UASB-HAL Advanced Centre for Bio-Energy Research – Rs.200.00 Lakhs.	<ul style="list-style-type: none"> • Civil Works • Scientific Lab Equipments

6.6.9.7. Alumni Support

Does the University have the active alumni association: **Yes**

The Alumni Association of UASB was established on 1st September 1989. As on today the Association has 10,500 registered members comprising of graduates in agriculture, horticulture, veterinary, dairy science, fisheries, agricultural marketing and cooperation, forestry, agri-biotech, food science, agricultural engineering and sericulture. Nearly 125 members belong to the cadre of IAS, IFS, IPS and other central services; several are Karnataka Administrative Service Officers, eminent scientists in ICAR and other research organizations, as professors, scientists and extension specialists in the Universities and Institutions. Great majority are serving in the State Developmental Departments, Banks, NGOs and other private sector organizations. Many are successful entrepreneurs, practicing farming and influential leaders in political circles. The members are spread across the globe.

Dr. G. Parmeshwar, former Deputy Chief Minister of Karnataka; Dr. S. Ayyappan, Former Secretary DARE and DG, ICAR; Dr. Sunny Ramaswamy, Former Director, USDA,; Dr. R. Dwarakinath and Dr. G.K. Veeresh, Late Dr. M. Mahadevappa, Dr. K. Narayana Kowda, former Vice-Chancellors; Dr. Krishna M. Ella, Chairman, Bharath Biotech; Dr. C. S. Prakash, Director, Tuskegee University, USA and many more are the well-known names in the alumni association.

Founder president of the Alumni Association and former Vice-Chancellor Dr.G. K.Veeresh has donated his entire pension amount and savings worth Rs.16 lakhs to the association to promote integrated farming systems and to award best IFS practising farmers at the state level. The association has mobilised more than a crore rupee from the alumni & donors and constructed its own building with a convention centre.

The association is fortunate to have many senior members, 25 members are octogenarians and Dr. R. Ramanna, Former Vice-Chancellor is the senior most member aged 93 years. It is also an interesting fact that a Father, Son and Grandson all graduated from UASB are our members representing three generations.

Mandates of the Association:

- Promote the professional growth of agriculture in all its spheres.
- Improve agriculture including plant and animal wealth of the state and to promote overall rural development and other allied activities
- Create spirit-de-crops among agriculture fraternity
- Foster friendship and fraternity among the agricultural technologists
- Maintain honour and dignity and safeguard the right and interests of the profession
- Facilitate interaction among agricultural technologists
- To promote sports and games of all kinds and description
- To arrange literary and cultural activities including concerts and other entertainments
- To establish and maintain a library and reading room
- To conduct study tours, exhibitions, excursions, *etc.*, and publications of magazines

- To give scholarship, freeships, prizes and monetary assistance to students to help them in their studies
- To assist social service organizations for promoting socio-economic activities with particular reference to rural development

The Association is managed by democratically elected body comprising of five office bearers and ten executive members who meet regularly at least once in a month. In the executive committee meeting, decisions pertaining to the association are taken as per the Bylaws. Annual general body meetings are convened every year to ascertain progress, approve the accounts and to plan the future activities.

The Association possesses three and a half acres land at Hebbal Campus on Bangalore- Kempegowda International Airport Road, on which it has constructed three floors architecturally designed magnificent and imposing stone building measuring 3,500 m² to carry out its activities and to fulfil the object of the association. It has two big conference halls with 600 and 300 seating capacity, 50 beds dormitory for visiting farmers and students to stay, board room, executive chambers, library, front lobby, reception and such other infrastructure. It has phone and internet connectivity, 100 KV power supply, diesel generator set and other facilities. On the front side of the building well laid out gardens and parks with pergola, walking track, gobozi, garden seating, lighting *etc.*, have been aesthetically created for recreation and pleasure feeling. Organizations like Karnataka Agricultural Produce Processing Export Corporation, Association for Promotion of Organic Farming, FPOs, Agril. Publications, Startups in Agriculture and other organizations are operating in this building complex to supplement and compliment the effort of the associations.

Since inception the association has organized several on campus and off campus programs benefiting members, students, farmers and general public on the topics related to agriculture and allied areas. It is working in close association with the University and developmental departments. The Association has organized several national and international conferences and seminars. Once in three years a fun filled global meet and technical seminars are organized involving members spread over in different countries are the noteworthy programmes.

The Association in collaboration with different agencies has taken up the following initiatives: waste to wealth, Agri-Eco-tourism, Agri-consultancy services, direct marketing of fruits and vegetables, promotion of Start-ups, working with price commission, promotion of bio-technological approaches in farming and animal management, popularizing integrated farming systems and such other activities. Following are the details of fund raised and areas of Alumni Association support to the University.

Details of fund raised and areas of Alumni Association support to the University during the reporting period

Sl. No.	Year	Fund Raised for University Development (Rs.)	Areas of Alumni Association Support to the University
1	2016-17	15,000	Promotion of National Integration Activities: Provided funds for organizing National Integration Camp for NSS Students of 2 nd Year B.Sc. (Agri)/AgMaco/B.Tech.
		28,000	Sponsored for 14 RAWE Villages of Doddaballapura, Tumkur, Nelamangala, Magadi and Koratagere taluks for organizing Animal Health Camps for Final year B. Sc. (Agri.) students of College of Agriculture, UAS, GKVK, Bangalore.
		12,000	Sponsored for RAWE programme to organize the activities; Soil Health Campaign, Animal Health Camp, Human Health Camp, Vanamahotsva, Agricultural Exhibition <i>etc.</i> in the 6 Raitha Samparka Kendras (RSKs)
		69,225	Supported UASB in organizing 50 th Convocation.
		25,000	Sponsored for organizing XIII Agricultural Science Congress, by UAS, Bangalore during February 2017

		25,000	Sponsored to College of Agriculture, Mandya towards its Silver Jubilee Celebrations.
		15,000	Alumni awards presented to two graduates of UASB in the field of Research, Extension and one for a graduate farmer.
		-	Supported the UASB in organizing Krishi Mela-Mobilizing farmers and alumni.
		23,010	Brought out Plough Boys Magazine and circulated to all the 4 Colleges of UASB - Libraries/All Heads.
		-	Provided accommodation for 300 students of various Agricultural Universities for their stay for visiting UASB.
		2,00,000	Maintaining Library for alumni members and students of UASB comprising of 5000 books / journals.
		23,010	Supplied Diary books for final year degree students undergoing RAWE programme.
2	2017-18	3,80,217	Promotion of IFS: Best Farmers who have adopted Integrated Farming System (IFS) were selected from four different regions of Karnataka and awarded on 07-10-2017.
		15,000	Personality Development programme for Under Graduate students and faculty of College of Sericulture, Chintamani was conducted on 26-09-2017
		45,252	Organized World Food Day and National Seminar on Changing the future of rural migration for food security and sustainable rural development on 16-10-2017.
		61,658	Supported UASB in organizing 51 st Convocation.
		-	Supported the UASB in organizing Krishi Mela in the year 2017 in mobilizing farmers and alumni.
		23,010	Brought out Plough Boys Magazine and circulated to all the 4 Colleges of UASB - Libraries/All Heads.
		23000	Supplied Diary books for final year degree students undergoing RAWE programme.
3	2018-19	57,246	Supported UASB in organizing 52 nd Convocation.
		34,936	Organized Special lecture on Reversal of Diabetes through Plant Diet was organized to Students and staff at Kuvempu Sabhagana, UAS, GKVK, Bangalore on 07-12-2018.
		78,000	Sponsored for RAWE programme for Final year B.Sc. (Agri.) students of College of Agriculture, UAS, GKVK, Bangalore, College of Agriculture, Hassan and College of Agriculture, Mandya.
		2,19,115	Organized Programme to popularize IFS: Best Farmers who have adopted Integrated Farming System (IFS) were selected from three different regions of Karnataka and awarded on 24-01-2019
		39,750	Supported UASB in organizing 53 rd Convocation.
		1,05,000	Gold Medal Award was initiated in the name of Alumni Association for Under Graduate Students who scores highest CGPA from among all UG Degree Programmes of UAS (B).
		53,762	Alumni Awards presented to two graduates in the field of Research, Extension and one for graduate farmer.
		78,000	Financial assistance given to organize RAWE programs at College of Agriculture, GKVK; College of Agriculture, Hassan and College of Agriculture, Mandya
		36,000	Scholarship Awarded to poor Under Graduate Students of UAS (B).
		-	Supported the UASB in organizing Krishi Mela -Mobilizing farmers and alumni.
		10,000	Supported UASB Employees Association in organizing cultural programmes.

		23,010	Brought out Plough Boys Magazine and circulated to all the four Colleges of UASB - Libraries/All Heads.
		23,000	Supplied Diary books for final year degree students undergoing RAWE programme.
4	2019-20	78,000	Sponsored for RAWE programme for Final year B. Sc. (Agri.) students of College of Agriculture, UAS, GKVK. Bangalore, College of Agriculture, Hassan and College of Agriculture, Mandya.
		25,000	Alumni Awards presented to two graduates in the field of Extension and one for graduate farmer.
		27,000	Scholarship to Three Under Graduate Students of three Colleges of UASB.
		-	Worked in close association with Agri War Room, created by UASB and arranged direct marketing of fruits, vegetables to a tune of 900 tons during Covid-19 lockdown period and helped farmers who were in distress.
		17,00,000	Organized Reconnect – 2019 – To create spirit-de-corps among agricultural graduates of UASB
		-	Supported the UASB in organizing Krishi Mela in the year 2019 in mobilizing farmers and alumni.
		23000	Supplied Diary books for final year degree students undergoing RAWE programme.
5	2020-21	28,568	Supported UASB in organizing 54 th Convocation
			Supported the UASB in organizing Krishi Mela in the year 2020 in mobilizing farmers and alumni.
			Supporting UASB in developing and organizing Agri. tourism for the benefit of urbanites.
			Promoted Agri. start-ups for the following University graduates - 1) Mr. Ashok S. Kulkarni, General Secretary, Agricos Foundation for New India (AFNI); 2) Mr. Prathist Kempegowda, Proprietor, Humming Silver, # 233, Behind Panchayath Office, Bagalur, Jala Hobli, Bangalore North – 562149; 3) Mr. B.N. Ambarish, Managing Partner, KEMPS FARM, #1002/C, Hosabeedi, BB Road, Yelahanka, Bangalore – 560064; 4) Ms. Savitha, L. P., No. 4, C-Type Quarters, ICAR- NDRI, SRS, Adugodi, Bengaluru – 560030
		23,000	Supplied Diary books for final year degree students undergoing RAWE programme.
		1,50,000	Organized Rural Development Programmes involving the students and alumni of UASB for: <ul style="list-style-type: none"> - Popularising Solar energy - Clean milk production - Animal Health camps - Apiary for unemployed - Nutritional Gardens - Awareness programme on using cycle weeder.
Total		37,95,552	

Additionally, the association is also providing following services to the University:

- For the benefit the farming community, association is organising the various rural developmental programmes at the village level.
- Providing accommodation to the farmers.
- Recognising and Honouring the best farmers.
- Conducting Global meet for improving the employability.
- Organising the Alumni re-connect for increasing the opportunities, avenues, etc.
- The first batch of Agri students have constructed parabola which is named as “Gajaba” and utilised for multi-purpose by the students.

- Sponsor the gold medals for the students to encourage them in academic excellence.
- Sponsoring the fellowships to support the poor and bright students in the University.
- Sponsoring the various events conducted by the University.
- A special programme called '*Dasoi*' has been introduced in the University to provide free food to the farmers who visit the University on various activities and occasions.
- Alumni donate the books and journals to the library for the benefit of the students and faculty.

15th District Local Sammelana

The Association in collaboration with Kannada Sahithya Parishad has organized 15th District Local Sammelana. As part of this mega event a special programme was organized and provided a platform for the students and graduates of our University to exhibit and share their poetry and literary work such as writings in Agricultural Sciences, short stories, reviews, poems, etc. Nearly 250 budding poets and writers of agriculture, horticulture, fisheries, veterinary, forestry and other graduates took part in this two-day event held on 20 & 21, March 2021 at Hebbal campus, Bangalore.





**Alumni Association Convention Centre,
Hebbal, Bangalore**



Global Alumni Meet 2015



Rural development activities



Honouring the Covid-19 Warriors



**National Workshop on Remunerative Prices
and Stable Market for Farmers - 2018**



Awareness Programme conducted in a village

6.6.10. Certificate

I, **Dr. G. N. Dharapal** the Registrar of the **University of Agricultural Sciences, Bangalore** hereby certify that the information contained in the sections 6.4, 6.5 and 6.6.1 to 6.6.9.7 are furnished as per the records available in the University.

Bengaluru
27.03.2020

Signature of Registrar with Date and Seal

Annexures

Annexure -1: List of collaborations of UAS, Bangalore with Institutions and Industries

During 2016-17

Sl. No.	Collaborative Institute/ Organization	Significant features of collaboration
1.	M/s Element42 Management Solutions Pvt. Ltd., Bangalore-560050	Designing, printing and issuance of technology-enabled various academic certificates
2.	M/s NSL (Formerly SCM) Sugars Ltd., Koppa, Maddur Taluk	Monitoring of Land Application of Distillery spent wash to Dryland for the year 2016-17 headed by Dept. of SS&AC
3.	M/s Sri Chamundeswari Sugars Ltd., Bharathi Nagar, Mandya	Monitoring of Land Application of Bio-methanated spend wash to Drylands for the year 2016-17 headed by Dept. of SS&AC
4.	National Scheduled Castes Finance and Development Corporation, New Delhi	To support SC farmers especially small and marginal farmer in scientific cultivation in agriculture & allied activities with a view to upscale their produce and market through an established supply chain to earn a sustainable income.
5.	Institute of Forest Genetics and Tree Breeding, Coimbatore	For collaborative research on various agriculture and environment issues especially with high-yielding varieties of tree crops and conserving tree genetics resources not only of India but across the globe
6.	National Research Centre on Pomegranate (ICAR), Solapur	To involve studies/ research on Pomegranate in the disciplines of Entomology, Agril Process Engineering PHT, Horticulture, Plant Pathology, SS & Soil water conservation engineering, <i>etc.</i>
7.	SBJ Institute of Technology, Bangalore	For joint initiation of research programmes/technology assistance in the field of science & Technology for the benefit of farmers
8.	M/s J.P. Distilleries Pvt. Ltd., Heggadathahalli, Kunigal, Tumkur	Monitoring the quality of treated distillery spent wash for Land Application to Dryland and its impacts headed by Dept. of SS&AC
9.	NITTEE Meenakshi Institute of Technology, Bangalore	For collaborative research projects in UG, PG & Ph.D in the areas of mutual interest
10.	National Bank for Agriculture and Rural Development (NABARD), DDM, Hassan	For implementing the promotion of Farmer Producer Organizations (FPO's)
11.	All India Coordinated Research Project (AICRP) on Home Science, New Delhi	For collaborative research in All India Co-ordinated Research Project on Home Science
12.	Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India	For a research project on the Chemical ecology of the northeast region of India
13.	Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India	Research Project- Genetic Enhancement & Bioavailability in Finger Millet (GEBFM)
14.	Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India	Research project- Characterization of Silkworm pupal bioprotein and processing for value addition
15.	Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India	For Project "FOR 2432" DFG, German-funded by DBT, Govt. of India
16.	Indian Institute of Pulses Research, Kanpur (IIPR)	Creation of seed hub at UAS, Bangalore

17.	ICRISAT Development Centre, Telangana	The popularization of newly developed High Yielding Water Use Efficient Varieties of Groundnut and Cowpea (under Farmer's participatory approach)
18.	Karnataka State Bioenergy Development Board, (KSBDB) Bangalore	Establishment of Central Referral Laboratory for Quality Testing & Research and Biodiesel Complex in Karnataka State
19.	Department of Biotechnology Ministry of Science & Technology, Govt. of India	Development of tomato transgene expressing <i>Coculus</i> Trypsin Inhibitor and its bio-evaluation against <i>Helicoverpa armigera</i> and fungal pathogens
20.	National Bureau of Agriculturally Important Microorganisms (NBAIM)-ICAR, Kushmaur, Uttar Pradesh	For collaborative Research in Agricultural Microbiology under Ph.D. studies
21.	The Deutsche Forschungsgemeinschaft (DFG), Germany & Dept. of Biotechnology, Govt. of India	Research on Transitions Agriculture, Economics and Society parenting with the German
22.	Consortium for DEWATS Dissemination (CDD) Society, Bangalore	For the project on Nexus Food production and settlement Hygiene in Poor Peri-urban Regions in India supported by BORDA
23.	Karnataka State Remote Sensing Applications Centre, KSRASAC, Bangalore	For recognizing KRSAC as an academic organization for conducting collaborative research, teaching and extension programmes
24.	ICAR-INDIAN Institute of Seed Science MAU, Uttar Pradesh and the University of Agricultural Sciences, Bangalore, Karnataka	For facilitating Students' training/post-graduate research and collaboration in research projects.
25.	ICAR-ATARI (Agricultural Technology application research institute , Bangalore	For facilitating students' training/Post Graduate research work
26.	University of Horticultural Science, Bagalkot and UAS, Bangalore	For teaching research and extension for the mutual benefits of both the Universities.
27.	ICAR-CPCRI,(Central plantation crops research institute) Kasargod	For facilitating students' Training/Post Graduate research
28.	Indian Institute of Horticultural Research	For facilitating collaborative training and Post Graduate research
29.	SJB Institute of Technology	Technological collaboration in the field of Science & Technology for the benefit of farmers.
30.	Indian Agricultural Research Institute, Pusa Campus, New Delhi-12.	For collaborative extension programme with SAUs/ICAR Institute

During 2017-18

Sl. No.	Collaborative Institute/ Organization	Significant features of collaboration
1.	Infosys Limited Bangalore	For collaborative research
2.	M/S Sri Chamundeshwari Sugars Ltd., and UASB & NSL Koppa sugars Ltd.	Monitoring of onetime application of distillery spent wash to drylands, UAS-Distillery monitoring Project for installation of 50 kilolitres of Neutral spirit/rectified spirit

3.	ICAR- CIPHET Panjab Agricultural University Campus, Ludhiana	Development of Health Foods based on a functional ingredient from small millets under CRP on health Food Platform Scheme, ICAR
4.	ICAR- Central Research Institute for Dry land Agriculture CRIDA	Updating of District Agriculture Contingency
5.	Gottingen University Germany	Exchange of students and Faculty
6.	Karnataka Biotechnology and Information Technology (KBITS), Bangalore	Development of a molecular and immunological tool for detection of Cardamom Mosaic Virus infecting <i>Elettaria cardamom</i> L. Maton
7.	Dept. of Biotechnology, Ministry of S&T, GoI, New Delhi	DNA Marker-assisted Mapping of anthracnose resistance in Chilli (<i>Capsicum annum</i> L.)
8.	Indo – German Partners	Establishment of Rural-Urban Centre
9.	ICAR- NIASM (National Institute of Abiotic Stress Management), Baramati, PUNE	For collaborative research for PG students under ICAR Umbrella
10.	Metahelix Life Sciences Limited,	Grant Agreement- for promoting the Higher Science Education as part of the CSR Philosophy
11.	Department of Horticulture,	Use of Plastics in Horticulture.
12.	Novozymes South Asia Pvt Ltd, Bio-AG, India	Characterizing potent microbial strains and microbial products of Novozymes for their abiotic stress tolerance and growth promotion in agricultural crops
13.	Bangalore and International Atomic Energy Agency (IAEA, Vienna)	Bioavailability of dietary proteins from plant-based foods
14.	M/S Sri Chamundeswari Sugars Ltd.,	For installation of 60 kilo litres of Neutral spirit / rectified spirit
15.	V.S.T. Tillers Tractors Ltd. Bangalore	For facilitating collaborative Research & establishment of UAS-VST Agri. Skill development excellence centre
16.	ASCI-KSSRDI (Agriculture Skill Council of India)	For recognizing KSSRDI as a Ph. D research Centre
17.	Bharatavani Project, Hunsur Road, Manasagangotri, Mysuru	For the promotion of Indian languages supported by Central Institute of Indian Language (CIIL), Ministry of Human Resource Development, Govt. of India.
18.	I & B Seeds private limited, Bangalore	For collaborative PG research and training in Agricultural Sciences & Technology
19.	Jain Irrigation Systems limited (JISL), Jalgaon-425001, Maharashtra, India	For collaborative education, research and extension

During 2018-19

Sl. No.	Collaborative Institute/ Organization	Significant features of collaboration
1.	Indira Gandhi Krishi Vishwavidyalaya, Raipur (Chhattisgarh)	For attaching Ph. D Students of IGKV at UAS, Bangalore
2.	Dept. of Microbiology, GKVK with ICAR	PATENT grant agreement– Tomato
3.	Metahelix Life Science, Bangalore	Awarding merit scholarship to II year P.G. students from 2019-20 except Biotechnology Department.
4.	M/s NSL Sugars Ltd, Koppa	For monitoring the quality of treated distillery spent wash on OTCLA to drylands

	And M/s Sri Chamundeshwari Sugar Ltd., Mandya	
5.	DBT, GoI, New Delhi. 1. Dr K. Chandrashekar, Dept. of Entomology, GKVK 2. Dr R. Uma Shankar, Dept. of Crop Physiology, GKVK	Development of sustainable production, technology for camptothecin from newly identified plant and fungal sources
6.	Biotech Consortium India Limited, New Delhi	Genetic Fidelity Testing of tissue Culture Raised Plants (Dept. of Plant Pathology, GKVK)
7.	CDSL Ventures Limited, Bangalore	Service Level Agreement
8.	University of Horticultural Sciences, Bagalkot	For cooperation in the areas of Teaching, Research and Extension
9.	Andhra Pradesh State Sericulture Research & Development Institute (APSSRDI), Hindupur AP	For collaborative teaching, research and extension works
10.	Nestle India Limited Nanjangud, Mysuru	For the implementation of Nestle healthy Kids Programme in schools of Karnataka & Tamil Nadu
11.	Maharashtra Hybrid Seeds Company Private Limited (MAHYCO), Mumbai	Commercialization of licensing of sunflower hybrids KBSH-44 & KBSH-79
12.	University of Agricultural and Horticultural Science, Shivamogga	For collaborative interaction and cooperation to achieve sustained / strong footage in Teaching, Research and Extension.
13.	Davangere & Chitradurga Regional Co-operative Organic Farmers Associations Federation Ltd.	Development of Millet active low-fat biscuit and millet micro green beverage
14.	Maharashtra Hybrid Seeds Co. Pvt. Ltd.	Agreement on licensing of sunflower hybrids KBSH-44 & KBSH-790 for commercialization
15.	National Committee on Plasticulture Applications in Horticulture (NCPAH), Ministry of AFW, New Delhi	Precision Farming Development Centre – ad-hoc project
16.	National Bureau of Soil Survey and Land Use Planning (ICAR-NBSS&LUP), Nagpur, Maharashtra	For collaborative education including PG programmes and conducting research with specific research objectives and goals
17.	M/s Wipro limited Sarjapur Road, Bangalore	Contract Research Agreement (signed by Director of Research)
18.	University of Gottingen, Germany (Erasmus+)	Inter-Institutional agreement
19.	ICRISAT Development Centre, Telangana	For the project on Popularization of newly developed High Yielding Water Use Efficient Varieties of Groundnut and Cowpea (under Farmers participatory approach)
20.	Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India	For a research project on Chemical ecology of the northeast region of India
21.	Ministry of Science & Technology, DBT, New Delhi (Dr. K. Chandrashekar, PI, Agril Entomology)	Project Name -Indian Bio-resource Information Network (IBIN) Geoportal Phase-III: Enhancing Bio-resource Service, Institutional Linkages and Outreach
22.	University of Agricultural Science, Raichur	Mutual cooperation in the area of Teaching, Research and Extension

23.	CCS National Institute of Agricultural Marketing, Jaipur	For joint promotion of Agri-marketing field through training, research, consultancy, documentation, dissemination, education and policy advocacy.
24.	CIMMYT, Centro Internacional De Mejormiento De Maiz Y Trigo	For maize doubled haploid facility at ARS-Kunigal of UAS, Bangalore
25.	M/s Cultiva Agri Tech Private Limited, Bangalore	To sell all the commercialize products of UAS, Bangalore not limited to seeds, seedlings, sapling books, Apiary, Sericulture, Forestry, Fisheries, Consumables / Products <i>etc.</i>

During 2019-20

Sl. No.	Collaborative Institute/ Organization	Significant features of collaboration
1.	ICRISAT, Patancheru, Telangana	For collaborative teaching, training, research for development programmes and other activities
2.	Movetia Zurich University of Applied Sciences & Institute of National Resource Science, Gruental, Waednswil	Partnership agreement/MoU
3.	Novozymes South Asia Pvt. Ltd, Bangalore	Extension of MoU of the project on Characterizing potent microbial strains & microbial products of Novozymes for their abiotic stress tolerance and growth promotion
4.	M/s Chamnundi Sugar Ltd.	For the supply of neutral spirit / rectified spirit for using molasses as raw material.
5.	Indian Institute of Horticulture Research, Bangalore	MoA for collaborative teaching, research and extension.
6.	<ul style="list-style-type: none"> • TRANALAB Pvt. Ltd., Bangalore • Cultiva Agri Tech. Pvt. Ltd., Bangalore • Narm Healthy Food & Beverage Pvt. Ltd., Chikkaballapura • Kavan Bio- Solutions, Bangalore Rural • Rayonnant Natural Care Excellence Pvt. Ltd., Bangalore 	MoU/Agreement with Agri Start-ups Incumbents under Agri-Innovation Center, UASB
7.	Tamil Nadu Agricultural University, Coimbatore, TN	MoU for collaborative Teaching, Research and extension activities
8.	Food and Agriculture Organization of the United Nations, (FAO)	Internship Agreement for 5-6 students under NAHEP- CAAST project
9.	KAWADA Industries INC Tokyo, Japan (c/o ZTC International landscaping Solutions Pvt. Ltd., Bangalore)	For collaborative activities in building technological innovations
10.	Department of Bio-Technology (DBT), GoI, New Delhi	For Project-Sugar -Mimic Alkloids in Mulberry and their role in Modulating Host Plant-insect Interactions”
11.	North Carolina State University, USA	For collaborative / exchange in Agril. Science/Technology and allied field activities
12.	Indian Institute of Pulses Research, Kanpur, UP	For collaborative Research, Teaching & Extension

13.	National Research Development Corporation, (NRDC), New Delhi	Assignment Deed for technology commercialization
14.	National Research Development Corporation, (NRDC), New Delhi	Revised MoU for providing IP protection and technology commercialization services
15.	National Research Development Corporation, (NRDC), New Delhi	To undertake Pre-commercialization Trials and Consumer acceptability studies of Millet based breakfast cereals
16.	Indian Meteorological Department (IMD), Ministry of Earth Science, New Delhi	To provide a grant in aid to Agro Meteorology field Unit (AMFU at GKVK and Naganahalli. Of UASB for its functioning
17.	Environmental Management and Policy Research Institute (EMPRI) of Dept. of Forest, Ecology & Environment, GoK	Project on Estimation of forest and tree cover to create an additional carbon sink of 2.5 to 3 billion tons of CO ₂ equivalent by 2030.
18.	M/s TRuCapSol LLC Bethlehem, Pennsylvania-18015, USA	Sponsorship Research Agreement on the project – understanding the bio-chemical composition of seed coat in different crops to develop bio-degradable membrane for encapsulation
19.	Western Sydney University, Australia	Partnership Agreement for Dual award and higher degree research
20.	Mr. Narasimha Farmer Entrepreneur, Gowribidanur, Chikkaballapura	Technology Sale Agreement - Process Technology for the Manufacture of High Fibre Food Mix
21.	M/s Delta Agri genetics Pvt. Ltd.	Licensing of Maize Hybrid MAH-14-5 for commercialization
22.	Louisiana State University Agricultural Center Baton Rouge, USA	Mutual cooperation in research and developing academic and cultural interchange through mutual assistance in the teaching and research
23.	Environmental Management and Policy Research Institute (EMPRI) of Dept. of Forest, Ecology & Environment, GoK	Project on “climate change impact assessment and projections in agriculture through crop modelling”
24.	Confederation of Indian Industry (CII) M.s Tata Steel Limited Jamshedpur & UAS, Bangalore	Implementation of Prime Minister’s Fellowship for Doctoral Research
25.	Research Sub-Contract Agreement-World Vegetable Centre, South Asia, ICRISAT	Project on Phenotyping water uptake and water use efficiencies of different dual-purpose tomatoes under the technical partnership to support the green innovation centres for Agri and food sector in India
26.	Chandra Shekhar Azad University of Agriculture & Technology, Kanpur, UP	For faculty exchange, capacity building and research and innovation
27.	Mahesh Devaraju, M/S Smyld Breads and Biscuits Entrepreneur Vijnapura Bangalore	Technology Sale Agreement – Process Technology for the Manufacture of coconut flour cookies
28.	Department of Biotechnology, Ministry of Science & T, GoI, New Delhi	MoA for Genetic enhancement of Minor Pulses: Generation of Genomic Resources for Accelerated Utilization and Improvement of minor pulses.
29.	Dept. of Watershed Development, Govt. of Karnataka (Sujala-III, KWDP-II)	MoU & ToR Watershed development project for mitigation in convergence with other developmental projects like MNAREGA.
30.	Environmental and Recycling Solutions India, Bangalore	MoU for Collection and disposal of waste under WoW initiative and send to ITC factory

31.	M/s Sri Chamundeswari Sugars Ltd., Mandya and NSL Sugars Ltd, Koppa	MoU for the supply of spirit and distillery
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During 2020-21

Sl. No.	Collaborative Institute/ Organization	Significant features of collaboration
1.	Dept. of Watershed Development, Govt. of Karnataka (Sujala-III, KWDP-II)	To develop a strategy for the post-project related to LRI, DL DSS and AMC services
2.	M/s Cauvery Sannidi for Indian Culture, Cauvery KanyaGurukula, Bommuru Agrahara village Palahalli Post, BelagolaHobli, Srirangapatna Taluk -571606	To develop low-cost plant tissue culture system for local production of quality Horticulture planting material in rural areas
3.	M/s ArambhaKrushitechIndiaPvt. Ltd, No.699, Matada beedi, Halagur, Malavalli taluk, Mandya-571421	For incubation programme by using image processing and machine learning in the field of agriculture to detect, forecast diseases, nutrition deficiency and drought condition in food crops.
4.	M/s Invicta Agritech India Pvt Ltd, Telangana	For Sale of KBSH-53 sunflower hybrid for five years as non-exclusive for 5 lakhs with a royalty of 4.5%
5.	M/s Bangalore Bioinnovation Centre Helix Biotech Park, electronic city, Phase-1, Bangalore	Strengthening of Agriculture Innovation Centre for entrepreneurship through orientation and other trainings
6.	Purdue University, Indiana, USA	Amendment No.1 of earlier MoU (2016) No.16011852
7.	Taiken Academy Nihon Wellness Sports University Tokyo, Japan	To facilitate academic research and educational cooperation
8.	Indian Meteorological Department, Ministry of Earth Science, New Delhi	To generate specific advisories for Agril-management and disseminates the same to the farming community of the respective districts & Zone.
9.	C-MMASC-Center for Mathematical modelling, computer simulation formerly CSIR, Bangalore	For mutual research collaboration for Masters / Ph.D., students to achieve the mandated goals set for mathematical modelling and computer simulation techniques in agriculture & allied sector
10.	ORBI Seeds International Pvt. Ltd., Bangalore -560064.	For collaborative research for Ph.D., students
11.	Karnataka Science and Technology Academy (KSTA), Bangalore	For collaboration in technology dissemination, fostering innovations and entrepreneurship for social benefit/ welfare
12.	M.S. Ramaiah Institute of Technology, Bangalore	To develop state of art information & communication technological platform for dissemination of Agri- technologies through ICT for capacity building of farmers
13.	Sri Devraj Urs Academy of Higher Education and Research, Kolar	For mutual collaboration in Higher Studies and Research on Agriculture, Horticulture, Nutrition and Allied Health Sciences,
14.	Farms2Fork Technologies, BTM 4th Phase, Bangalore-560076	For upgrading the irrigation infrastructure and setting up of demo centres to carry out R&D activities at WTC, ZARS, Mandya.

15.	M/s Seree Fresh LLP RT Nagar Post, Bangalore - 024	Technology Sale Agreement for renting the building
16.	M/s Aradya's Agro-Food & Beverages, Food Processing Unit, Mandya	Technology Sale Agreement
17.	Namdari Seeds Pvt Ltd Bidadi, Bangalore -109	For collaborative PG Research activities
18.	Sri Chandra Mauli, Mysuru	Facilitating Industrialist /progressive farmers for commercial production of chemical-free jaggery on a monthly fee basis
19.	M/s Millet Home	MoA for providing stall on rental basis and Agri-produce cooperative marketing society Ltd. Mandya,
20.	Agriculture Produce cooperative Marketing Society Ltd, Mandya,	MoA for providing stall on rental basis and Agri-produce cooperative marketing society Ltd. Mandya,
21.	Dalhousie University Canada	MoU- to facilitate the Faculty and Student Exchange, collaborative research and Dual degree programmes.
22.	Karnataka State Natural Disaster Monitoring Centre (KSNDMC) Yelahanka, Bangalore	MoU- to develop co-operation and collaboration in research for development, training, and other agreed activities.
23.	N/s Handcraft Studio Academy, No.7/9/2, 2nd main road, Chandravarkar Layout near Datagururu Sadanana Ashram, Bangalore-020.	To develop high-quality value-added natural products from herbs medicinal and aromatic plants for health and wellness and promotion of research through a business platform
24.	IIOR-ICAR, Hyderabad and M/s Invicta Agritech India Pvt Ltd, Telangana	License Agreement for sale and commercialization of KBSH-53 sunflower Hybrid
25.	Sea6 Energy Pvt. Ltd.	For collaborative Research Projects and PG Research
26.	Director, NAHEP, ICAR	Patent Agreement on technology developed under CAAST project.
27.	Nobel Seeds Pvt. Ltd, Bangalore	For collaborative PG Research
28.	HDFC Bank Ltd, Mumbai Brach office at Mattikere, Bangalore	MoU for services as the agrarian bank for website and mobile as using payment gateway technology cash management services, NEFT, DDdd std
29.	Hindustan Aeronautics Limited, Bangalore	Establishment of UASB-HAL Advanced Center for Bioenergy Research
30.	M/s Perfura Technologies (India) Pvt. Ltd., Coimbatore, Tamil Nadu.	To facilitate the incubation center for innovation, to develop technologies and commercialization of Agri based products.
31.	M/s Beegle Agritech and Agriproducts Pvt. Ltd, Bannerghatta, bangalore	To facilitate the incubation center for innovation, to develop technologies and commercialization of Agri. based products
32.	B. Nagesh Babu, M/s Nisarga Naturals, Tumkuru	Technology Sale Agreement – for sale of coconut flour cookies and laddoo.
33.	M/s Vidyaranya Ayurvedalaya Pvt Ltd, Bengaluru	To facilitate the incubation programme to produce high fibre food mix per month by online marketing
34.	M/s Scion Agricos Pvt Ltd, Bengaluru	To create an authentic farm/farmer data collection system and database and to minimize the supply chain efficiency

35.	M/s Zume Agritech Pvt Ltd, Bengaluru	To facilitate incubation programme for increased adoption of hydroponics aby reducing land, water and usage in agriculture
36.	M/s Shreeka Innovations, Bengaluru	To facilitate the incubation programme for process optimization for the protein enhanced millet products
37.	M/ Shreeka Lifestyle (OPC) Pvt. Ltd, Bengaluru	To facilitate the incubation programme for enhancement of shelf stability of millet products.
38.	M/s NSL Sugars Ltd, Maddur Taluk, Madya Dist.	For monitoring the quality of treated distillery spent wash for one time controlled and application to dryland and its impact on crops, yield and groundwater.
39.	M/s Chamnundi Sugar Ltd, Maddur Taluk, Mandya Dist.	For monitoring the quality of treated distillery spent wash for one time controlled and application to dryland and its impact on crops, yield and groundwater.

Annexure – 2 : Year wise Composition of Academic Council

Sl. No.	Name & Designation	Chairman / Member / Convener
2016-17- 182nd Academic Council Meeting on 20.08.2016		
1	Dr. H. Shivanna, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. R.Siddaramappa, Former Dean (PGS) (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. M.B. Rajegowda, Registrar, UAS, GKVK	Member
4	Dr. N.R. Gangadharappa, Director of Research, UAS, GKVK	Member
5	Dr. K. Jagadeeshwara, Director of Extension UAS, Hebbal	Member
6.	Dr. N. Krishnamurthy, Dean (PGS), UAS, GKVK	Member
7	Dr. H. Khader Khan, Dean (Agri) College of Agriculture, GKVK	Member
8	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
9	Dr. Balakrishna Gowda, Dean (Agri), College of Agriculture. Hassan	Member
10	Dr. V. Shankaranarayana, Dean (Seri), College of Seri. Chintamani	Member
11	Dr. Mahabaleshwar Hegde, Comptroller, UAS, GKVK and Dean of Student Welfare i/c	Member
12	Dr.D.M. Gowda, Professor & University Head, Dept. of Agri. Statistics, Applied Maths & Computer Science, UAS, GKVK	Member
13	Dr. P.K. Mandanna, Professor & Uni. Head, Dept. of Agricultural marketing & Cooperation, UAS, GKVK	Member
14	Dr. Palanimuthu, V., Professor & University Head, Dept. Of Agri. Engineering, UAS, GKVK	Member
15	Dr. Neena Joshi, Professor, Dept. of Food Sci. & Nutrition UAS, GKVK	Member
16	Dr. T.K. Narayanaswamy, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
17	Dr. A. Manjunath, Professor, Dept. of Agri. Microbiology, UAS, GKVK	Member
18	Dr. D.P. Kumar, Director of Education, UAS, GKVK	Member Secretary
19	Dr. R.N. Bhaskar, Administrative Officer, UAS, GKVK	Invitee
20	Dr. K.C. Narayanaswamy, Controller of Examinations, University Examination Centre, UAS, GKVK	Invitee
21	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK	Invitee
2016-17 - 183rd Academic Council Meeting held on 20.03.2017		
1	Dr. H. Shivanna, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. R. Siddaramappa, Former Dean (PGS) (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. M.B. Rajegowda, Registrar, UAS, GKVK	Member
4	Dr. N. Krishnamurthy, Dean (PGS), UAS, GKVK	Member
5	Dr. K. Jagadeeshwara, Director of Extension UAS, Hebbal	Member
6	Dr. H. Khader Khan, Dean (Agri) College of Agriculture, GKVK	Member
7	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
8	Dr. Theertha Prasad, D. Dean (Agri), College of Agriculture. Hassan	Member
9	Dr. V. Shankaranarayana, Dean (Seri), College of Seri. Chintamani	Member

10	Dr. Mahabaleshwar Hegde, Dean of Student Welfare, UAS, GKVK	Member
11	Dr. Nagaraju, Professor & Comptroller, UAS, GKVK	Member
12	Dr. D.M. Gowda, Professor & Uni. Head, Dept. of Agri. Statistics, Applied Maths. & CS, UAS, GKVK	Member
13	Dr. P.K. Mandanna, Professor & Uni. Head, Dept. of Agricultural Marketing & Cooperation, UAS, GKVK	Member
14	Dr. Palanimuthu, V., Professor & University Head, Dept. of Agril. Engineering, UAS, GKVK	Member
15	Dr. Neena Joshi, Professor, Dept. of Food Sci. & Nutrition UAS, GKVK	Member
16	Dr. T.K. Narayanaswamy, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
17	Dr. A. Manjunath, Professor, Dept. of Agril. Microbiology, UAS, GKVK	Member
18	Dr. D.P. Kumar, Director of Education, UAS, GKVK	Member Secretary
19	Dr. R.N. Bhaskar, Administrative Officer, UAS, GKVK	Invitees
20	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitees
21	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK	Invitees
2017-18 - 184th Academic Council Meeting held on 29.06.2017		
1	Dr. H. Shivanna, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. T.K. Prabhakara Setty, Former Director of Research (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. A.B. Patil, Registrar, UAS, GKVK	Member
4	Dr. Shailaja V. Hittalamani, Dean (PGS), UAS, GKVK	Member
5	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK	Member
6	Dr. M.S. Nataraju, Director of Extension UAS, Hebbal	Member
7	Dr. S. Rajendra Prasad, Dean (Agri) College of Agriculture, GKVK	Member
8	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
9	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
10	Dr. V. Shankaranarayana, Dean (Seri), College of Seri. Chintamani	Member
11	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
12	Dr. D.M. Gowda, Professor & University Head, Dept. of Agri. Statistics, Applied Maths. & CS, UAS, GKVK	Member
13	Dr. A. Manjunath, Professor, Dept. of Agril. Microbiology, UAS, GKVK	Member
14	Dr. G.N. Nagaraja, Professor & University Head, Dept. of Agri. Marketing & Cooperation, UAS, GKVK	Member
15	Dr. H.G. Ashoka, Professor & Head, Dept. of Agril. Engineering, UAS, GKVK	Member
16	Dr. Vijayalakshmi, D. Professor, Dept. of Food Science & Nutrition, UAS, GKVK	Member
17	Dr. H.V. Vijayakumara Swamy, Professor (Fishery Science), Department of Plant Biotechnology, UAS, GKVK	Member
18	Dr. A. Manjunath, Professor, Dept. of Agril. Microbiology, UAS, GKVK	Member
19	Dr. G.N. Nagaraja, Professor & University Head, Dept. of Agri. Marketing & Cooperation, UAS, GKVK	Member
20	Dr. D.P. Kumar, Director of Education, UAS, GKVK	Member-Secretary

21	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitee
22	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitee
23	Mr. Ajit Kumar, Associate Professor, Physical Education, UAS, GKVK	Invitee
2017-18 -185th Academic Council Meeting held on 24.10.2017		
1	Dr. H. Shivanna, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. T.K. Prabhakara Setty, Former Director of Research (Eminent Agriculture Educationist from outside the University),	Member
3	Dr. A.B. Patil, Registrar, UAS, GKVK	Member
4	Dr. Shailaja V. Hittalamani, Dean (PGS), UAS, GKVK	Member
5	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK	Member
6	Dr. M.S. Nataraju, Director of Extension, UAS, Hebbal	Member
7	Dr. S. Rajendra Prasad, Dean (Agri) College of Agriculture, GKVK	Member
8	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
9	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
10	Dr. Venkataravana, Dean (Seri), College of Seri. Chintamani	Member
11	Dr. M. Byregowda, Dean of Student Welfare, UAS, GKVK	Member
12	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
13	Dr. D.M. Gowda, Professor & University Head, Dept. of Agri. Statistics, Applied Maths. & CS, UAS, GKVK	Member
14	Dr. B.N. Satyanarayana, Professor and Uni. Head, Dept. of Horticulture, UAS, GKVK	Member
15	Dr. Mahabaleshwar Hegde, Professor, Dept. of Horticulture, UAS, GKVK	Member
16	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
17	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
18	Dr. G.N. Nagaraja, Professor & University Head, Dept. of Agri. Marketing & Cooperation, UAS, GKVK	Member
19	Dr. H.G. Ashoka, Professor & Head, Dept. of Agri. Engineering, UAS, GKVK	Member
20	Dr. Neelu Nangia, Professor and University Head, Dept. of Sericulture, UAS, GKVK	Member
21	Dr. Vijayalakshmi, D. Professor, Dept. of Food Science & Nutrition, UAS, GKVK	Member
22	Dr. H.V. Vijayakumara Swamy, Professor (Fishery Science), Department of Plant Biotechnology, UAS, GKVK	Member
23	Dr. D.P. Kumar, Director of Education, UAS, GKVK	Member - Secretary,
24	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitees
25	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitees
26	Dr. R.N. Bhaskar, Administrative Officer, UAS, GKVK	Invitees
2017-18 -186th Academic Council Meeting held on 18.01.2018		
1	Dr. H. Shivanna, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. T.K. Prabhakara Setty, Former Director of Research (Eminent Agriculture Educationist from outside the University) Member, Academic Council, UAS, Bengaluru	Member

3	Dr. A.B. Patil, Registrar, UAS, GKVK	Member
4	Dr. Shailaja V. Hittalamani, Dean (PGS), UAS, GKVK	Member
5	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK	Member
6	Dr. M.S. Nataraju, Director of Extension UAS, Hebbal	Member
7	Dr. S. Rajendra Prasad, Dean (Agri) College of Agriculture, GKVK	Member
8	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
9	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
10	Dr. Venkataravana, Dean (Seri), College of Seri. Chintamani	Member
11	Dr. M. Byregowda, Dean of Student Welfare, UAS, GKVK	Member
12	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
13	Dr. B.N. Satyanarayana, Professor and Uni. Head, Dept. of Horticulture, UAS, GKVK	Member
14	Dr. Mahabaleshwar Hegde, Professor, Dept. of Horticulture, UAS, GKVK	Member
15	Dr. G.N. Nagaraja, Professor & University Head, Dept. of Agri. Marketing & Cooperation, UAS, GKVK	Member
16	Dr. H.G. Ashoka, Professor & Head, Dept. of Agril. Engineering, UAS, GKVK	Member
17	Dr. Neelu Nangia, Professor and University Head, Dept. of Sericulture, UAS, GKVK	Member
18	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitees
19	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitees
20	Dr. R.N. Bhaskar, Administrative Officer, UAS, GKVK	Invitees
2018-19 - 187th Academic Council Meeting held on 10.11.2018		
1	Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, Bengaluru	Chairman
2	Dr. T.K. Prabhakara Setty, Former Director of Research (Eminent Agriculture Educationist from outside the University) Member, Academic Council, UAS, Bengaluru	Member
3	Dr. Mahabaleshwar Hegde, Registrar, UAS, GKVK	Member
4	Dr. M.S. Nataraju, Director of Extension UAS, Hebbal	Member
5	Dr. B.N. Sathyanarayana, Dean (PGS), UAS, GKVK	Member
6	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
7	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
8	Dr. Venkataravana, P. Dean (Seri), College of Seri. Chintamani	Member
9	Dr. M. Byregowda, Dean of Student Welfare, UAS, GKVK & I/c. Dean (Agri.), College of Agriculture, GKVK	Member
10	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
11	Dr. H.G. Ashoka, Professor & Head, Dept. of Agril. Engineering, UAS, GKVK & Special Officer, College of Agricultural Engineering, UAS, GKVK	Member
12	Dr. G.C. Kuberappa, Professor & University Head, Dept. of Apiculture	Member
13	Dr. Channabasavegowda Gowda, R. Professor & University Head, Dept. of SS & AC AICRP on LTEF & Member, College of Agriculture, GKVK	Member
14	Dr. M. Shivamurthy, Professor & University Head, Dept. of Agril. Extension	Member
15	Dr. M.S. Jayaram, Professor, Dept. of Agri. Marketing & Cooperation	Member

16	Dr. R.N. Bhaskar, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
17	Dr. H.V. Vijayakumara Swamy, Professor (Fishery Science), Department of Plant Biotechnology, UAS, GKVK	Member
18	Dr. Vijayalakshmi, D. Professor, Dept. of Food Science & Nutrition, UAS, GKVK	Member
19	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
20	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
21	Dr. Venkataravana, P. Dean (Seri), College of Seri. Chintamani	Member
22	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitee
23	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitee
24	Dr. G. Gopinath, Administrative Officer, UAS, GKVK	Invitee
25	Dr. S. N. Vasudevan, Special Officer, College of Agriculture, Chamarajanagar	Invitee
26	Dr. H.T. Nagaraj, Principal (Diploma in Agriculture), VC Farm, Mandya	Invitee
2018-19 - 188th Academic Council Meeting held on 18.03.2019		
1	Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, Bengaluru	Chairman & Member - Secretary
2	Dr. T.K. Prabhakara Setty, Former Director of Research (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. Mahabaleshwar Hegde, Registrar, UAS, GKVK	Member
4	Director of Extension, UAS, Hebbal (represented by Dr. K. Narayana Gowda, Professor and Associate Director of Extension, UAS, Hebbal, Bengaluru)	Member
5	Dr. B.N. Sathyanarayana, Dean (PGS), UAS, GKVK	Member
6	Dr. T. Shivashankar, Dean (Agri), College of Agriculture, Mandya	Member
7	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
8	Dr. Venkataravana, P. Dean (Seri), College of Seri. Chintamani	Member
9	Dr. M. Byregowda, Dean of Student Welfare, UAS, GKVK & I/c. Dean (Agri.), College of Agriculture, GKVK	Member
10	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
11	Dr. H.G. Ashoka, Professor of Agri. Engineering & CSO, Directorate of Research, UAS, GKVK	Member
12	Dr. G.C. Kuberappa, Professor & University Head, Dept. of Apiculture	Member
13	Dr. B.M. Shashidhar, Professor & University Head, Dept. of Agril. Marketing & Cooperation, UAS, GKVK	Member
14	Dr. R.N. Bhaskar, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
15	Dr. H.V. Vijayakumara Swamy, Professor (Fishery Sci.), Dept. of Plant Biotech., UAS, GKVK	Member
16	Dr. K. Geetha, Professor, Dept. of Food Science & Nutrition, UAS, GKVK	Member
17	Dr. S. N. Vasudevan, Special Officer, College of Agriculture, Chamarajanagar	Invitee
18	Dr. B.C. Ravikumar, Special Officer, College of Agril. Engineering, UAS, GKVK	Invitee

19	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitee
20	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitee
21	Dr. G. Gopinath, Administrative Officer, UAS, GKVK	Invitee
22	Dr. H.T. Nagaraj, Principal (Diploma in Agriculture), College of Agriculture, VC Farm, Mandya	Invitee
2019-20 189th Academic Council Meeting held on 08.08.2019		
1	Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, Bengaluru	Chairman & Member - Secretary
2	Dr. M.A. Shankar, Former Director of Research (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. Mahabaleshwar Hegde, Registrar, UAS, GKVK	Member
4	Dr. D.L. Savithramma, Dean (PGS), UAS, GKVK	Member
5	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK	Member
6	The Director of Extension, UAS, GKVK (represented by Dr. K. Narayana Gowda, Professor and Associate Director of Extension, UAS, Hebbal)	Member
7	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
8	Dr. Venkataravana, P. Dean (Seri), College of Seri. Chintamani	Member
9	Dr. Venkatesh, Dean (Agri), College of Agriculture, Mandya	Member
10	Dr. M. Byregowda, Dean of Student Welfare, UAS, GKVK & I/c. Dean (Agri.), College of Agriculture, GKVK	Member
11	Shri D. Vijayakumar, Comptroller, UAS, GKVK	Member
12	Dr. Channabasave Gowda, R. Professor and University Head, Dept. of SS & AC, UAS, GKVK	Member
13	Dr. Narendrappa, T. Professor & University Head, Dept. of Plant Pathology	Member
14	Dr. Shivalinge Gowda, N.S. Professor & University Head, Dept. of Agril. Extension	Member
15	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
16	Dr. Venkataravana, P. Dean (Seri), College of Seri. Chintamani	Member
17	Dr. B.C. Ravikumar, Professor & Head, Department of Agri. Engineering &	Member
18	Dr. B.M. Shashidhar, Professor & University Head, Dept. of Agri. Marketing & Cooperation, UAS, GKVK	Member
19	Dr. R.N. Bhaskar, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
20	Dr. R.L. Ravikumar, Professor & Head, Department of Plant Biotechnology, UAS, GKVK	Member
21	Dr. K. Geetha, Professor, Dept. of Food Science & Nutrition, UAS, GKVK	Member
22	Dr. S. N. Vasudevan, Special Officer, College of Agriculture, Chamarajanagar	Invitee
23	Dr. G.Gopinath, Administrative Officer, UAS, GKVK	Invitee
24	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK	Invitee
25	Dr. K.P. Chinnaswamy, Coordinator, PPMC, UAS, GKVK & Nodal Officer to ICAR	Invitee

26	Dr. Dr. S.S. Prakash, Principal, Diploma (Agri), College of Agriculture, Mandya	Invitee
2020-21 - 190th Academic Council Meeting held on 27.05.2020		
1	Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, GKVK, Bengaluru	Chairman & Member Secretary
2	Dr. M.A. Shankar, Former Director of Research (Eminent Agriculture Educationist from outside the University), Academic Council, UAS, GKVK, Bengaluru	Member
3	Dr. A.G. Shankar, Dean (PGS), and Dean of Student Welfare i/c UAS, GKVK, Bengaluru	Member
4	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK, Bengaluru	Member
5	Dr. M. Byregowda, Director of Extension, UAS, GKVK, Bengaluru	Member
6	Dr. D.L. Savithamma, Dean (Agri), College of Agriculture. GKVK, Bengaluru	Member
7	Dr. N. Devakumar, Dean (Agri), College of Agriculture. Hassan	Member
8	Dr. Venkataravana, P. Dean (Seri), College of Sericulture. Chintamani	Member
9	Dr. Venkatesh, Dean (Agri), College of Agriculture, Mandya	Member
10	Dr. Suresh, S.V. Comptroller, UAS, GKVK, Bengaluru	Member
11	Dr. Narendrappa, T. Professor & University Head, Dept. of Plant Pathology	Member
12	Dr. O.R. Nataraju, Professor and University Head, Discipline of Animal Sciences, College of Agriculture, Hassan	Member
13	Dr. Srinivasa, N. Professor and University Head, Dept. of Agril. Entomology, College of Agriculture, UAS, GKVK, Bengaluru	Member
14	Dr. B.C. Ravikumar, Professor & Head, Department of Agri. Engineering & College of Agriculture, UAS, GKVK, Bengaluru	Member
15	Dr. R.N. Bhaskar, Professor & University Head, Dept. of Sericulture, UAS, GKVK	Member
16	Dr. C.P. Gracy, Professor & University Head, Dept. of Agril. Marketing & Cooperation, UAS, GKVK, Bengaluru	Member
17	Dr. R.L. Ravikumar, Professor & Head, Department of Plant Biotechnology, UAS, GKVK, Bengaluru	Member
18	Dr. K. Geetha, Professor, Dept. of Food Science & Nutrition, UAS, GKVK, Bengaluru	Member
19	Dr. K.P. Chinnaswamy, Coordinator, PPMC & Nodal Officer to ICAR, UAS, GKVK, Bengaluru	Invitee
20	Dr. G.Gopinath, Administrative Officer, UAS, GKVK, Bengaluru	Invitee
21	Dr. K.C. Narayanaswamy, Controller of Examinations, UEC, UAS, GKVK, Bengaluru	Invitee
22	Dr. M.P. Rajanna, Special Officer, College of Agriculture, Chamarajanagar	Invitee
23	Dr. S.S. Prakash, Principal, Diploma (Agri), College of Agriculture, Mandya	Invitee
2020-21 - 191st Academic Council Meeting held on 18.01.2021		
1	Dr. S. Rajendra Prasad, Vice-Chancellor, UAS, GKVK, Bengaluru	Chairman & Member Secretary

2	Dr. M.A. Shankar, Former Director of Research (Eminent Agriculture Educationist from outside the University)	Member
3	Dr. Srinivasa, N, Dean (PGS), and Dean of Student Welfare i/c UAS, GKVK, Bengaluru	Member
4	Dr. Y.G. Shadakshari, Director of Research, UAS, GKVK, Bengaluru	Member
5	Dr. M. Byregowda, Director of Extension, UAS, GKVK, Bengaluru	Member
6	Dr. D.L. Savithramma, Dean (Agri), College of Agriculture. GKVK, Bengaluru	Member
7	Dr. N. Devakumar, Dean (Agri), College of agriculture. Hassan	Member
8	Dr. Venkataravana, P. Dean (Seri), College of Sericulture. Chintamani	Member
9	Dr. Venkatesh, Dean (Agri), College of Agriculture, Mandya	Member
10	Dr. Suresh, S.V. Comptroller, UAS, GKVK, Bengaluru	Member
11	Dr. Narendrappa, T. Professor & University Head, Dept. of Plant Pathology,	Member
12	Dr. O.R. Nataraju, Professor and University Head, Discipline of Animal Sciences, College of Agriculture, Hassan	Member
13	Dr. Srinivasa, N. Professor and University Head, Dept. of Agril. Entomology, College of Agriculture, UAS, GKVK, Bengaluru	Member
14	Dr. B.C. Ravikumar, Professor & Head, Department of Agri. Engineering & College of Agriculture, UAS, GKVK, Bengaluru	Member
15	Dr. M.S. Ganapathy, Professor & University Head, Dept. of Agril. Marketing & Cooperation, UAS, GKVK, Bengaluru	Member
16	Dr. K.C. Narayanaswamy, Professor & Controller of Examinations, UAS, GKVK,	Member
17	Dr. R.L. Ravikumar, Professor & Head, Department of Plant Biotechnology, UAS,	Member
18	Dr. K. Geetha, Professor, Dept. of Food Science & Nutrition, UAS, GKVK, Bengaluru	Member
19	Dr. Siddayya, Coordinator, PPMC & Nodal Officer to ICAR, UAS, GKVK, Bengaluru	Invitee
20	Dr. G. Gopinath, Administrative Officer, UAS, GKVK, Bengaluru	Invitee
21	Dr. M.P. Rajanna, Special Officer, College of Agriculture, Chamarajanagar	Invitee
22	Dr. S.S. Prakash, Principal, Diploma (Agri), College of Agriculture, Mandya	Invitee

Annexure – 3 : Details of Academic Council Meetings

Major Recommendations	Action Taken
2016-17 ;182nd ACM; date :20-08-2016	
Starting of integrated degree programme in UASB	Based on the Coordination committee recommendations the proposal was dropped
To review the Memorandum of Understandings (MoAs / MoUs)	The existing MOUs/MOAs are being reviewed periodically to know the progress of implementation, defunct MOUs/MOAs are being treated as closed and deleted.
Notification to be issued regarding the two-year Diploma(Agri.) courses	Two-year Diploma (Agri.) course w.e.f. academic year 2016-17 is being offered only at Mandya campus for the present.
Restructuring of Postgraduate courses to include umbrella courses	Offering of umbrella courses, which are listed in more than one department, has been implemented by the Departments where the required facilities and expertise is/are available
Common Admission to all PG Degree Programmes in the State Farm Universities	UASB will be coordinating and conducting the common PG CET for Admission to all the Farm Universities of the State during the Academic year 2016-17.
Eligibility criteria for Undergraduate Degree Programmes in Farm Universities of Karnataka	For admission of candidates to UG programmes through KEA, the combination of PCMB in II PUC is compulsory, while for the candidates admitted through ICAR with other combinations viz., PCB/CBZ/Inter(Agri.)etc., should complete the prescribed remedial courses.
Continuation of revised pattern of Question papers for final external examinations of UG Degree Programmes	Revised pattern of question papers for final external examinations of all UG Degree Programmes was adopted/continued
Eligibility criteria for undergraduate degree programme at UASB under NRI	As per ICAR guidelines restricting to only PCMB candidates for admission was relaxed and the same was extended to NRI with the condition that preference will be given for PCMB, followed by Non-PCMB candidates
Recommendation and confirmation of Ph.D. / Masters and MBA degree during 50 th Convocation of UASB to those who have completed their degree programme successfully	The eligible candidates have been awarded Ph.D. / Masters and MBA degrees at the 50 th Convocation held on 30 th April, 2016
Recommendation and confirmation of Bachelor of Science and Bachelor of Technology degree during 50 th Convocation of UASB to those who have completed their degree programme successfully	The eligible candidates have been awarded Bachelor of Science and Bachelor of Technology degrees in the 50 th Convocation held on 30 th April, 2016.
Recommendation and confirmation of the list of eligible candidates to be awarded Gold medals during the 50 th Convocation of UASB	As approved by the Academic Council, the eligible candidates have been awarded Gold medals in the 50 th Convocation held on 30 th April, 2016
Recommendation and confirmation of Diploma during 50 th Convocation of UASB to those who have completed their diploma programme successfully	The Academic Council ratified the action taken by the University in awarding the diploma certificates to the eligible candidates in a separate function held on 29 th July, 2015.
Conversion of CGPA awarded under Trimester Scheme to percentage	The Academic Council ratified the action taken by the University in notifying modified formula for conversion

	of CGPA awarded under Trimester Scheme to percentage of marks.
Modified Guidelines for Post-Doctoral Fellows (PDF) at UAS, Bangalore	The Academic Council ratified the action taken by the University in modifying the guidelines for pursuing PDF at UASB by fixing the fee payable @ Rs. 20,000/ at the beginning of every semester.
Institution of Gold Medal in the name of Sri Muniswamy Gowda Rajanna to the highest scoring student in M.Sc. (Agri.) in Seed Science & Technology from either Bengaluru rural or Chikkaballapura or Kolar districts	The Academic Council ratified the action taken by the University w.e.f. 51 st Convocation of UASB.
Institution of Gold Medal in the name of Sreeshaila Nidumamidi Matada Gowramma Gangadharaiah Gold Medal to meritorious woman student in M.Sc. (Agri.) in Agri. Economics	The Academic Council ratified the action taken by the University w.e.f. 50 th Convocation of UASB.
Revised Guidelines for registration of Ph.D. degree by RAs/SRFs/JRFs working in any UASB Project and appointment of UASB Scientists / PIs / Professors as Guide / Co-Guide / Member of the Ph.D. fellow in other Universities	The Academic Council ratified the action taken by the University for issuing Revised Guidelines for registration of Ph.D. degree by RAs/SRFs/JRFs working in any UASB Project and appointment of UASB Scientists / PIs / Professors as Guide / Co-Guide / Member of the Ph.D. fellow in other Universities
Extending the eligibility of B.Sc. (Agri. Biotech) Degree holders to M.Sc. (Agri.) programme in all the disciplines	Already implemented during the year 2016-17, as per the decision of the Academic Council
Modification of UG Academic Information & Regulations under Semester System	On the recommendations of The Board of Studies (UG), faculty of Agricultural Engineering, the Academic Council approved the modified academic regulations for students admitted from the academic year 2016-17 and onwards
Digital Evaluation of Answer Booklets of Final External Examinations of UG Degree programmes	The Academic Council approved the introduction of digital evaluation of answer booklets of final external examinations of all UG degree programmes w.e.f. the academic year 2017-18 and onwards
To consider recognized PG Teachers from other Institutions with MoU for Major Advisor	On the recommendations of The Board of Studies (PG), the Academic Council approved the proposal to consider recognized PG Teachers from other Institutions with MoU for Major Advisor w.e.f. academic year 2017-18 and onwards
To modify the Guidelines for recognition of PG Teacher from other Institutes	The Academic Council approved the proposal to modify the Guidelines for recognition of PG Teacher from other Institutes
Combining of Thesis Chapters' Experimental Results / Results and Discussion and formulating as one Chapter i.e. Results & Discussion for Masters' students.	The Academic Council approved the proposal for Combining of Thesis Chapters' Experimental Results / Results and Discussion and formulating as one Chapter i.e., Results & Discussion for Masters' students w.e.f. academic year 2016-17 and onwards.
Fixing Time limit for completion of Postgraduate Degree programme	Notification for fixing time limit for completion of Postgraduate Degree programme was issued
Guidelines for deputing Postgraduate students for presentation of Research papers at	Notification pertaining to guidelines for deputing Postgraduate students for presentation of Research papers at National/International Seminars / Conference was issued

National/International Seminars/Conference	
The ICAR Peer Review Committee, Sectoral Committees, and the National Agricultural Education Accreditation Board recommended for the Constitution of separate Board of Studies for each UG programme at UAS, Bangalore	Separate Board of Studies (UG) has been created for each Undergraduate programme as indicated below: <ol style="list-style-type: none"> 1. Board of Studies (UG), Faculty of Agriculture 2. Board of Studies (UG), Faculty of Agril. Marketing and Cooperation 3. Board of Studies (UG), Faculty of Agril. Biotechnology 4. Board of Studies (UG), Faculty of Sericulture 5. Board of Studies (UG), Faculty of Agril. Engineering 6. Board of Studies (UG), Faculty of Food Science & Technology
Revision of probationary period from the existing one year to two years for the posts of Teachers / Technical Assistants and equivalent and Non-teaching staff at UASB	Academic Council approved the proposal for the revision of probationary period from the existing one year to two years for the posts of Teachers / Technical Assistants and equivalent and Non-teaching staff in the University
Adopting a Common criteria across the farm Universities in the State for inviting eligible applicants to the interviews for the post of Teachers and Officers	The Academic Council approved the proposal adopting a common criterion across the farm Universities in the State for inviting eligible applicants to the interviews for the post of Teachers and Officers
Adoption of the Modified Course curriculum for UG programmes as per the V Deans' Committee	Academic Council approved the modified course curriculum for UG programmes as per the V Deans' Committee and approved the enhancement of credit hours uniformly for all UG Programmes from the existing 162-165 credit hours to 183 credit hours, including remedial courses.
Creation of four sections within the Department of Agricultural Marketing, Cooperation & Business Management, College of Agriculture, GKVK	The Board of Management in its 371 st meeting held on 5 th January 2017, approved the proposal for creation of four sections within the Department of Agricultural Marketing, Cooperation & Business Management, College of Agriculture, GKVK, namely, Section - I Agribusiness Management Section - II Agricultural Marketing and Trade Section - III Agricultural Finance and Accounting Section - IV Cooperation
Increasing reservation for Foreign Nationals and NRI in UG programmes	Academic Council approved the proposal for increasing reservation for Foreign Nationals and NRI for admission to different UG programmes
2016-17:183rdACM; date: 20.03.2017	
Regulations regarding timely return of evaluated answer scripts to students in PG courses after evaluation	The necessary Notification in this regard has been issued by the Registrar to implement the Regulations regarding timely return of evaluated answer scripts to students in PG courses w.e.f. academic year 2016-17.
Providing photocopies of answer booklets for re- totalling and re-evaluation of their written qualifying examinations on demand by the PG students	The necessary notification for providing photocopies of answer booklets of their written qualifying examinations for re- totalling and re-evaluation on demand by the PG students has been issued by the Registrar to implement the regulations w.e.f. academic year 2016-17.
Adjunct Professorship at UAS, Bangalore	At present all the required logistic facilities are being provided to the Emeritus Scientists who have got Research projects from outside funding agencies for carrying out research work in the field of their specialisation and their expertise can be utilised. Such

	facilities are also extended to eminent scientists from other reputed Universities who desire to work in UASB on sabbatical leave, with prior approval of the University, at no cost to the University, and by providing only logistic support.
Considering B.Sc. (Seri.) candidates on par with B.Sc. (Agri.) candidates for admission to M.Sc. programmes in all the Agricultural Universities in Karnataka	As decided in the Coordination Committee, B.Sc. (Seri.) candidates have been made eligible (on par with B.Sc. (Agri.) candidates) for admission to M.Sc. programmes in all the Agricultural Universities in Karnataka
Providing opportunities for the Technical Staff appointed under T-4 series for higher education	The Academic Council approved the proposal for providing part-time facilities for Technical Staff, appointed under T-4 series, for higher education and the guidelines for the same were also approved.
Fixing Time limit for completion of Postgraduate Degree programme	The Academic Council decided to modify the Postgraduate Academic Regulations 18.1 and 18.2, restricting the time limit for completion of the PG programme and deleting the provision for re-admission
Increasing reservation for Foreign Nationals and NRIs in UG programmes	At present 15 per cent of the total intake is reserved for NRIs / Foreign Nationals selected through ICAR. Considering the percentage of seats allotted for PG programme and the demand for NRI seats, the Academic Council approved the proposal for keeping separate quota of 10 per cent for NRIs and 15 per cent of intake for Foreign Nationals w.e.f. the Academic year 2017-18.
2017-18: 184th ACM; Date: 29.06.2017	
Eligibility criteria for Undergraduate Degree programmes in Farm Universities in Karnataka	The Academic Council decided that for UG admission through KEA, the University should adopt the eligibility criteria adopted during 2016-17 even for admission during 2017-18.
Criteria for Award of University Residents Merit Scholarship (URMS)	For the enhanced rate of URMS for eligible UG and PG students, the Academic Council decided that it should be purely based on merit rather than the income level of their parents.
Recommendation and Confirmation of Ph.D. / Master's and MBA Degree during the 51 st Convocation of UASB, to those who have completed their Degree programme successfully	As approved by the Academic council, the eligible Candidates have been awarded Ph.D. / Master's and MBA degrees in the 51 st Convocation held on 24-4-2017
Recommendation and Confirmation of Bachelor of Science and Bachelor of Technology Degree during the 51 st Convocation of UASB, to those who have completed their Degree programme successfully	As approved by the Academic Council, the eligible Candidates have been awarded Bachelor of Science and Bachelor of Technology degrees in the 51 st Convocation held on 24-4-2017
Recommendation and Confirmation of the list of eligible candidates to be awarded Gold Medals during the 51 st Convocation of UASB.	As approved by the Academic Council, the eligible candidates have been awarded gold medals in the 51 st Convocation held on 24-4-2017
Recommendation and confirmation of the list of candidates eligible for the Award of Diploma in Agriculture (two years) 2015-16	Diploma in Agriculture (two years) certificates has been issued to the eligible candidates on 24-7-2016 which was ratified by the Academic Council.

Campus Gold medal for Postgraduate students in UASB from the 51 st Convocation	The Academic Council ratified the action taken by the University in instituting Campus Gold Medal for the students, other than the University Gold Medal, for all PG programmes, w.e.f. 51 st Convocation held on 24-4-2017
Institution of Scholarship in the name of Sri Muniswamy Gowda Rajanna Merit Scholarship” to B.Sc. (Agri.) of UASB	The Academic Council ratified the action taken by the University in instituting this scholarship to one eligible first year B.Sc. (Agri.) student, preferably for poor and meritorious candidate of rural farming community from Bengaluru rural, Chikkaballapura and Kolar Districts by following UASB guidelines and regulations.
Institution of Scholarship in the name of Sri Muniswamy Gowda Rajanna Merit Scholarship to M.Sc.(Agri.) in Seed Science and Technology, UAS, Bangalore	The Academic Council ratified the action taken by the University in instituting this scholarship to one eligible first year M.Sc. (Agri.) student in Seed Science and Technology preferably for meritorious students of rural farming community from Bengaluru rural, Chikkaballapura and Kolar Districts by following UAS guidelines and regulations.
Institution of Gold Medal in the name of Bangalore Beekeepers Association (BBA) to one meritorious student in M.Sc.(Agri.) in Apiculture	The Academic Council approved the proposal for instituting this gold medal to one eligible student who scores highest CGPA in M.Sc. (Agri.) in Apiculture and ratified the action taken to implement the same w.e.f. 51 st Convocation held on 24-4-2017
Fee structure for admission to Undergraduate and Postgraduate degree programmes for the Academic year 2016-17.	The Academic Council ratified the fee structure adopted for admissions to UG / PG programmes during the Academic year 2016-17 as indicated below: <ol style="list-style-type: none"> 1. Common fee structure for Undergraduate degree programmes in all SAUs for the Academic year 2016-17 2. Enhancement of Miscellaneous and Other fees in respect of UG / PG Degree programmes for the year 2016-17 on par with the Enhancement of other fee structures 3. Common Fee structure for Ph.D. and M.Sc. (Agri.) degree programmes in all SAUs for the Academic year 2016-17 4. Fee Structure for MBA (ABM) degree programmes for the Academic year 2016-17
Renaming the present College-wise Gold Medal as “Campus Gold Medal” for UG students in UAS, Bangalore from the 49 th Convocation.	The Academic Council ratified the action taken by the University to rename College-wise Gold Medal as “Campus Gold Medal” for UG students in UASB w.e.f. the 49 th Convocation and onwards.
Institution of Gold Medal in the name of Late Dr. Sneha Malli Reddy Memorial Gold Medal for the highest OGPA securing student in B.Sc. (Agricultural Marketing and Cooperation) studied in Rural area for ten years from College of Agriculture, UAS, GKVK, Bengaluru.	The Academic Council ratified the action taken by the University in instituting this Gold Medal in UASB w.e.f. the 51 st Convocation and onwards.
Creation of four Departments in Agricultural Biotechnology discipline at the College of Agriculture, Hassan.	The proposal to create four sections in the Faculty of Agri. Bio-technology was placed in the 374 th emergent meeting of the Board of Management held on 29 th May, 2017 and the same was approved by the Board.
Creation of six Departments in the Faculty of Food Science & Technology at the College of Agriculture, Hassan.	The proposal to create six sections in the Faculty of Food Science & Technology was approved by the Board of Management in its 374 th Emergent meeting held on 29 th May, 2017.

Modified Nomenclature for the UG Degree programmes offered in the University of Agricultural Sciences, Bangalore.

On the recommendations of the V Deans committee and National Agricultural Education Accreditation Board of ICAR, New Delhi, the Academic Council approved Modified Nomenclature for the UG Degree programmes offered in the UASB w.e.f. the academic year 2017-18 and onwards viz.,

Sl. No.	Present Nomenclature of the Degree Programmes	Proposed Nomenclature of the Degree Programmes as per V Deans committee
1.	B.Sc.(Agri.)	B.Sc. (Hons.) Agriculture
2.	B.Sc.(Seri.)	B.Sc. (Hons.) Sericulture
3.	B.Sc. (Agri. Biotech)	B.Tech. Biotechnology
4.	B.Tech. (Agril. Engg)	B.Tech.(Agricultural Engineering)
5.	B.Tech.(Food Science & Technology)	B.Tech. (Food Technology)
6.	B.Sc. (Ag. Maco)	B.Sc. (Hons.) Ag. Maco

Modified Format of the Degree Certificate to be issued to successful candidates at the Annual Convocation.

Consequent to the creation of separate Board of Studies for each UG degree programme offered by UASB, the Academic Council approved the proposal for modified format of the Degree Certificate to be issued to successful candidates at the Annual Convocation w.e.f. 51st Convocation.

Proposing the Scheme of Evaluation of Courses under Student READY programme for B.Tech. (Agril. Engg.) Degree programme.

The Academic Council approved the proposed scheme of evaluation of courses under Students Rural Entrepreneurship Awareness Development Yojana (READY) for B.Tech. (Ag. Engg.) degree programme.

Modification of UG Academic Information & Regulations under Semester System.

The Academic Council approved the modified academic regulations for students admitted from the academic year 2016-17 and onwards.

Digital Evaluation of Answer Booklets of Final External Examinations of UG Degree programme.

The Academic Council approved the introduction of digital evaluation of answer booklets of final external examinations of all UG degree programmes w.e.f. the academic year 2017-18 and onwards.

To consider recognized PG Teachers from other Institutions with MoU for Major Advisor.

The Academic Council approved the proposal to consider recognized PG Teachers from other Institutions with MoU for Major Advisor w.e.f. academic year 2017-18 and onwards.

To modify the Guidelines for recognition of PG Teacher from other Institutes.

The Academic Council approved the proposal to modify the Guidelines for recognition of PG Teacher from other Institutes.

Combining of Thesis Chapters' Experimental Results / Results and Discussion and formulating as one Chapter *i.e.*, Results & Discussion for Masters' students.

The Academic Council approved the proposal for Combining of Thesis Chapters' Experimental Results / Results and Discussion and formulating as one Chapter *i.e.*, Results & Discussion for Masters' students w.e.f. academic year 2016-17 and onwards.

Revision of MBA course Regulation and Syllabus.

The Academic Council approved the proposal regarding revision of MBA course Regulations and Syllabus.

Ratification of Course syllabus of Ph.D. (Horticulture) degree programme in the Department of Horticulture, GKVK.

The Academic Council approved the proposal and ratified the course syllabus of Ph.D. (Horticulture) degree programme in the Department of Horticulture, GKVK.

Conducting written examination in five different streams for Master's Degree programme admission for the academic year 2017-18.

It was decided to follow the Common guidelines for PG Admission during the academic year 2017-18, by calling the meeting of all SAUs in the state.

2017-18:185th ACM; Date:24.10.2017

Guidelines for the Best Teacher Award sponsored by the Indian Council of Agricultural Research (ICAR) for Agricultural Universities.	As per the existing UASB guidelines, the Best Teacher Awards were presented on the Foundation Day which was held on 4 th October 2017. However, from 2018-19 onwards, the ICAR guidelines will be followed.
Regulations for taking up Project Fellows / Trainees from Institutions / other Universities.	The Academic Council approved for enhancing the fee (by 25%) to be paid to UASB by the Project Fellows / Trainees from other Institutions / Universities. The other guidelines already in practice will continue.
Guidelines for conducting Interim & Mid-term Examinations of UG / Internal Examinations of PG courses.	The recommendations made by the committee constituted for framing the Guidelines for conducting Interim and Mid-term Examinations of UG / Internal Examinations of PG courses in the 182 nd Academic Council meeting held on 20.08.2016 were considered and approved by the Academic Council.
Establishment of “National Academic Depository” (NAD) Cell and signing service level agreement with National Academic Depositories to provide students with Digital Academic Certificates / Awards	The Academic Council agreed in principle for the establishment of “National Academic Depository” (NAD) Cell and signing service level agreement with National Academic Depositories to provide students with Digital Academic Certificates / Awards.
Reintroducing the facilities for permitting UG students to visit other Universities outside the country.	The Academic Council decided that the earlier practice of permitting UG students to visit other Universities outside the country (at their own cost) for wider exposure may be continued.
2017-18 :186th ACM; Date:18.01.2018	
Proposal for introduction of Direct Cash-less Remittance of students’ fees pertaining to academics and hostel as well as drafting modalities for the same	The proposal with recommendations of the Manager, Canara Bank, GKVK for transaction fee exemption has been forwarded to the Head Office, Canara Bank and it is being processed. Meanwhile, on pilot basis, the cashless transactions have been introduced for payment of mess bills of the boarders in PG Girls Hostel.
Upgrading the Department of Agricultural Engineering, GKVK to Agricultural Engineering College	Proposal for upgrading the Department of Agricultural Engineering, GKVK to Agricultural Engineering College has been sent to the Government of Karnataka for formal approval. University Notification is to be issued in this matter
Guidelines for the Best Teacher Award sponsored by the Indian Council of agricultural Research (ICAR) for Agricultural Universities	The Academic Council suggested to retain the present five best teacher awards, carrying cash prize of Rs. 25000/- each. Action will be taken accordingly
Common Fee structure, Seat Matrix for admission to Undergraduate, Postgraduate Degree and Two Years Diploma (Agri.) for the Academic year 2017-18	Modified Seat Matrix and Common fee structure for admission to Undergraduate, Postgraduate Degree and Two Years Diploma (Agri) courses have been given effect during the Academic year 2017-18.
Revision of Guidelines for rewarding Teachers / Scientists	The approval of the Academic Council was given for the modified guidelines for rewarding Teachers / Scientists.
Establishment of National Academic Depository (NAD) Cell	The Board approved the establishment of NAD Cell in the University in the 376 th meeting of the Board of

and signing Service Level Agreement with National Academic Depositories to provide students with Academic Certificates / Awards	Management held on 5 th December 2017. However, the Board directed the University to take 4G exemption before establishment of NAD Cell. In this regard, action is being taken to get 4G exemption.										
Providing Teaching /Technical Assistants in the Departments of the College	The Academic Council approved the proposal for providing Teaching Assistants in the Departments of the colleges in <i>lieu</i> of Graduate Assistants										
Minimum percentage of marks required for admission to Undergraduate courses in the University under Non-Resident Indian (NRI) quota	The Academic Council decided that the candidates seeking admission to any UG Programme should have successfully completed the II PUC or its equivalent Examination with not less than 50 per cent marks in the concerned subject. (PCM / PCMB) w.e.f. Academic year 2018-19. Similarly, for admission to M.Sc. and Ph.D. programmes, the minimum requirement of CGPA in the eligibility Degree programme was prescribed as 6.5 and 7.5 out of 10.00, respectively.										
Deputation of Regular T-4 series employees for higher studies leading to M.Sc. / Ph.D. Degree within the University	The Academic Council suggested that the provisions made for the T-4 series employees of ICAR Scheme for pursuing higher studies in the University to be continued										
Revising the present Guidelines for sanction of financial assistance to Teachers / Scientists of UASB under Travel Grants for attending International Conference / Seminar / Symposium etc. outside / within the country	While approving the modified Guidelines, the Academic Council decided that only the actual Travel expenses in any Airlines (Economy Class only) may be paid, but not DA / <i>per diem</i> .										
Prescribing maximum credit hours for PG Degree programmes	The Academic Council approved the proposal for incorporating the following para under 8.0 (for M.Sc. Programme) and Para 8.2 (for Ph.D. programme) “A student will be allowed to register a maximum of two credits of course work directly related to the research in addition to the stipulated total credits as specified in PG Academic Information and Regulations with proper justification from the Advisory Committee and the approval from the Dean (PGS)”										
Providing financial assistance to PG students who are non-recipient of any scholarships / fellowships	The Academic Council approved the proposal for providing financial assistance to the students of Postgraduate programmes, who are not in receipt of any other Fellowship / Scholarship or other financial assistance from any source, at the rate of Rs.1000/- per month for the students of Master’s Degree programme and Rs.1500/- per month for the students of Doctoral Degree programmes w.e.f. academic year 2017-18.										
Considering the Emeritus Scientists / Professors / National Professors / any eminent position for PG Guidance / Co-guidance / Members	The Academic Council approved the proposal for inclusion of Emeritus Scientists / Professors / National Professors available in the University, as Co-Chairman / Member of the Advisory Committee for Ph.D. and M.Sc. students. However, provision to nominate them as Guide for M.Sc. students in the Departments where limited staff are available, may be considered.										
Evaluation of Non-Credit courses in PG Programmes	The Academic Council approved the modified evaluation pattern for the Non-credit courses carrying 1+0 and 0+1 existing at Postgraduate level w.e.f. II Semester 2017-18 onwards, as given below: <table border="1" data-bbox="711 1885 1360 1976"> <thead> <tr> <th rowspan="2">Description</th> <th colspan="2">Distribution of Marks</th> <th rowspan="2">Grading</th> </tr> <tr> <th>1+0</th> <th>0+1</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Description	Distribution of Marks		Grading	1+0	0+1				
Description	Distribution of Marks		Grading								
	1+0	0+1									

	credit hour	Credit hour	
I Exam	30	20	A student who scores 60 marks and above will be considered as satisfactory and less than 60 will be considered as non-satisfactory. Attendance is as in case of regular courses
Final Exam	50	50	
Assignment / Records / Presentations etc.,	15	25	
Attendance	05	05	
Total	100	100	

Appointment of Senior Research Fellows / Research Assistants in the outside funded projects

Regarding appointment of Research Fellows in outside funded Projects, (except ICAR Projects), the Academic Council suggested that regarding the age and qualifications, the Guidelines of the Funding Agencies may be adopted and preference may be given for the Post Graduates in Agriculture for appointment as SRF / RA.

2018-19: 187th ACM; Date: 10.11.2018

Proposal for introduction of Direct Cash-less Remittance of students' fees pertaining to academics and hostels as well as drafting modalities for the same

The Academic Council decided that the matter should be pursued with the Canara Bank authorities for its implementation w.e.f. II Semester of 2017-18 in all the campuses. In the campuses where Canara Bank is not functioning, the transactions may be made through any other Nationalized Bank.

Upgrading the Dept. of Agricultural Engineering, GKVK to Agricultural Engineering College

The College of Agricultural Engineering at GKVK was formally inaugurated on 1th Sept.2018.

Establishment of National Academic Depository (NAD) Cell and signing Service Level Agreement with NAD to provide students with Academic Certificates

The Academic Council was informed that 4G exemption has been extended up to 2021. Accordingly, the Controller of Examinations was informed to pursue the matter.

Deputation of Regular T-4 series employees for higher studies leading to M.Sc. / Ph.D. Degree within the University

Based on the thorough discussions held in the earlier meetings, the Academic Council decided to retain the Guidelines as approved in its 182nd meeting held on 20-08-2016 and approved by the Board of Management, UAS, Bangalore, in its 375th meeting held on 11th July 2017. Notification on the approved Guidelines has been issued.

Recommendation and Confirmation of Ph.D. / Master's and MBA Degree during the 52nd Convocation of the University of Agricultural Sciences, Bangalore, to those who have completed their Degree programme successfully

As approved by the Academic Council, the eligible candidates have been awarded Ph.D. / Masters and MBA degree in the 52nd Convocation held on 9th February 2018.

Recommendation and Confirmation of Bachelor of Science and Bachelor of Technology Degree during the 52nd Convocation of UASB to those who have completed their Degree programme successfully.

As approved by the Academic Council, the eligible candidates have been awarded Bachelor of Science and Bachelor of Technology degree in the 52nd Convocation held on 9th February 2018.

Recommendation and Confirmation of the list of eligible candidates to be awarded Gold Medals during the 52 nd Convocation of the UASB	As approved by the Academic Council, the eligible candidates have been awarded various Gold Medals during the 52 nd Convocation of the University held on 9 th February, 2018.
Recommendation and Confirmation of the list of candidates eligible for the award of Diploma in Agriculture (two years) during the Academic year 2016-17.	The Academic Council approved the list of 43 eligible candidates for the award of Diploma (Agriculture) offered by the UASB and ratified the action taken in awarding the Diploma certificates to the eligible candidates in a separate function held at Mandya Campus on 16 th August, 2017.
Issue of Migration / Transfer Certificate for UG / PG Degree programmes	The Academic Council approved the proposal to modify the format for issue of Migration/ Transfer Certificate for UG and PG degree programmes and also ratified the action in this regard. The modified format will be adopted in future.
Institution of Prof. K.M. Jayaramaiah Gold Medal for the best student of Ph.D. programme in Agricultural Extension	The action taken by the University in instituting one Gold Medal in the name of “Prof. K.M. Jayaramaiah Gold Medal” to be awarded to the best student in Doctoral Degree programme in Agricultural Extension, coming from a farming community, w.e.f. the 52 nd Convocation as per the UAS Guidelines, was approved and the action taken in this regard was ratified.
Institution of “Indian Society for Environmental Studies Gold Medal” for meritorious M.Sc. student in the subject of Environmental Science	The proposal for instituting “Indian Society for Environmental Studies Gold Medal” to be awarded to the meritorious student of M.Sc.(Agri.) Degree programme in Environmental Science, with the stipulation that if eligible M.Sc.(Agri.) in Environmental Science candidates are not available, the Gold Medal can be awarded to eligible meritorious Ph.D. candidates in the subject of Forestry & Env. Science, was approved and the action taken to institute the Gold Medal w.e.f. 52 nd Convocation and onwards was ratified.
Considering the retired Teachers / Scientists for serving as the member of PG Advisory Committee	On the recommendations of the Board of Studies (PG), the Academic Council approved the proposal for inclusion of retired Teachers /Scientists as Members of the Advisory Committee of not more than three students in an Academic year, with proper justification and on need basis, with the approval of the Dean (PGS), and at no cost to the University.
Implementing the recommendations of the Committee regarding splitting of Umbrella courses PET 501 (2+1) and AEX 504 / AEC 506 (2+1)	After thorough discussion on the proposal, the Academic Council decided to retain the umbrella courses PET 501: Integrated Pest and Disease Management (2+1) and AEX 504 / AEC 506: Research Methodology for Social Sciences (2+1) and to get feedback from the Teachers and PG students of the concerned departments.
Allotment of PG students to in service / deputed / Part-time teachers	The Academic Council was not in favour of nominating part-time teachers, either as Chairman or member of the Advisory Committee of PG students. Further, it was decided that Part-time teachers may be considered for inclusion in the Advisory Committee, only after they complete the final <i>viva-voce</i> examination as part of their own Ph.D. programme.
Permitting to register 24 cr. hrs. per year for part-time Ph.D. students	The Academic Council approved the proposal to permit the part-time students (who are on deputation for first two semesters) to register up to 24 credit hours per Academic year (2 Semesters) w.e.f. I Semester of 2018-19 and onwards.

Conversion of one post of Assistant Professor of Entomology to the post of Assistant Professor of Entomology (Curator).	The Academic Council approved the proposal for converting one of the existing posts of Assistant Professor of Entomology in the College of Agriculture, GKVK, as Assistant Professor of Entomology (Curator) in addition to the prescribed qualifications for the post of Assistant Professor of Entomology. The Board of Management in its meeting held on 12-06-2018 also approved the proposal.
Change of title of Section from Food Microbiology to Section of Food Safety and Quality	Considering the recommendations of the V Deans Committee and on the justifications given in the proposal, the Academic Council reconsidered its decision taken in the 183 rd meeting held on 20-03-2017 and decided to modify the name of the Section of Food Microbiology as Section of Food Safety and Quality. The Proposal has been approved by the Board of Management in its 378 th meeting held on 12 th June 2018
Award of Donor's Pure Gold Medals instituted by M/s Sitaram Jindal Foundation, Bengaluru	The Academic Council approved the proposal to award three Pure Gold Medals in the name of M/s Sitaram Jindal Foundation, Bengaluru one each in the following subjects : (i) B.Sc. (Agril. Biotech.) (ii) M.Sc.(Agri.) in Horticulture (iii) M. Tech (Agri. Engg.) in Processing & Food Engineering
Award of Donor's Gold Medals with negative Balance	In the circumstances explained in the proposal and considering the non-availability of sufficient funds for providing some of the Donors Gold medals, the Academic Council approved the proposal for awarding Certificate of Gold Medal (instead of Gold medals) in such cases, w.e.f. 52 nd Convocation held on 9 th February 2018 and onwards.
Adoption of Revised and Common fee structure for Undergraduate Degree programmes at all Farm Universities of Karnataka for the Academic year 2018-19.	The Academic Council approved the revised Common fee structure for admission to Undergraduate degree programmes proposed to be adopted in all the Farm Universities in Karnataka (except KVA & FSU), during the Academic year 2018-19.
2018-19:188th ACM; Date:18.03.2019	
Proposal for introduction of Direct Cash-less Remittance of students' fees pertaining to academics and hostels as well as drafting modalities for the same.	The cashless fee payment and paperless online registrations have been successfully implemented w.e.f. II Semester 2018-19 for all UG programmes.
Establishment of National Academic Depository (NAD) Cell and signing Service Level Agreement with NAD to provide students with Academic Certificates	As decided by the Academic Council, the UAS, Bangalore has taken action to prepare and issue both soft and hard copies of Convocation /Degree Certificates of both UG and PG students during the 53 rd Convocation. The academic certificates of the students who have passed out during 2015-16, 2016-17 and 2017-18 have been prepared for uploading to NAD
Upgradation of the Department of Agricultural Engineering as College of Agricultural Engineering at UAS, GKVK Campus, Bangalore from the academic year 2018-19 – Ratification of the action taken by the University	The Academic Council was informed of the recommendations of the National Agricultural Education Accreditation Board of ICAR for establishing a College of Agricultural Engineering by upgrading the existing Department of Agricultural Engineering, College of Agriculture, GKVK, where UG and PG programmes are being offered. In pursuance of the suggestions of the ICAR and after getting the approval of the Board of Management, a proposal was sent to the Government of Karnataka in this regard. The Government of Karnataka accorded its administrative approval to UAS, Bangalore

	and subsequently the University Notification in this regard was issued.
Starting of new College of Agriculture at Chamarajanagara, from the Academic year 2018-19 - Ratification of the action taken by the University	The Chairman explained the genesis of establishing the College of Agriculture at Chamarajanagara w.e.f. the Academic year 2018-19. Administrative approval of the Government of Karnataka has been received. On receipt of the Government Order, University Orders establishing the College of Agriculture at Chamarajanagara from the Academic year 2018-19 was issued. Accordingly, the new College of Agriculture at Chamarajanagara started functioning from the Academic year 2018-19.
Ratification for approval for signing MoU / MoA	Academic Council ratified the five MoUs/MoAs pertaining to the Research Projects entered by the University with other organizations
Award of Gold Medal in the name of Sri K. Subbaiah as 'Sri K. Subbaiah Memorial Gold Medal'	The Academic Council ratified the action taken by the University in modifying the eligibility criteria for award of Gold Medal in the name of Sri K. Subbaiah Memorial Gold Medal from the 53 rd Convocation of the UASB, as follows: An outgoing I Rank Ph.D. student of Agricultural Microbiology with OGPA of more than 9.00. In the event that no outgoing Ph.D. student meets the criteria, it may be given to an outgoing I Rank Master's Degree student of Agricultural Microbiology with OGPA of more than 9.00.
Amendment of UG Academic Regulations 11.6 pertaining to Supplementary Examinations	The Academic Council examined the proposal in detail. On the justifications given in the Proposal, the action taken by the University in amending the UG Academic Regulations 11.6 pertaining to supplementary examinations was ratified by the Academic Council.
Institution of Scholarship in the name of "Metahelix Life Sciences Limited, Bengaluru"	The Academic Council approved the proposal for instituting a Scholarship in the name of "Metahelix Life Sciences Limited, Bengaluru", to meritorious PG students from low income families, on the Terms and Conditions agreed between the University and the Donor.
Time limit for completion of Postgraduate Degree programme for considering the award of Gold medals during the Annual Convocation.	The Academic Council decided to strictly follow the earlier Regulations for award of Gold Medals existed prior to the Academic Year 2015-16. Only the students who complete all the requirements for the award of the respective Degree within the stipulated period i.e. Four consecutive Semesters for Master's Degree programme and Six Consecutive Semesters for Ph.D. programme need to be considered for award of Gold Medals / Certificate of Gold Medal. The modified Regulations are applicable to the students admitted to the PG programmes from the Academic year 2018-19.
Evaluation Pattern for Rural Agricultural Work Experience (RAWE) of Undergraduate Degree programmes	While approving the modified evaluation pattern for RAWE of UG degree programmes, the Academic Council desired that Examination component carrying 20 marks may also be included in the evaluation pattern by adjusting the marks proposed for Work experience and other components. The new Guidelines will be given effect for the students admitted during 2017-18 and onwards.
Duration and Evaluation of READY courses for B. Tech (Agricultural Engineering)	The Academic Council approved the modified Evaluation pattern for READY courses for B.Tech. (Agricultural Engineering) Degree programme. The Academic Council desired for inclusion of Examination component carrying 20 marks in the modified evaluation pattern of READY courses as suggested under Item 11. The New Guidelines

	will be given effect for the students admitted during 2017-18 and onwards.																					
Payment of remuneration to the Faculty of UASB towards evaluation of answer booklets of final external examinations of UG degree programmes	Based on the recommendations of the Academic Council, the Board of Management in its 379 th meeting held on 5 th Jan. 2019, accorded its approval for payment of remuneration to faculty towards evaluation of answer booklets of final external examinations of UG degree programmes at UASB.																					
To increase PG seats intake for M.Sc.(Agri.) Seri and Ph.D. in Sericulture	On the justification given in the proposal and on the recommendations of the Board of Studies (PG), the Academic Council approved the proposal for increasing the intake of students for PG programmes in the Department of Sericulture, College of Agriculture, GKVK, from the Academic year 2019-20 i.e., M.Sc.(Agri) in Sericulture : Ten students (inclusive of two seats under ICAR quota) and for Ph. D. in Sericulture : Three students (inclusive of ICAR quota)																					
Matching Percentage levels of anti-plagiarism allowed for PG students for submission of thesis	The Academic Council ratified the action taken in introducing the software to check plagiarism and grammar of thesis submitted by PG students of the University by using the software developed for the purpose. The matching percentage levels of anti-plagiarism allowed for PG students for submission of thesis as approved by the Academic Council was <table border="1" data-bbox="727 869 1354 1163"> <thead> <tr> <th>Sl. No.</th> <th>Chapter</th> <th>Maximum Matching percentage allowed</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>Introduction</td> <td>15.00</td> </tr> <tr> <td>II</td> <td>Review of Literature</td> <td>40.00</td> </tr> <tr> <td>III</td> <td>Materials & Methods</td> <td>40.00</td> </tr> <tr> <td>IV</td> <td>Results & Discussion</td> <td>20.00</td> </tr> <tr> <td>V</td> <td>Reference</td> <td>100.00</td> </tr> <tr> <td>VI</td> <td>Summary and Abstracts</td> <td>05.00</td> </tr> </tbody> </table>	Sl. No.	Chapter	Maximum Matching percentage allowed	I	Introduction	15.00	II	Review of Literature	40.00	III	Materials & Methods	40.00	IV	Results & Discussion	20.00	V	Reference	100.00	VI	Summary and Abstracts	05.00
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Anti-plagiarism certificate to be produced by PG students while submission of thesis	The format of Anti Plagiarism Certificate for submission of thesis by PG students was approved by the Academic Council.																					
Recording the audited courses registered by the students as Audited Course (AC) in the CGPA/OGPA Card	The Academic Council approved for allowing PG students to register for a maximum of two credit hours required to complete the Degree programme viz., M.Sc. (55 + 2 credits) and for Ph.D. (75 + 2). If the students register for more than the stipulated credit hours (2) such of the courses will be considered as Audited Course (AC) and these courses will not be considered for calculating final CGPA / OGPA. Such of the courses will be indicated as AC in the CGPA / OGPA Card.																					
Modification in Final thesis submission related to Form-6	The Academic Council approved the proposal for modification of Form No.6 as indicated below: At the time of submission of the thesis, the Ph.D. student must possess the acceptance certificate of one research paper for publication in <i>The Mysore Journal of Agricultural Sciences</i> and an additional Research paper submitted to any other journal which has NAAS rating of 4 and above, or with an impact factor of 0.5 and above. The title of the paper and acceptance letter are to be indicated in Form 6.																					
Institution of one Gold Medal in the name of "Alumni Association, UAS, Bangalore, for the highest OGPA earning student among all	The proposal for instituting one Gold Medal in the name of "Alumni Association, UAS, Bangalore" for the highest CGPA earning student among all the Undergraduate Degree Programmes in UASB, by following UAS, Gold																					

the Undergraduate degree programmes in UAS, Bangalore	Medal norms, from the 53 rd Convocation and onwards was approved by the Academic Council.
Ratification of the establishment and operationalization of Nodal Agricultural Education Cell (NODAEC)- ICAR with Nodal Officer – Agricultural Education to ICAR at UASB	The Academic Council ratified the action taken by the University in establishing the Nodal Agricultural Education Cell (NODAEC) – ICAR and also the nominations of the Nodal Officer for liaisoning with Education Division, ICAR, New Delhi.
2020-21:189th ACM; Date:27.05.2020	
Proposal for introduction of Direct Cashless Remittance of students' fees pertaining to academics and hostels as well as drafting modalities for the same	The proposal for development of software for automation of entire study cycle of PG students including online fee payment and online registration has been prepared. The Board of Management in its 381 st meeting held on 4 th June 2019 while approving financial sanction of Rs.28.00 lakhs suggested that the UGAM software developed for UG Academic programmes needs to be upgraded with additional features for PG programmes also, for which the process document is being prepared for assigning the work to a software vendor.
Establishment of National Academic Depository (NAD) Cell and signing Service Level Agreement with NAD to provide students with Academic Certificates	As decided by the Academic Council, the UASB has taken action to prepare and issue both soft and hard copies of Convocation /Degree Certificates of both UG and PG students during the 53 rd Convocation. The National Academic Depository (NAD) has been established as a part of Digital India Initiative. The objective of providing digital, secure and online verifiable academic certificates to students is to put an end to fake and forged certificates and to reduce the drudgery on administrative work in issuance of certificates. This will also greatly facilitate for issuance of duplicate copies of certificates and verification of request by employers or by the students and make possible instant and online certificate verification. The academic certificates of students passed out during the years 2015-16, 2016-17 and 2017-18 are available in the NAD, which can be accessed by registration in the NAD, followed by logging onto the User ID and Password. The UAS, Bangalore is awarding degrees by issuing digital degree certificates during the 53 rd Convocation, which is the first of its kind in the State.
To increase PG seats intake for M.Sc.(Agri.) Seri and Ph.D. in Sericulture.	The Academic Council reconsidered its earlier decision taken in the 187 th meeting held on November 10, 2018, and decided to increase the intake of students for the PG programmes in the Department of Sericulture, College of Agriculture, GKVK, from the Academic year 2019-20 as : M.Sc.(Agri) in Sericulture : Ten students (exclusive of two seats under ICAR quota) and Ph.D. in Sericulture : Three students (exclusive of ICAR quota)
Matching Percentage levels of anti-plagiarism allowed for PG students for submission of thesis	The Vice-Chancellor stated that the present formula for matching percentage levels of anti-plagiarism was adopted based on the consensus of the Coordination Committee of the Agricultural Universities in the State. Hence, the same formula may be continued for some time and based on the experience, any modification can be suggested for consideration of the Coordination Committee and the Academic Council. The present formula will be continued for some more time.

<p>Modification of Guidelines for appointment of Senior Research Fellows (SRF) and Junior Research Fellows (JRF) in Projects / Schemes on contract Basis.</p>	<p>The Academic Council desired that necessary orders based on the decision of the Academic Council need to be issued for guidance of all the Principal Investigators and the respective Directorates.</p>
<p>Proposal for upgrading the Ex-Prime Minister Shri.H.D.Deve Gowda award from State to National level which is conferred to the Best Farmer and Farm Women in UASB Krishi Mela.</p>	<p>The suggestions of the Academic Council for converting the above award as National award, was examined by a Committee under the Chairmanship of the Director of Education, UAS, GKVK and the Director of Extension, UAS, Hebbal, Director of Research, UAS, GKVK, Registrar, UAS, GKVK and the Dean (Agri), College of Agriculture, GKVK, as members of the Committee. The Committee in its meeting held on 8th March 2019, recommended that the awards in the name Sri H.D. Devegowda, Hon'ble Former Prime Minister of India be retained as State level award. Two awards - one for the best male farmer and another for the best female farmer would be instituted. Each award shall carry Rs. 50,000 cash prize, Citation and a memento. As recommended by the Committee, these awards will be retained as State Level Awards. Corrigendum in the Minutes of the 188th meeting of the Academic Council</p>
<p>Recommendation and Confirmation of Ph.D. / Master's and MBA Degree during the 53rd Convocation of the UASB to those who have completed their Degree programme successfully</p>	<p>On the recommendations of the Board of Studies (PG), in its 15th meeting held on March 1, 2019, the Academic Council approved and decided to recommend to the Board of Management for its consideration and approval, the list of eligible candidates as for conferment of the respective Degrees at 53rd Convocation of the UAS, Bangalore. All the eligible candidates have been awarded the respective PG Degree in the 53rd Convocation held on March 25, 2019.</p>
<p>Recommendation and Confirmation of Bachelor of Science and Bachelor of Technology Degree during 53rd Convocation of the UASB to those who have completed their Degree programme successfully</p>	<p>As approved by the Academic Council, the eligible candidates have been awarded the Bachelor of Science and Bachelor of Technology degrees in the 53rd Convocation held on March 25, 2019.</p>
<p>Recommendation and Confirmation of the list of eligible candidates to be awarded Gold Medals during the 53rd Convocation of the UASB</p>	<p>The Academic Council approved the list of eligible candidates for the award of various Gold Medals during 53rd Convocation of the University, as recommended by the Committee. Gold Medals have been awarded to the eligible candidates during the 53rd Convocation held on March 25, 2019</p>
<p>Recommendation and Confirmation of the list of candidates eligible for the award of Diploma in Agriculture (two years) during the Academic year 2017-18</p>	<p>The Academic Council approved the list of 47 eligible candidates for the award of Diploma (Agriculture) offered by UASB and ratified the action taken by the University in awarding the Diploma certificates to the eligible candidates in a separate function held at Mandya Campus on 12th August, 2018.</p>
<p>Adoption of revised Score Card for filling up of the post of Director of Education and other Officer posts at UAS, Bangalore, as proposed by the Department of Agriculture, Government of Karnataka</p>	<p>The Chairman explained the background for issue of Government Orders prescribing common Score-card for recruitment for the post of Officers in the Farm Universities. After detailed discussions on the proposal, the Academic Council suggested for the following changes in the Score card.</p> <p>. In the eligibility criteria, there is a mention that the applicant must have published in the referred journals a minimum of five research papers in the journals with</p>

	<p>NAAS rating of not less than 5 during the service. This clause may be deleted and instead a separate mark may be allocated in the Score card for publishing in the high rated journals.</p> <p>On page 5 of the Annexure-I of the Government Order, in the General Guidelines, there is a mention that the applicant should have a minimum period of 2 years' service on the last date of submission of his / her application. The Academic Council suggested for reducing it to 'minimum of one-year service' as the senior-most Professors with good academic records are denied for applying to the Key officers' posts by keeping two years' minimum service criteria.</p> <p>Further, for certain modifications of the Score Card, the Registrar was informed to finalise the same in consultation with the Administrative Officer, based on the points given in Annexure II (Explanatory Notes for award of Marks) and send the same to the Government for reconsideration of the Score Card, with the approval of the Chairman, Academic Council. Further, the members suggested for removing the words "Externally funded" [Sl.No. 3 and 4 of the Score Card - Pages 68 and 73 of the Agenda]. Regarding the marks allotted for Scientific publications, the stipulation of NAAS rated journals may be deleted (Item 5 - Page 65 and 68 of the Agenda). Further, marks need to be allotted for publication of Books also under the Scientific Publications.</p> <p>After getting the approval of the Board of Management, the proposal has been placed in the meeting of the Coordination Committee of Farm Universities in its meeting held on 5th July 2019</p>				
<p>Adoption of revised Score Card for filling up of the posts of Assistant Professor through direct recruitment mode at UASB as proposed by the Department of Agriculture, Government of Karnataka.</p>	<p>The Academic Council after detailed discussions on the Common Score Card for filling up of the posts of Assistant Professor through direct recruitment mode at UASB approved the proposal and recommended for placing before the Board of Management. Further, the Academic Council suggested the modifications of the Score Card for consideration of the Government.</p>				
<p>Qualifications for direct recruitment of Assistant Professor of Curator (Entomology) at UAS, Bangalore</p>	<p>While considering the item, The Academic Council decided as follows:</p> <p>The nomenclature of the post be retained as Assistant Professor of Entomology (Curator) (instead of Assistant Professor of Curator (Entomology) as approved by the Academic Council in its 186th meeting held on 18th January, 2018 and the 378th Board of Management.</p> <p>Essential Qualification</p> <table border="1" data-bbox="711 1562 1349 1927"> <tr> <td data-bbox="711 1562 878 1717">Essential qualification</td> <td data-bbox="878 1562 1349 1717">Good Academic records with at least 55% (Traditional) or 60% (Trimester) or 70% (Semester) marks or its equivalent at the Master's Degree level [M.Sc.(Agri.) in Agricultural Entomology / M.Sc. (Agri.) in Apiculture] from a recognized University</td> </tr> <tr> <td data-bbox="711 1717 878 1927">Desirable</td> <td data-bbox="878 1717 1349 1927">Proven track record in taxonomic research based on publications, experience in curating taxonomic collections and type specimens, work experience in museum, skilled in scientific illustrations including macro- and micro-photography, digitization of museum data, knowledge of material transfers etc. Doctorate degree in insect taxonomy is highly desirable</td> </tr> </table> <p>With the above modification, the Academic Council approved the Essential qualification for appointment to</p>	Essential qualification	Good Academic records with at least 55% (Traditional) or 60% (Trimester) or 70% (Semester) marks or its equivalent at the Master's Degree level [M.Sc.(Agri.) in Agricultural Entomology / M.Sc. (Agri.) in Apiculture] from a recognized University	Desirable	Proven track record in taxonomic research based on publications, experience in curating taxonomic collections and type specimens, work experience in museum, skilled in scientific illustrations including macro- and micro-photography, digitization of museum data, knowledge of material transfers etc. Doctorate degree in insect taxonomy is highly desirable
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	<p>the post of Assistant Professor of Entomology (Curator) and recommended for placing before the Board of Management for its approval. The proposed qualifications were placed in the 381st meeting of the Board of Management, held on June 4, 2019 and the same were approved.</p>
<p>2020-21: 190th ACM; Date: 27-05-2020</p>	
<p>Proposal for introduction of Direct Cashless Remittance of students' fees pertaining to academics and hostels as well as drafting modalities</p>	<p>As decided in the previous meeting, the facilities for on-line payment of fees and on-line registration may be implemented for PG programme also. The Controller of Examinations, UEC was informed to look in this aspect and take further action for its implementation as early as possible. The University has allocated Rs.28 lakhs for PG automation for which sanction of University is awaited.</p>
<p>Upgradation of the Department of Agricultural Engineering as College of Agricultural Engineering at UAS, GKVK Campus, Bangalore from the Academic year 2018-19</p>	<p>The Academic Council was informed by the Special Officer, College of Agricultural Engineering, that a Committee has been constituted to give suggestions on the following points:</p> <ul style="list-style-type: none"> • To indicate the infrastructure and human resource required to be created immediately • To develop a Master Plan for the Agricultural Engineering College building proposed and infrastructure at GKVK • To develop a five-year programme of recurring and non-recurring expenditure which would be required to put up the infrastructure for the Agricultural Engineering College. <p>The Committee has submitted its Report to the University. The recommendations of the Committee include</p> <ol style="list-style-type: none"> 1. Financial, Human Resources (Faculty and Staff) and physical facilities should be made in phased manner – Two phases 2. Renaming of the existing Sections as Departments 3. Requirement of Faculty and staff and Financial requirements for laboratory facilities (Buildings) and Lab equipment. <p>Proposals requiring approval of the Academic Council will be placed after getting the recommendations of the Board of Studies, Faculty of Agricultural Engineering.</p>
<p>Starting of new College of Agriculture at Chamarajanagara, from the Academic year 2018-19</p>	<p>The Special Officer, College of Agriculture, Chamarajanagara, informed that transfer of 77.2 acres of land to the UASB has been completed. Since the second batch of students have been admitted for the UG programme during the current academic year, the Academic Council desired that further action for construction of the College building and Hostels need to be initiated as early as possible. A Master Plan for the entire area of the Campus need to be developed. Extension of the existing Administrative building at KVK is in progress. Similarly, extension of Trainees Hostel for accommodating girl students for their lodging is also in progress and expected to complete by March 2020. Master Plan for the 77.2 acres of land allotted for the College is almost completed. For construction of Buildings the Government is being approached to sanction and release the fund, as the NABARD did not release the fund though sanctioned.</p>

<p>Adoption of revised Score Card for filling up of the post of Director of Education and other Officer posts at UASB as proposed by the Ministry of Agriculture, Government of Karnataka</p>	<p>The Academic Council was informed by the Chairman that the item was discussed in the Coordination Committee of the Farm Universities held on 5th July 2019 wherein it was agreed to consider relaxing the condition that the applicant should have a minimum period of two years' service on the date of submission of the application and to modify the minimum period of service as one year. The minimum period of service for eligibility has been reduced to one year.</p>
<p>Institution of Scholarship in the name of Late Dr. Sneha Malli Reddy and Late Smt. Parvathamma Narayana Reddy Memorial Scholarship for the highest OGPA securing girl students in B.Sc. (Hons.) Agricultural Marketing and Co-operation studied in Rural area for ten years from the College of Agriculture, UAS, GKVK, Bengaluru.</p>	<p>The action taken by the University in accepting and instituting the Scholarship in the name of "Late Dr. Sneha Malli Reddy and Late Smt. Parvathamma Narayana Reddy Memorial Scholarship" for the highest OGPA securing girl student in B.Sc. (Hons.) Agricultural Marketing and Cooperation studied in Rural area for ten years from the College of Agriculture, UAS, GKVK, Bengaluru, from the Academic year 2019-20 onwards as per the Guidelines given in the proposal was approved by the Academic Council.</p> <p>Regarding the award of Scholarship for the Second year and onwards, there is no clarity whether the same girl who has been awarded the Scholarship during the First year of the Degree programme is to be awarded the Scholarship irrespective of her CGPA during the I year of the Degree programme, or any other Girl students fulfilling the basic criteria and obtaining better CGPA during the I year can be considered for the award of Scholarship. In the circumstances, the Academic Council desired that opinion of the Donor in this regard may be obtained and implemented accordingly. The Donor has provided the required clarification vide letter dated 28-08-2019. The scholarship has to be advertised and awarded every year. The percentage / Grade point secured in previous academic year should be the basis for awarding scholarship.</p>
<p>Institution of Gold Medal in the name of "Smt. B. Nanjamma Narayanaswamy Gold Medal" for the highest OGPA securing students in B.Sc.(Hons.) Agriculture among all the campuses of UAS, Bangalore</p>	<p>The Academic Council ratified the action taken by the University in instituting a Gold Medal in the name of Smt. B. Nanjamma Narayanaswamy Gold Medal "for the highest OGPA securing student in B.Sc. (Hons.) Agriculture among all the campuses of UASB, by following the UAS Gold Medal norms, from the Academic year 2019-20, which shall be awarded from the 54th Convocation of the UASB and onwards.</p>
<p>Institution of Gold Medals in the name of Chamarajanagara Taluk Madapura Gramada Late Sri Kendavare Madappa and Smt. Puttabasamma Gold Medal for the highest OGPA securing students (one Boy and one Girl) in B.Sc.(Hons) Agri. from the College of Agriculture, Chamarajanagara.</p>	<p>The action taken in institution of Two Gold Medals in the name of Chamarajanagara Taluk Madapura Gramada Late Sri Kendavare Madappa and Smt. Puttabasamma Gold Medal for the highest OGPA securing students (one Boy and one Girl) in B.Sc.(Hons) from the College of Agriculture, Chamarajanagara, w.e.f. the Academic year 2021-22 and onwards, was ratified by the Academic Council.</p>
<p>Common fee structure & Seat Matrix for admission to Postgraduate Degree programmes and Two-year Diploma (Agri.) for the year 2018-19 and 2019-20</p>	<p>The Academic Council approved and ratified the Common fee structure and Seat Matrix for admission to Postgraduate Degree programme and Two years Diploma (Agri.) for the year 2018-19 and 2019-20.</p>

<p>Modification of Academic Regulations (partial) for Postgraduate Diploma in Agriculture (PGDA) course offered at UASB through distance mode</p>	<p>On the justification given in the proposal, the Academic Council approved the following modifications in the Academic Regulations for Postgraduate Diploma in Agriculture (PGA) course offered at UAS, Bangalore, through distance mode</p> <table border="1" data-bbox="722 268 1356 632"> <thead> <tr> <th data-bbox="722 268 917 342">Existing Regulations</th> <th data-bbox="917 268 1356 342">Modified Regulations as approved by the Academic Council</th> </tr> </thead> <tbody> <tr> <td data-bbox="722 342 917 632"> <p>Sec. 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period.</p> </td> <td data-bbox="917 342 1356 632"> <p>Section 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period. Candidates who are unable to complete their course within two years shall register afresh through re-admission by paying the prescribed fee of Rs. 12,000/- and appear for the failed / missed out examinations and complete their course.</p> </td> </tr> </tbody> </table> <p>The above modified Regulations shall be applicable to the candidates admitted for the One-year Postgraduate Diploma in Agriculture (PGDA) course from the first batch <i>i.e.</i>, w.e.f. 2014-15 onwards.</p>	Existing Regulations	Modified Regulations as approved by the Academic Council	<p>Sec. 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period.</p>	<p>Section 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period. Candidates who are unable to complete their course within two years shall register afresh through re-admission by paying the prescribed fee of Rs. 12,000/- and appear for the failed / missed out examinations and complete their course.</p>
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<p>Sec. 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period.</p>	<p>Section 9(d): The validity of admission is for two years. The registered candidates should complete their course within that period. Candidates who are unable to complete their course within two years shall register afresh through re-admission by paying the prescribed fee of Rs. 12,000/- and appear for the failed / missed out examinations and complete their course.</p>				
<p>Ratification of extending the eligibility of M.Sc.(Agri.) in Plant Biochemistry Degree holders to Ph.D. in Plant Biotechnology</p>	<p>The Academic Council approved the proposal extending the eligibility of M.Sc. (Agri.) in Plant Biochemistry Degree holders for admission to Ph.D. Programme in Plant Biotechnology, from the Academic year 2018-19 and ratified the action taken in this regard by the University.</p>				
<p>Starting of Master's Degree programme in Bioinformatics at the Department of Plant Biotechnology, CoA, GKVK</p>	<p>The Academic Council approved the proposal for starting of Master's Degree programme in Bioinformatics at the Department of Plant Biotechnology, College of Agriculture, GKVK, from the Academic year 2020-21. The Syllabus for the M.Sc. programme in Bioinformatics was also approved by the Academic Council.</p>				
<p>Ratification for starting of Ph.D. degree programme in Agribusiness Management</p>	<p>The Academic Council ratified the action taken in starting of Ph.D. Degree programme in Agribusiness Management at GKVK Campus, w.e.f. the Academic year 2019-20, with an intake of four students. The courses to be offered for Ph.D. Degree programme were also approved by the Academic Council.</p>				
<p>Reconsideration of time limit for completion of Postgraduate Degree programme for considering the award of Gold Medals during the Convocation</p>	<p>The Academic Council decided to restore the Provisions of Notification No. R/PS/AC/178 (Part-B- Item 25/2014-15 dated 14th January 2015, which provides: 1. The student shall complete all the formalities required for completion of the Degree programme on or before the last working day of December. The CGPA shall however, be calculated considering the performance in the courses, research and thesis.</p>				
<p>Reducing the fee for Thesis submission after regular time</p>	<p>On the justification as given in the proposal and on the recommendations of the 16th meeting of the Board of Studies (PGS), the Academic Council approved the proposal for reducing the existing fee (Rs.3555/-) to Rs.2000/- for Thesis submission after regular time, irrespective of the category of students.</p>				
<p>Guidelines to be followed w.r.t. the students name, parents name & Date of birth while preparing Marks card and related documents</p>	<p>The Academic Council approved the proposed Guidelines for entry of student's name, parent's name and date of birth to prepare the Academic Records in the University. Consider name of the students as given in the transcript of previous degree programme</p>				

	<ul style="list-style-type: none"> • Consider the parent's name and date of birth as given in the transcript of previous degree programme as first preference (if exists), otherwise consider the II PUC or equivalent as second preference (if exists), or else consider SSLC or equivalent as third preference for Master's Degree • Consider the parents name and date of birth as given in the transcript of Master's degree programme as first preference (if exists), otherwise consider the transcripts of Bachelor's degree programme as second preference (if exists) Or • Consider the II PUC or equivalent as third preference (if exists) Or • Consider the SSLC or equivalent as final preference for Doctoral Degree. • In case of foreign students, where parent name & date of birth are not mentioned in any transcripts, the information available in the Passport shall be considered. When the required pertinent information is not provided by the student, such information shall not be entered in the transcripts.
Increasing of PG seats intake at the College of Agriculture, GKVK from 2020-21 onwards	The Academic Council approved for increasing the intake for Postgraduate programmes in some of the Ph.D./PG programmes at the College of Agriculture, GKVK, from the Academic year 2020-21 onwards.
Issue of Postgraduate students Marks Card, PDC & Character Certificate with English & Kannada from the Academic year 2019-20	The Academic Council approved the proposal for issue of Marks Card, PDC & Character Certificate with English & Kannada (except for Foreign students) w.e.f. the Academic year 2019-20.
Considering the recognized PG teachers of other SAUs possessing MoU with UASB and Co-Chairman/Member and recognized PG teachers of other ICAR Institutes / R & D Industries possessing MoU with UASB for Chairman / Co-Chairman/ Members.	<p>The Academic Council decided that the existing Guidelines for designating the Scientist / Teachers from other recognized Institutions possessing MoU with the UAS, Bengaluru, as Co-Chairman of the Advisory Committee may be followed.</p> <p>In the event of extra ordinary circumstances of non-availability of adequate infrastructure facilities / technical expertise in the University viz. Nanotechnology, the Dean (PGS) on the recommendations of the concerned Head of the Department and with the approval of the Director of Education, will decide on designating the Scientist/Teachers from other Institutions, as Chairman of the Advisory Committee. This provision is applicable only for Ph.D. students.</p> <p>Further, the Expert member desired that if a particular Institute is recognized as per the above provision, then the Thesis of such students shall not be sent to the same Institute for Evaluation.</p>
Guidelines for changing the Major Advisors	The Academic Council was of the opinion that the existing Guidelines in this regard shall be continued. However, under special circumstances, the Dean (PGS) is authorized to take appropriate decision.
Framing of Guidelines for discontinuation of Degree programme by Postgraduate students	As per the provisions of PG Regulation No. 6 the candidates admitted to Postgraduate programmes are required to complete the degree programmes to which they are admitted, within the stipulated period, failing which their admissions will be cancelled. However, there is no specific Regulations for allowing the students to cancel their admission before the stipulated period, on

	<p>various reasons such as getting appointment, on medical grounds or on other reasons. Hence, the following Guidelines as approved by the Board of Studies (PGS) in its 16th meeting held on July 29, 2019 were approved by the Academic Council.</p> <p>The Dean of Postgraduate Studies shall obtain necessary documentary evidences from the requested students (<i>viz.</i>, copies of appointment Order, selection list, medical certificates etc.) along with their representation for discontinuation and No Due Certificate (from the respective College / Department / Hostel / Library etc.) The same will be forwarded to the Registrar, UAS(B). After obtaining the approval by the Vice-Chancellor, the Registrar, UAS(B) shall issue the Notification for discontinuation by quoting Regulation 6.1 or 6.2 of the degree programme.</p>
<p>Induction of student READY (Rural Entrepreneurship Awareness Development Yojana) programme for different degree programmes in the University B.Sc. (Hons.) Agriculture B.Sc. (Hons.) Ag. Maco. B.Sc. (Hons.) Sericulture B.Tech. (Agri. Engineering) B.Tech.(Food Technology) B.Tech.(Biotechnology)</p>	<p>The Academic Council approved the details of programmes included in the Rural Entrepreneurship Awareness Development Yojana (READY) programme for the UG students as per the recommendations of the V Deans Committee. The modified programme is applicable from the Academic year 2019-20 for the students admitted to various UG programmes in the UASB during the Academic year 2016-17 and onwards.</p>
<p>Change of Course number and title from FPO 311 Student READY – Industrial Tour(0+1) to SRF 311 Educational Tour (0+1) for B.Tech.(Food Technology) programme at the College of Agriculture, Hassan</p>	<p>The Academic Council approved the proposal to change the course number from FPO 311 Student READY – Industrial Tour (0+1) to SRF 311 Educational Tour (0+1) for B.Tech. (Food Technology) Programme w.e.f. the Academic year 2019-20.</p>
<p>Inclusion of new Hands-On Training (HOT) modules for B.Sc.(Hons.) Agriculture at College of Agriculture, Hassan</p>	<p>The Academic Council approved the proposal for inclusion of new Hands-On Training (HOT) modules for B.Sc.(Hons.) Agriculture at the College of Agriculture, Hassan. Further, the Academic Council desired that uniformity should be maintained for new Hands-on Training Modules for B.Sc. (Hons.) Agriculture, across all Teaching campuses of UASB</p>
<p>Modification of course content of HoT Module EFS 421 “Food Processing” (0+10) for B.Sc. (Hons.) Agriculture at College of Agriculture, Hassan</p>	<p>The Academic Council approved the proposal for modification of Course contents of HoT Module EFS 421 Food Processing (0+10) for B.Sc. (Hons.) Agriculture at the College of Agriculture, Hassan</p>
<p>Revision of the course content of “Instrumental Techniques in Food Analysis” (FSQ 311 2+1) at the College of Agriculture, Hassan.</p>	<p>The proposal for revision of the course contents of FSQ 311 (2+1) Instrumental Techniques in Food Analysis were approved by the Academic Council, applicable for the students admitted during the Academic year 2018-19 onwards.</p>
<p>Proposal for extending Diploma in Sericulture from one year to two years duration at College of Sericulture, Chintamani</p>	<p>While agreeing to the proposal for modifying the existing Diploma in Sericulture with the duration of One year to a Diploma programme with a duration of Two years, the Dean (Seri.) was informed to send the detailed proposal in consultation with senior faculty members of Sericulture, along with detailed course contents, syllabus, financial implications and total Credit hour requirements on similar lines of the Two years Diploma (Agri.)</p>

	presently being offered at Mandya Campus. Accordingly, the Dean (Seri.) has provided the detailed proposal along with budgetary requirements as suggested by the Academic Council.
Issue of Under-Graduate student's marks card, PDC & Character Certificate in both English and Kannada from the Academic year 2019-20	The Academic Council approved the proposal for issue of Undergraduate students Marks card, Provisional Degree Certificate and Character Certificate in both English and Kannada from the Academic year 2019-20.
2020-21:191st ACM; Date:18-01-2021	
Proposal for introduction of Direct Cashless Remittance of students' fees pertaining to academics and hostels as well as drafting modalities	The Dean (PGS) stated that procurement of the required software for automation of the PG programme is in process and the matter will be pursued. Work order has been issued to the selected firm for development of software on or before 05-03-2021
Recommendation and Confirmation of Ph.D. / Master's and MBA Degrees during the 54 th Convocation of UASB, to those who have completed their Degree programme successfully.	The Academic Council approved the list of eligible Ph.D. / Master's and MBA candidates for conferment of the Degrees at the 54 th Convocation of UASB
Recommendation and Confirmation of Bachelor of Science and Bachelor of Technology Degree during the 54 th Convocation of the UASB to those who have completed their Degree programme successfully	The Academic Council approved the list of eligible candidates under Bachelor of Science and Bachelor of Technology Degree for the conferment of the respective Degree at the 54 th Convocation of the UASB.
Recommendation and Confirmation of the list of eligible candidates to be awarded Gold Medals during the 54 th Convocation of the UASB	The Academic Council approved the list of eligible candidates for the award of various Gold Medals during the 54 th Convocation of the University.
Recommendation and Confirmation of the list of eligible candidates for the award of Diploma in Agriculture (Two years) during the Academic year 2018-19	The Academic Council approved the list of 43 eligible candidates for the award of Diploma (Agriculture) offered by the UASB and ratified the action taken by the University in awarding the Diploma certificates to the eligible candidates in a separate ceremony held at VC Farm, Mandya on 21 st November 2019.
Permission to Technical Assistants (T3, T4 etc.) to offer Undergraduate courses independently in UAS, Bangalore.	The Academic Council ratified the action taken by the University for permitting the Technical Assistants (T3, T4 etc.) working in the UASB to offer Undergraduate courses independently at the College of Agriculture, Chamarajanagar and also ratified the action taken by the University in permitting the Technical Assistants(T3,T4 etc.) at UASB to offer UG Courses independently at all teaching Campuses of UASB
Introducing One Year Certificate Course in Apiculture through Distance Education Mode	The Academic Council ratified the action taken by the Directorate of Extension in introducing a Certificate course in Apiculture with a duration of one year through Distance Education mode. The Course contents, Guidelines / Prospectus pertaining to the one-year Certificate course in Apiculture, were also approved by the Academic Council.
Proposal for Dual Ph.D. and M.Res. programme with Western Sydney University, Australia	The Academic Council approved the proposal for Dual Ph.D. and M.Res. programme with Western Sydney University, Australia. However, other details / guidelines for regarding identification of the Departments

	/ selection of candidates / transfer of credits / evaluation procedure and other details have to be worked out. In this regard, a Committee under the Chairmanship of the Dean (PGS) and the Heads of the Departments concerned may work out the modalities and detailed procedure for consideration and approval of the University.																		
Ratification for approval for signing MoU / MoA	The Academic Council approved and ratified the action taken by the University in approving seventeen MoAs and seven MoUs signed by the UASB during the period from February 2019 to May 2020																		
Framing Regulations regarding the discontinuation of students of PG degree programme as not eligible to apply for University Resident Merit (URM) Scholarships	The Academic Council approved the proposal for modifying the Regulations (21.1.2) to include the Clause 'Students who discontinue the PG programme are not eligible for URMS'.																		
Revision of amount of University Resident Merit (URM) Scholarships for Postgraduate students	The Academic Council decided to recommend for enhancement of URM Scholarships to Rs.3000/- per month for the students of Master's Degree programme and to Rs.4000/- per month for the students of Doctoral Degree programmes. However, the enhanced rate is applicable from the Academic year 2020-21, for the PG students on roll during the Academic year 2020-21 and onwards.																		
Modifying the Certificate for prevention of Plagiarism to be produced by PG students while submitting the thesis	The Academic Council approved the proposal permissible limits of plagiarism for Postgraduate Thesis at UAS, Bangalore, as indicated below, and to modify the format of the CERTIFICATE accordingly, applicable from the Academic year 2020-21 onwards. <table border="1" data-bbox="727 997 1351 1192"> <thead> <tr> <th rowspan="2">Sl. No.</th> <th rowspan="2">Chapter/s</th> <th colspan="2">Maximum plagiarism allowed (%)</th> </tr> <tr> <th>Ph.D.</th> <th>M.Sc.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Introduction</td> <td>10.00</td> <td>10.00</td> </tr> <tr> <td>2</td> <td>Results & Discussion</td> <td>10.00</td> <td>15.00</td> </tr> <tr> <td>3</td> <td>Summary / Abstract</td> <td>10.00</td> <td>10.00</td> </tr> </tbody> </table>	Sl. No.	Chapter/s	Maximum plagiarism allowed (%)		Ph.D.	M.Sc.	1	Introduction	10.00	10.00	2	Results & Discussion	10.00	15.00	3	Summary / Abstract	10.00	10.00
Sl. No.	Chapter/s			Maximum plagiarism allowed (%)															
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1	Introduction	10.00	10.00																
2	Results & Discussion	10.00	15.00																
3	Summary / Abstract	10.00	10.00																
Creation of Departmental Academic Integrity Panel at UAS(B) for Plagiarism check	The Academic Council approved the proposal for creation of Departmental Academic Integrity Panel (DAIP) at the UASB for plagiarism check.																		
Creation of Institutional Academic Integrity Panel (IAIP) at UAS(B) for Plagiarism check.	The Academic Council approved the Guidelines for creation of The Institutional Academic Integrity Panel (IAIP) of the UAS, Bangalore.																		
Considering AST 501 (1+1) Statistical Methods for Applied Sciences as a compulsory course for all Master's degree programmes	The Academic Council approved the proposal to make the PG Course [AST 501, Statistical Methods for Applied Sciences (1+1)] as a compulsory course for all Master's Degree programmes in UAS, Bangalore.																		
Restricting the recognized PG teacher in numbers for serving as the Member/s in the Advisory Committees in an academic year.	The Academic Council approved the proposal for restricting the maximum number of Advisory Committees (six) on which the recognized PG Teacher can serve as a member in any Academic year. The number of Committees to be restricted to 12 in case of PG Teacher in Agricultural Statistics. The modified Regulations is w.e.f. the Academic year 2020-21 and onwards.																		
Approval of the Guidelines and the Proforma for the Best Teacher Award sponsored by the ICAR	The Academic Council approved the same and recommended for taking further action in this matter.																		
Enhancement of value of UAS Merit and General Scholarship to	The Academic Council approved the proposal for enhancement of the value of UAS Merit and General																		

Bachelor Degree students at UAS, Bangalore from the Academic year 2020-21 and onwards

Scholarship to Bachelor Degree students at UASB from the Academic year 2020-21 and onwards, as indicated below:

Sl. No	Degree programme	Existing Scholarship Amount per month (Rs.)	Proposed Scholarship Amount per month (Rs.)
UAS Merit Scholarship			
1	UG Degree programmes	1000/-	1500/-
General Scholarship			
2	UG Degree programme	500/-	1,000/-

Change in nomenclature of B.Sc. (Hons.) Ag.Maco. UG degree programme to B.Sc. (Hons) Agribusiness Management and approval of Course Curriculum in the Department of Agricultural Marketing, Cooperation and Business Management, GKVK, under common nomenclature as approved and recommended by ICAR, New Delhi.

The Academic Council approved the following proposal To modify the existing nomenclature of the UG Degree programme offered by the Department of Agricultural Marketing, Cooperation and Business Management, UAS, GKVK, [B.Sc. (Hons.) Ag.Maco] as B.Sc.(Hons.) Agribusiness Management applicable for the students to be admitted to the UG degree programme from the Academic year 2020-21 onwards
To adopt the modified syllabus for B.Sc. (Hons) Agribusiness Management with effect from the Academic year 2020-21 for the students to be admitted to the UG degree programme from the Academic year 2020-21 onwards.

Scheme of evaluation for practical work of EL / HoT courses from the academic year 2020-21 onwards

The Academic Council approved the proposal for modifying the Scheme of evaluation for practical work of EL / HoT courses as indicated below:

Modified Scheme of Evaluation of EL / HoT Programme

Sl. No.	Particulars	Max. Marks
1	Project Planning and writing	10
2	Technical, Entrepreneurship and Business skills development and Work Record	25
3	Monthly assessment	10
4	Output delivery, Project Report & presentation	25
5	Final written examination	25
6	Attendance	05
	Total	100

The modified scheme of evaluation is applicable to the students admitted to UG degree programmes in Agriculture / Agri. Marketing & Cooperation / Sericulture, during the Academic year 2016-17 and onwards (who are in the Final year of their Degree programme during the Academic year 2019-20).

Conducting of *viva-voce* examinations through on-line mode

Considering the present difficult situation due to the COVID-19 pandemic and the consequent lockdown, the Academic Council approved the proposal for conducting the final *viva-voce* examination and qualifying *viva-voce* examination for PG students only during the II Semester 2019-20, through online mode with the following conditions.
The Head of the Department shall supervise the entire activity

	<p>The Head of the Department shall certify the advisory / nominated members for their presence in the Online viva-voce examination in Form-3 / Form-6</p> <p>The marks of qualifying / final <i>viva –voce</i> examination shall be entered by the Head of the Department in consultation with Major Advisor, Members of the Advisory Committee and the Nominated member after the completion of viva-voce</p> <p>As per the ICAR advisory the online <i>viva-voce</i> to be recorded for future reference</p> <p>The other points pertaining to <i>viva-voce</i> examinations enlisted in Postgraduate Academic Information and Regulations 2017-18 shall prevail.</p>
<p>Filling up the various vacant seats for Postgraduate degree programmes through open counselling under ICAR & CAT admissions at UAS, Bangalore for the academic year 2019-20</p>	<p>The Academic Council ratified the action by the University in filling up the various vacant seats for Postgraduate degree programmes through open counselling under ICAR & CAT admissions at UAS, Bangalore, for the academic year 2019-20.</p>
<p>Extension of Notification No. R/AR/AC-189 / Part-B / Item 12 / 2019-20 dated 25-10-2019 pertaining to modification in final thesis submission and related to Form 6.</p>	<p>The Academic Council in its 189th meeting held on August 8, 2019, approved the modification of Regulations pertaining to final thesis submission and related to Form 6 as follows:</p> <p>“At the time of submission of the thesis, the Ph.D. student must possess the acceptance certificate of one research paper for publication in <i>The Mysore Journal of Agricultural Sciences</i> and an additional Research Paper submitted to any other journal which has NAAS rate of 4 and above or with an impact factor of 0.5 and above. Further, the titles of the paper and acceptance letter are to be indicated in Form 6.”</p> <p style="text-align: center;">OR</p> <p>“At the time of submission of thesis, Ph.D. students must possess the acceptance certificate of two research papers from journals which possess NAAS rate of 4.0 and above or with an impact factor of 0.5 and above. Also, the candidate has to orally present one of the papers in the PG Science Week and provide the abstract to the Directorate of Post Graduate Studies. Further, the titles of the paper and acceptance letter are to be indicated in Form 6.”</p> <p>The Academic Council approved the proposal for extending the modified Regulations as indicated above, for one more academic year i.e., till the end of academic year 2019-20.</p>
<p>Reintroduction of National Cadet Corps (NCC) course for all the degree programmes in UAS, Bangalore</p>	<p>The Academic Council approved the proposal for reintroduction of National Cadet Corps (NCC) at UASB. To start with, NCC programme may be started for the UG students to be admitted at GKVK campus. The programme may be extended to other campuses subsequently when the facilities are created. The Dean of Student Welfare was informed to work out the modalities for implementation of the programme at GKVK Campus w.e.f. the Academic year 2020-21.</p>

Annexure – 4 : Details of Library Committee Meeting Conducted from 16-17 to 20-21

Sl. No.	Year	Campus	Date of Library Committee Meetings	Action Taken
1.	2016-17	University Library, GKVK	08.07.2016	<ul style="list-style-type: none"> • Renewal of Indiastate.com database 2016 • Review the list of Books suggested by the officers • Ratification of books purchased • Renewal of Foreign Journals (2016-17)
			05.11.2016	<ul style="list-style-type: none"> • Reviewed the New Indents: List of Books recommended by the HoDs and Faculty. • Reviewed the list of e-Books recommended by the HoDs and Faculty. • Renewal of Foreign Journals
		College Library, Hassan	14.03.2016	• Recommendation of books for purchase
			04.09.2016	• Recommendation of books for purchase
			22.01.2017	• Recommendation of books for purchase
		College Library, Chintamani	19.05.2016	<ul style="list-style-type: none"> • Book list of different subjects in agriculture has been sent to the welfare department upon the request for the supply of books under OBC grants. • Request for the KOHA software, UPS facility and e-resources and strengthening human resources for the library.
			06.09.2016	• Request to the welfare department, upon the request for the supply of books under OBC grants.
			24.11.2016	• Request to strengthen human resources in the library has been met with requirement of two more staff on contractual basis.
			13.02.2017	<ul style="list-style-type: none"> • Procurement of the books under ICAR grants • Purchase of library software (KOHA software), computers hardware's and furniture's sanctioned under 2nd instalment of ICAR grants. • Replacement of Resonance journal with agriculture and allied journals.
2.	2017-18	University Library, GKVK	17.01.2017	<ul style="list-style-type: none"> • New Indents: List of Books recommended by HoDs and University Officers. • Renewal of CAB-CD ROM database 2017 • Renewal of Indian Journals • Procurement of e-Books
			16.08.2017	• New Indents: List of Books recommended by HoDs and University Officers.

				<ul style="list-style-type: none"> • Review of list of Kannada books recommended by faculty.
			23.11.2017	<ul style="list-style-type: none"> • Renewal of Journals 2018 • Renewal of e-Journals • Renewal of print and e-Journals according to user requirements • Renewal of CAB-CD Rom Database 2018. • Subscribe the new International Journals. • Discussed about the lack of staff • ICAR Funds.
		College Library, Hassan	19.10.2017	<ul style="list-style-type: none"> • Recommendation of books for purchase
			20.02.2018	<ul style="list-style-type: none"> • Recommendation of books for purchase
		College Library, Chintamani	16.09.2017	<ul style="list-style-type: none"> • Utilisation of state grants for renewal of journals, magazines and books. • Updated books list in the library sent through e-mails to all teachers.
3.	2018-19	University Library, GKVK	17.02.2018	<ul style="list-style-type: none"> • Review of purchased books • Discussed about purchase of books costing more than Rs. 10,000/- • Discussion about Purchase of books under ICAR Grants. • Regarding the purchase of General knowledge, novels, story books, etc. • Purchase of Indian journals which are not available in CeRA. • Discussed about the Lack of staff • Fitting glass-sensor door in the main entrance of the Library. • Discussion about the Koha upgradation
			06.09.2018	<ul style="list-style-type: none"> • Review the list of Books suggested by the officers • Discussed to approval of the Journal of Extension Education for life time membership • Ratification of e-Books • Discussed about the contract employees to work on Saturday, Sunday and in second shift duty. • Discussed about the painting of the library
		College Library, Hassan	05.08.2018	<ul style="list-style-type: none"> • Recommendation of books for purchase
			04.02.2019	<ul style="list-style-type: none"> • Recommendation of books for purchase
		College Library, Chintamani	25.06.2018	<ul style="list-style-type: none"> • Utilisation of ICAR grants for procuring e-journals and e-books. • Suggestion of ICAR logo in barcode stickers to label the text books for the year 2018-2019.
			25.08.2018	<ul style="list-style-type: none"> • Approved tender notification for up gradation of KOHA software.
4	2019-20		12.01.2019	<ul style="list-style-type: none"> • Reviewed of the last LSC (06.09.2018)

		University Library, GKVK		<ul style="list-style-type: none"> Reviewed the list of Books suggested by the officers Reviewed the list of Books suggested by the Students Reviewed the list of books required by the students. Renewal of the standing order. Renewal of CAB-CD ROM database 2019 Renewal of National and International Journals Subscribe of New National and International Journals Regarding visiting librarian of constituent college Inviting all assistant librarians to LS meeting. Discuss about Library timings (24/7)
			18.01.2019	<ul style="list-style-type: none"> Reviewed the indent list of Indian and foreign Journals. New Indents: List of Books recommended by HoDs and University Officers. Renewal of CAB-CD ROM database Renewal of Advances Series
			06.09.2019	<ul style="list-style-type: none"> Strengthening of library Extension of library timings Library staff manual (Preparation of job chart) Journal binding Library tour for newly admitted UG students Preparation of policies
		College Library, Hassan	04.05.2019	<ul style="list-style-type: none"> Committee decided to dispose-off all the News Papers and Magazines received by the Library till 31.03.2018
			22.11.2019	<ul style="list-style-type: none"> Submitted ATR to University pertaining to Library Staff Manual (Job Chart), Library Timings, Establishment of KOHA LMS, establishment of New Arrivals Section, JRF Studies Section, Competitive Studies Section, Personality Development Books Section and Establishing of 10KW Roof Top Solar Power Unit
		College Library, Chintamani	21.01.2020	<ul style="list-style-type: none"> CCTV up gradation in the library. Orientation to students about library facilities by the teachers.
5.	2020-21	University Library, GKVK	31.01.2020	<ul style="list-style-type: none"> Reviewed of the last LSC (06.09.2019) Reviewed the list of Books suggested by the officers Reviewed the list of Books suggested by the Students

			<ul style="list-style-type: none"> Reviewed the list of books required by the students. Renewal of the standing order Renewal of CAB-CD ROM database 2019 Renewal of National and International Journals Subscribe of New National and International Journals
		19.02.2020	<ul style="list-style-type: none"> Reviewed of the last LSC (31.01.2020) Reviewed the list of Books suggested by the officers Reviewed the list of Books suggested by the Students Reviewed the list of books required by the students. Renewal of the standing order Renewal of CAB-CD ROM database 2020
		24.02.2020	<ul style="list-style-type: none"> Reviewed of the last LSC (19.02.2020) Reviewed the list of Books suggested by the officers Reviewed the list of Books suggested by the Students Reviewed the list of books required by the students. Renewal of the standing order Submission of Stock Verification report Renewal of National and International Journals Subscribe of New National and International Journals Discussed about purchase of materials for digitization
		02.09.2020	<ul style="list-style-type: none"> Review of the last LSC (24.02.2020) Purchase of Skill Development Centre Books Purchase of ICAR grants books Subscribe of New National and International Journals Purchase of books under State grants Discussed about library staff dress code/ ID card
	College Library, Mandya	22.05.2020	<ul style="list-style-type: none"> Purchase of Books for Library
		08.10.2020	<ul style="list-style-type: none"> Purchase of Books for Library
		18.02.2021	<ul style="list-style-type: none"> To open Library till 10.00 pm during week days
	College Library, Hassan	04.05.2020	<ul style="list-style-type: none"> Recommendation of books for purchase
		03.06.2020	<ul style="list-style-type: none"> Over Due Fines waived off to staff from 24.03.2020 to 04.05.2020 and to students from 24.03.2020 till semester commencement due to Covid-19 Lockdown

			02.01.2021	<ul style="list-style-type: none"> • Recommendation of books for purchase
			05.01.2021	<ul style="list-style-type: none"> • Recommendation of books for purchase
			12.01.2021	<ul style="list-style-type: none"> • Recommendation of books for purchase
		College Library, Chintamani	-	<ul style="list-style-type: none"> • Due to COVID-19 pandemic no meetings were conducted

Annexure – 5 : Details of Research Council Meetings Held during the Report Period

Sl. No.	Action Points	Action Taken																		
2016-17, 56th Research Council Meeting dt.15.06.2016																				
1	About 50 plants of new tamarind variety GKVK-17 may be evaluated in other research stations for regional suitability.	<ul style="list-style-type: none"> About 150 GKVK-17 grafted tamarind saplings were supplied and planted at Agriculture Research Station, Tiptur (100) and Agriculture Research Station Balajigapade (50) for further evaluations and demonstration. 23,143 grafted saplings were produced during 2016-17 to 2020-21 at ARS, Chintamani and sold to the farmers for commercial cultivation. 																		
2	Review the activities of the following Professional Chairs such as IFFCO Chair at Department of Extension, Marketing Board Chair at Agriculture Marketing and Co-operation Department and Biofuel Chair	<ul style="list-style-type: none"> A committee constituted under the Chairmanship of Director of Education, UAS, Bangalore has reviewed the various Professional Chairs functioning in the University and following are the activities. <p><u>IFFCO Chair:</u></p> <ul style="list-style-type: none"> Under IFFCO Chair, 20 research projects have been completed since its inception (1981) and two are under progress. <u>Marketing Board:</u> Conducted 59 training programmes for the benefit of 3350 farmers as detailed below. <table border="1" style="margin-left: 40px; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #e6e6fa;"> <th>Year</th> <th>Trainings</th> <th>Trainees</th> </tr> </thead> <tbody> <tr><td>2016-17</td><td>12</td><td>500</td></tr> <tr><td>2017-18</td><td>13</td><td>500</td></tr> <tr><td>2018-19</td><td>10</td><td>550</td></tr> <tr><td>2019-20</td><td>11</td><td>600</td></tr> <tr><td>2020-21</td><td>13</td><td>1200</td></tr> </tbody> </table> <p><u>Biofuel Chair:</u></p> <p>The research studies on bio-fuel development in Karnataka are being undertaken since 2007. The yield and suitability of tree born oil to produce bio-diesel has been identified over the period and the consortia of plant/tree species are developed for growing across the plains, hills and costal area of Karnataka. Further, four M. Sc. (Agri.) and one Ph. D. student completed their research on bio fuel during the period 2015 - 2020.</p>	Year	Trainings	Trainees	2016-17	12	500	2017-18	13	500	2018-19	10	550	2019-20	11	600	2020-21	13	1200
Year	Trainings	Trainees																		
2016-17	12	500																		
2017-18	13	500																		
2018-19	10	550																		
2019-20	11	600																		
2020-21	13	1200																		
3	Develop protocol for University of Agricultural Sciences, Bangalore following the ICAR & TNAU model with regard to establishment of IPR management cell (IPRMC) in UAS, Bengaluru.	<ul style="list-style-type: none"> Based on the suggestion of research council, IPR Cell was established in the University of Agricultural Sciences, Bangalore vide order No. AO/ Gen-II / IPAC and IPMC / 353 / 2016-17 dtd.2-5-2016. Proposal for 21 varieties were sent and of which 18 varieties were registered under PPV & FRA and the details are furnished below. <table border="1" style="margin-left: 40px; border-collapse: collapse; text-align: center;"> <tbody> <tr><td>Rice</td><td>BR 2655, Hemavathy, (DWR4107), MAS 946-1 & MAS 26</td></tr> <tr><td>Finger millet</td><td>GPU 48, GPU 67, ML 365 & MR 6</td></tr> <tr><td>Maize</td><td>NAC 6004, NAC 6002 & NAH 2049</td></tr> <tr><td>Pigeon pea</td><td>BRG 1, BRG-3 & BRG-5</td></tr> <tr><td>Sunflower</td><td>KBSH41, KBSH42, KBSH 44 & KBSH 53</td></tr> </tbody> </table>	Rice	BR 2655, Hemavathy, (DWR4107), MAS 946-1 & MAS 26	Finger millet	GPU 48, GPU 67, ML 365 & MR 6	Maize	NAC 6004, NAC 6002 & NAH 2049	Pigeon pea	BRG 1, BRG-3 & BRG-5	Sunflower	KBSH41, KBSH42, KBSH 44 & KBSH 53								
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4	Develop new proposals for Centre of Excellence for ICAR Funding.	<ul style="list-style-type: none"> • University is already having three Centres of Excellence Viz., Centre of Excellence for Nutri-Cereals (Small Millets), Niche Area of Excellence for integrated drought research genetic enhancement of crops by molecular approaches and phenotyping and Niche area of excellence for capacity building in Taxonomy of Insects and Mite. • The four new proposals submitted by UAS, Bangalore on (i) Water Resource Management in the Context of Climate Change, (ii) Centre of Excellence of Bioenergy, (iii) Centre of Excellence for Dryland Agriculture and (iv) Centre of Excellence for Millets to ICAR were not considered for review under NAE component since, UAS Bangalore has already been supported with two programmes entitled “Capacity building in Taxonomy of Insects and Mites” and “Integrated Centre for Drought Research, Genetic Enhancement of Crops by Molecular Approaches and Phenotyping” (ICAR-Letter No. F. No. 10(6) 2016-EP&HS dtd. 29-4-2016 of ADG (Education Planning & Home Science, ICAR)
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2017-18, 57th Research Council Meeting dt. 27.06.2017

1	To develop package of practices for organic farming in different crops	<ul style="list-style-type: none"> • Organic crop production practices developed for rice, ragi, maize, red gram, field bean, cowpea, groundnut, onion and chilli were recommended for inclusion in Package of practise during ZREP 2017-18. • A compendium on organic farming research at UAS, Bangalore was developed during 2020-21. • A chapter for organic farming will be included in the revised supplementary copy of Package of practice (Pooraka Kaipidi).
2	Arranging Demonstration of new crop varieties in RSKs by RAWEP students	Under student READY programme the new crop varieties and technologies developed at UAS, Bangalore are being demonstrated and also field days are being organised at RSKs
3	Establishment of Incubation Centre in the University	<ul style="list-style-type: none"> • Agri. Innovation Centre was started in Aug, 2016 to nurture and Strengthen Agriculture innovation and entrepreneurship and to incubate start-ups and capitalize on the knowledge base existing at UAS, Bangalore. • Till date, 17 Incubates were provided with space, physical and technical assistance for their Agri-start-ups • The University started a collaborative incubation program with C-CAMP on 10th December 2017 to nurture the incubation in the areas of Molecular Biology in agriculture. Under this collaboration C-CAMP submitted and obtained the projects for Agri. Incubation (K-TECH TBI) from the Government of Karnataka on 24th January 2018. • Till date 3 incubates have completed the project and 5 incubates project work is under progress. • Further, a separate incubation centre for rural women and youths is established at KVK, Bengaluru Rural and they conducted 7 skill trainings which benefited 1141 farmers/ farm women.

4	Breeders who have developed new crop varieties should arrange for sufficient seeds for popularization through field demonstration	<ul style="list-style-type: none"> Annually breeder seed & quality seeds are produced as per the DAC, State seed roll plan indent and the action plan would be drawn in consultation with all crop breeders. The newly released elite varieties and hybrids are popularized by showcasing them in annual Krishi Melas, field days, frontline demonstrations, mini-kit seed distributions Awareness is created by educating farmers through TV and radio programs and by distributing extension bulletins, brochures / leaflet in Kannada & English
5	Monitoring of the Farm Trials	<ul style="list-style-type: none"> Monitoring is made mandatory for farm trials at two stages of crop growth. Annually, monitoring team will be drafted by including senior Professors of the university as members and is headed by the Associate Director of Research of each zone. Farm trials are conducted by sending inputs and guidelines to the implementing officer well in advance by the proposing scientist. After successful conduct of experiments, monitoring team visits and records the remarks of monitoring, further, based on the proceedings of the monitoring team report ADEs discuss the implementation of farm trials during bimonthly meeting and get the feedback from the state Department Officers. Efforts are underway to digitize monitoring of farm trials/MLT's through mobile App.

2018-19, 58th Research Council Meeting dt. 29.06.2018

1	Impact analysis of the released technologies of UAS Bangalore	<ul style="list-style-type: none"> The project on “Impact of technologies/ varieties released by UASB” is funded by university with total outlay of Rs. 18 lakhs. Under the university jurisdiction, the impact assessment of major crops and the leading varieties for the crops rice, sugarcane, finger millet, maize, sunflower, red gram, and groundnut were undertaken. The impact analysis indicated that, the total economic benefit realized by the farming community through cultivation of important varieties of aforesaid crops was Rs. 800 crores during 2018. The cumulative gain comes to more than Rs. 4500 crores over the years since the release of the varieties. The area coverage over the new varieties are detailed below. <table border="1" data-bbox="654 1430 1360 1808"> <thead> <tr> <th>Crop</th> <th>Variety</th> <th>% area covered</th> </tr> </thead> <tbody> <tr> <td>Sugarcane</td> <td>VCF 0517</td> <td>80</td> </tr> <tr> <td>Rice</td> <td>Tanu, MTU 1001, BR 2655, Jaya, KRH 4</td> <td>51</td> </tr> <tr> <td>Finger millet</td> <td>GPU 28, MR 6, INDAF 7 and 9</td> <td>> 95</td> </tr> <tr> <td>Maize</td> <td>MAH -14-5, Hema (NAH 1137)</td> <td>9.5</td> </tr> <tr> <td>Redgram</td> <td>BRG 2, 4 and 5</td> <td>86</td> </tr> <tr> <td>Groundnut</td> <td>K- 6, KCG – 6, ICGV -91114</td> <td>70</td> </tr> <tr> <td>Sunflower</td> <td>KBSH 41, 42, 53</td> <td>74</td> </tr> </tbody> </table> <p>Note: Project is under progress</p>	Crop	Variety	% area covered	Sugarcane	VCF 0517	80	Rice	Tanu, MTU 1001, BR 2655, Jaya, KRH 4	51	Finger millet	GPU 28, MR 6, INDAF 7 and 9	> 95	Maize	MAH -14-5, Hema (NAH 1137)	9.5	Redgram	BRG 2, 4 and 5	86	Groundnut	K- 6, KCG – 6, ICGV -91114	70	Sunflower	KBSH 41, 42, 53	74
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2 Progress of flagship program of the University of Agricultural Sciences, Bangalore to be included

1) Niche area of excellence for capacity building in Taxonomy of Insects and Mites.

- Taxonomic manuals of Insects and mites with pictorial keys are prepared
- Following trainings were organized

Year	Faculty (#)	Students (#)
2012-13	38	9
2013-14	46	19
2014-15	36	21
2015-16	11	76
2016-17	67	89

2) Centre of Excellence on Small Millets (CoESM).

Year	Trainings (#)	Trainees (#)
2016-17	5	150
2017-18	17	534
2018-19	4	149
2019-20	8	235
2020-21	2	80

- 21.9 tonnes of millets were processed during the period 2016-17 to 2020-21
- Sale counter at the campus was opened during February-2018 in collaboration with Davanagere and Chitradurga District Regional Co-op. Organic Farmer Federation and they have sold nearly 50 tonnes of millet rice till date and the profit has gone directly to them
- 5 Companies have signed MoAs to have its employees as Incubates
- Technologies developed: More than 50 products have been developed by the centre

3) Niche area of excellence - Integrated Centre for Drought Research: Genetic enhancement of crops by molecular approaches and phenotyping

- Trait introgressed rice variety KMP175 sustains productivity (22.43%) and saves water under semi-irrigated aerobic conditions. This variety was released & was notified [SO. 1379 (E) dtd 27.03.2018]
- QTLs for drought adaptive traits were introgressed into paddy cultivar IR-64 by MABAC: promising DC-BC3F5 line was identified with 98% background gene recovery and 32% yield advantage under aerobic condition
- Groundnut transgenic events expressing Alfin: PDH45:HSF4A- 6 lines are found promising. These could increase yield by 21-27%
- Double haploid technology has been standardized using rice hybrid KRH-4 anthers
- 5 training modules have been developed:
 1. Drought adaptive traits,
 2. Drought stress response,
 3. Trait donor lines for adaptive traits
 4. QTL discovery and introgression by MAS
 5. Drought mitigation options and approaches

3	UAS projects to be sanctioned taking the Vision 2030 document into consideration	<ul style="list-style-type: none"> University funded projects are being sanctioned as per the strategies enlisted in the Vision 2030 document. Projects under different theme areas comprising Varietal Technological Developmental Projects (VTDP), Climate Smart Agriculture Projects (CSAP) and Farmers Centric Demand Driven Projects (FCDD) are sanctioned as detailed below <table border="1" data-bbox="755 336 1307 493"> <thead> <tr> <th>Year</th> <th>VTDP</th> <th>CSAP</th> <th>FCDD</th> </tr> </thead> <tbody> <tr> <td>2017-18</td> <td>23</td> <td>2</td> <td>-</td> </tr> <tr> <td>2018-19</td> <td>20</td> <td>4</td> <td>5</td> </tr> <tr> <td>2019-20</td> <td>11</td> <td>4</td> <td>5</td> </tr> <tr> <td>2020-21</td> <td>16</td> <td>7</td> <td>7</td> </tr> </tbody> </table>	Year	VTDP	CSAP	FCDD	2017-18	23	2	-	2018-19	20	4	5	2019-20	11	4	5	2020-21	16	7	7
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4	Intensify the research on organic farming	<ul style="list-style-type: none"> 18 new technical programmes were formulated and implemented for developing organic package of practices for nutri-cereals production. A separate research station is demarked exclusively to conduct the organic research (including animal component): Organic Farming Research Station located at Naganahalli, Mysore Research Institute for Organic Farming, GKVK coordinates other organic research activities like developing organic production practices in all major crops grown in Karnataka. At present university is standardizing organic crop management modules for almost all the crops of university jurisdiction by formulating technical programmes specific to organic farming (17 in 2018-19, 18 in 2019-20 & 17 in 2020-21)
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5	Implementation and progress of farm trials need to be deliberated during bimonthly workshop	<ul style="list-style-type: none"> Annually, monitoring team drafted and headed by Associate Director of Research of each zone reviews the farm trials. Based on the proceedings of the monitoring team report, ADEs will discuss the implementation of farm trials during bimonthly meeting and get the feedback from the state Department Officers and present at ZREP workshop
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2019-20, 59th Research Council Meeting dt. 20.05.2019

1	Taxonomic manuals with pictorial keys prepared for training programmes under 'Niche area of excellence for capacity building in Taxonomy of Insects and Mites' should be deposited to the library of all the campuses	<ul style="list-style-type: none"> Taxonomic manuals with pictorial keys prepared for training programs under 'Niche area of excellence for capacity building in Taxonomy of Insects and Mites' are deposited (both hard & soft copy) at the library of all the campuses.
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2	Skill training programs organized at centre of excellence on small millets are to be reported to the Directorate of Extension	<ul style="list-style-type: none"> Details of training programs organized at Centre of Excellence on Small Millets regarding popularization, cultivation practices, utilization and value addition of nutri-cereals is sent to Directorate of Extension. <table border="1" data-bbox="771 1774 1291 1932"> <thead> <tr> <th>Year</th> <th>Trainings</th> <th>Trainees</th> </tr> </thead> <tbody> <tr> <td>2018-19</td> <td>4</td> <td>149</td> </tr> <tr> <td>2019-20</td> <td>8</td> <td>235</td> </tr> <tr> <td>2020-21</td> <td>2</td> <td>80</td> </tr> </tbody> </table>	Year	Trainings	Trainees	2018-19	4	149	2019-20	8	235	2020-21	2	80
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3	Major achievements of organic farming research till date should be documented as compendium	<p>Major research findings and activities undertaken at Research Institute of organic farming, GKVK and other research stations is documented as compendium including all the technologies developed at RIOF year wise. It also includes research; demonstrations & extension work in organic farming carried out at different ARS & ZARS in major field crops. Significant achievements are documented here:</p> <ul style="list-style-type: none"> • Bio-digester –A liquid organic manure production unit concept was scientifically evaluated and established at all ARS & ZARS of UAS (B). • Organic nutrient management package of practices in Finger millet, Maize, Pigeon pea and Groundnut crops was developed for the benefit of organic farmers by using the biodigester liquid manure.
4	Workshop should be conducted on ‘Developing winning research proposal’	<ul style="list-style-type: none"> • The University of Agricultural Sciences, Bangalore and NAARM Hyderabad jointly organized 3 days training programme on ‘<i>Developing winning project proposal</i>’ at Staff training unit, Hebbal during 26th – 28th December, 2019. • In this training programme 28 young scientists from research, teaching and extension wings of the university were trained by the expert.
5	Research emphasis should also be given on straw quality of finger millet	<ul style="list-style-type: none"> • It is made mandatory to assess the straw quality and present the same during the release proposal submission at ATM and ZREP workshops • UASB has signed a MoU with ICRISAT, Hyderabad during 2016-17, as per the MoU scientists of UASB and ICRISAT are working towards developing high yielding finger millet varieties that possess better straw quality. • All the quality aspects of finger millets straw are being analysed at ICRISAT, Hyderabad
6	To develop agricultural implements related to field crops for small land holdings to reduce drudgery	<ul style="list-style-type: none"> • Bullock drawn automatic seed drill for finger millet based cropping system was developed and included in PoP during ZREP 2018-19 • Multipurpose mobile solar tunnel dryer (60 kg capacity) for drying pupae from Sericulture Industry has been developed and included in PoP during ZREP 2019-20 • Single & multiple mulberry branch pruning & shoot harvesting tools and Battery-operated cocoon harvester for silkworm moutage gadgets are in testing stage • Under AICRP (FIM), ZARS, Mandya, field trials are underway on sugarcane cutter-planter, sugarcane seedling planter, sugarcane harvester, paddy reaper, paddy planter, rotary weeder. • Modified tractor drawn seed-cum-fertilizer drill for Ragi has been developed in AICRP (Dryland) and is being field tested • Seed drills for small millets, developed at ICAR-Central Institute of Agricultural Engineering, Bhopal are procured under UAS project (2020-21) for field testing in Southern Karnataka

7	Arrangements should be made to increase the sale of PHET gadgets with proper documentation.	<ul style="list-style-type: none"> AICRP on PHET has been manufacturing and selling in-house developed PHT equipment's & gadgets that are developed using UASB revolving fund. The details of gadgets sold during different year are furnished below. <table border="1" data-bbox="727 247 1339 583"> <thead> <tr> <th rowspan="2">Particulars</th> <th colspan="2">2019-20</th> <th colspan="2">2020-21</th> </tr> <tr> <th>No.</th> <th>Revenue</th> <th>No.</th> <th>Revenue</th> </tr> </thead> <tbody> <tr> <td>Mango Harvester</td> <td>140</td> <td>30,400</td> <td>66</td> <td>13,200</td> </tr> <tr> <td>Sapota Harvester</td> <td>79</td> <td>16,530</td> <td>20</td> <td>7,500</td> </tr> <tr> <td>Coconut dehusker</td> <td>56</td> <td>45,600</td> <td>23</td> <td>18,400</td> </tr> <tr> <td>Hand operated arecanut dehusker</td> <td>1</td> <td>5,500</td> <td>3</td> <td>16,500</td> </tr> <tr> <td>Tamarind dehuller & deseeder</td> <td>2</td> <td>112,000</td> <td>1</td> <td>55,000</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Sales are properly billed and accounted under Revolving fund maintained by SFS, ZARS, GKVK 	Particulars	2019-20		2020-21		No.	Revenue	No.	Revenue	Mango Harvester	140	30,400	66	13,200	Sapota Harvester	79	16,530	20	7,500	Coconut dehusker	56	45,600	23	18,400	Hand operated arecanut dehusker	1	5,500	3	16,500	Tamarind dehuller & deseeder	2	112,000	1	55,000
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8	PHET should produce coconut dehuskers in large numbers and should be provided to KVKs for further sale.	<ul style="list-style-type: none"> Based on the demand/ indents, all the necessary arrangements are made to sale coconut dehuskers at AICRP on PHET and ATIC unit through KVKs of University of Agricultural Sciences, Bangalore. During the last 5 years (2016-2020), 251 Coconut dehuskers were sold and earned Rs. 2,06,100 																																		
9	During Krishimela, arrangements should be made for the farmers to visit Amla/ Custard apple based agri-horti system at DLAP and their opinion should be documented	<ul style="list-style-type: none"> During Krishimela, Amla / Custard apple based agri-horti system is included in route map of Krishimela by making required modifications. Most of the visitors of the Krishimela visited this unit and registered their feedback in the registry maintained at the unit. It is included as visiting spot in all the training and awareness programmes conducted at the university 																																		
10	Development of drought, temperature tolerant and short duration varieties	<ul style="list-style-type: none"> Two short duration varieties were recommended for release one each in cowpea (PGCP-6) and black gram (LBG-791) during ZREP-2019 Further, 7 projects on 'Revalidation of Recommended Package of Practices for Pigeonpea, Soybean, Arid legumes, Sunflower, Castor, Small millets and to practices for sustainable dry farming under Changed Climate Condition' were sanctioned and funded by UASB with an outlay of Rs. 25 Lakhs during 2020-21 																																		
11	More trainings on organic farming and millets	<ul style="list-style-type: none"> Organic Farming Research Station, Naganahally. Research Institute on Organic Farming, GKVK; Centre of excellence – Nutri-cereals and all the Krishi Vigyan Kendra; Extension Education Unit, Farmers training institute, Bakery unit of university were directed to organize more training programmes on organic millets production, processing and value addition About 43 training programmes were conducted (2019-21) out which thirty one programs on Integrated crop management and value addition of small millets and twelve programs on Organic farming wherein total 843 farmers and farm women from southern Karnataka participated 																																		

		<ul style="list-style-type: none"> • Other than trainings programmes, millets and nutri-cereals are being popularized through melas, exhibitions and workshops. University of Agricultural Sciences, Bangalore is actively involved either by participating or by jointly organizing in these programmes with Agriculture department, Government of Karnataka.
12	While developing varieties collect and furnish the information on fodder quality and palatability of straws in finger millet	<ul style="list-style-type: none"> • UASB and ICRISAT has signed a MoU for collaborative research on millets. Multi location trials and tests on quality traits of the straw of all millets that are at MLT stage and varieties that are found promising will be conducted at ICRISAT. • Information on test results of straw quality is made mandatory in the variety release proposal and at the ZREP while recommending the variety.
13	Development of own varieties instead of working on endorsing varieties for release	<ul style="list-style-type: none"> • UASB has set a priority to develop and release location specific crops and varieties. • In the last decade, among the 50 varieties released except for the 5 endorsed varieties such as Paddy: Gangavathi Sona; Guniea grass: JHGG-08-01; Napier hybrid: BNH-10 & Co-4 and Groundnut: ICGV-91114, rest all were developed at UASB. • During 2019-20, 3 varieties developed at UASB are released and 8 varieties developed at UASB are approved for farm trials
14	Research on maize stalk rot and pest: Fall army worm <i>Spodoptera frugiperda</i>	<p>A) Maize stalk rot A project on “Studies on Maize stalk rot” was called and funded by UASB under Farmers centric projects category during 2016 for the period of 2 years (2016-2018).</p> <ul style="list-style-type: none"> • Maize genotype (8 hybrids) such as NK-6240; MAH-154, 157, 187, 194, 207, 215, 216 & 225 and Cauvery were found to be tolerant to stalk rot. • Further, as stalk rot is soil borne disease, the disease infestation completely depends on Varieties tolerance level, environment, the location where it is grown and changes over the years. • Research on developing IDM is underway. <p>B) Fall armyworm</p> <ul style="list-style-type: none"> • Chemical control of fall Army worm, <i>Spodoptera frugiperda</i> in maize was recommended to be included in PoP during ZREP, 2020: Application of spinetoram 11.7 SC @ 0.5 ml/ chlorantraniliprole 18.5 SC @ 0.4 ml or emamectin benzoate 5 SG @ 0.4 grams per litre water. • Research on developing IPM is underway.
15	Development of sunflower genotypes for confectionary purpose	<ul style="list-style-type: none"> • Following promising sunflower lines are identified and being used in breeding programme to evolve elite sunflower genotypes <ul style="list-style-type: none"> ✓ Confectionary: EC 734846, 34824, 734837, 734803, 734798 ✓ Oleic acid: OPV-3 & OPV-378 ✓ Ornamental: K-3, L-1-1, M-25, C-30 and C-18

16	Presenting the cumulative information about released varieties and technologies during Research Council Meeting	<ul style="list-style-type: none"> • UASB has so far released 296 high yielding crop varieties/hybrids in different crops viz., Cereals (127), Potential Crops (4), Pulses (53), Oilseed (35), Commercial crops (33), Horticultural Crops (32) and fodder crops (12). • Information on all the varieties released in various crops by the Scientists of the UASB since its inception (1965) is compiled as Compendium “Crop varieties/ hybrids/ animal breeds released by UAS, Bangalore (1965-2020)”
17	Develop, popularize and seed production of all millets including brown top millet.	<ul style="list-style-type: none"> • Research on developing high yielding varieties of millets is under progress. • During <i>Kharif</i> -2020: ZREP workshop, varieties of 3 crops viz., Proso millet: GPUP-28; Little millet: GPUL-6 and Foxtail millet: GPUF-3 are recommended for farm trials at Zone-5 and Zone-6. • Breeder seeds and foundation seeds of all the varieties are produced at Agricultural Research stations, Krishi Vigyan Kendras and other units/ locations under the supervision of NSP
18	Development of new varieties in niger, sesame, blackgram and greengram crops	<ul style="list-style-type: none"> • During <i>Kharif</i> -2019: ZREP workshop, LBG-791, a blackgram variety was recommended for release for both Zone – 5 & 6 • Sesamum (GKS-1 & JTS-8) and Niger (KBN-2 & Selections from IGPN-2004-01) are found to be promising and are presently under Multi location trials. • Research on developing high yielding varieties of niger, sesame, blackgram and greengram crops is under progress.
19	Beej Aadhar App should be added to the package of practice	<ul style="list-style-type: none"> • Information about Beej Aadhaar App will be included in the revised Supplementary copy of Package of practice (Pooraka Kaipidi).
20	Commercialization & popularization of new technologies for the benefit of farmers	<ul style="list-style-type: none"> • A catalogue on technologies commercialized was published in 2012 and was made available to public domain • Second edition of catalogue with updated technology information is prepared and will be published by 2021 • Compendium on 103 technologies that are ready for commercialization is prepared
21	Demonstrating developed all new technologies in one place	<ul style="list-style-type: none"> • Demonstration of the varieties and technologies released during ZREP 2019 and 2020 was exhibited during Krishimela 24-27th October, 2019 and 11-13th November, 2020; field days at ARS and FLDs. • Demonstration plots for the varieties and technologies released during that year will be exhibited in the respective years during each krishimela by delineating a separate block for the same.

2020-21, 60th Research Council Meeting dt. 26.05.2020

1.	Finger millet and nutri-cereals varieties should be subjected for analysis of fodder qualities prior to release of them from UAS, Bangalore and facilities available for this purpose at Animal breeding Station, Hesaraghatta may be utilised	<ul style="list-style-type: none"> • UASB and ICRISAT has signed a MoU for collaborative research on millets. Multi location trials and tests on quality traits of the straw of all millets that are at MLT stage and varieties that are found promising will be conducted at ICRISAT. • Information on test results of straw quality is made mandatory in the variety release proposal and at the ZREP while recommending the variety. • Facilities of Animal breeding Station, Hesaraghatta are being used for assessing fodder quality
2	Development and release of varieties in Barnyard millet, Proso millet and Kodomillet should be undertaken as there is much demand for improved varieties in these crops	<ul style="list-style-type: none"> • During <i>Kharif</i> -2020: ZREP workshop, varieties of 3 crops viz., Proso millet: GPUP-28; Little millet: GPUL-6 and Foxtail millet: GPUF-3 are recommended for farm trials at Zone-5 and Zone-6. • Research on developing high yielding varieties of millets is under progress.
3	Scientists and staff of National Seed Project should discuss with crop breeders and ensure the availability of seeds for sowing	<ul style="list-style-type: none"> • Annual breeder seed & quality seeds are produced as per the DAC, State seed roll plan indent and the action plan would be drawn in consultation with all crop breeders. • Seeds are produced on the university farm and KVK • Every year, a meeting on seed roll plan is conducted during June. • Breeder seeds and foundation seeds of all the varieties are produced at Agricultural Research stations, Krishi Vigyan Kendras and other units/ locations apart from SFPP for quality seed production and the seed supply is ensured under the supervision of NSP
4	Dual mode (battery & power) fabrication should be adopted for solar drying tunnel for silk pupae	<ul style="list-style-type: none"> • Dual mode fabrication of the silk pupae solar dryer is not feasible as 2 electrical coils of 250wts used drains the battery drains of in short time • Electrical fabrication of the solar dryer is possible but the initial cost and operational cost increases by 2-3 times
5	Improved technologies like automation should be adopted for production of bio-fertilisers & to avoid duplication of products bar-coding technology and UAS, Bangalore brand name should be adopted	<ul style="list-style-type: none"> • A project entitled "Production and promotion of microbial biofertilizers in agriculture" is submitted to CSR, HAL for mechanization • 1st round of presentation has been done during Dec-2020 with a budget outlay of 291.81 lakhs. • Further discussions are under progress

26.05.2020, 60th Research Council Meeting, dt.26.05.2020

1	Food & Nutrition scientists should identify and recommend the foods that help to develop resistance against many diseases	<ul style="list-style-type: none"> • AICRP (FN) has developed food mixes using locally available foods to address Non-Communicable Diseases such as Obesity & Diabetes which can be used in preparing regional traditional foods. The same has been commercialized. • Moringa (Drumstick leaves) rich in phytochemicals which helps in improving immunity against NCD's and infections.
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		<ul style="list-style-type: none"> • Millets: The power house of nutrients is exploited in development of range of ready to eat, ready to cook, convenience foods. • Finger millet nutri dense laddu, ragi malt and popped ragi hurihittu is developed and sold at AICRP (FN) which is helpful for health of vulnerable groups. • Under-utilized foods such as Quinoa and Chia which are rich in nutrients are also exploited for developing value added foods.
2	Need to develop improved varieties on priority basis in Oilseed crops especially in Sesamum & Niger	<p><u>Sunflower</u></p> <ul style="list-style-type: none"> • Release of KBSH-78 Sunflower hybrid in 2018 for Karnataka. • Commercialization of KBSH-44 and KBSH-79 with MAHYCO seed company pvt. Ltd., Jalna. • Commercialization of KBSH-53 with M/s Invicta Agritech Pvt. Ltd., Hyderabad. <p><u>Sesamum & Niger</u></p> <ul style="list-style-type: none"> • Sesamum (GKS-1 & JTS-8) and Niger (KBN-2 & Selections from IGPN-2004-01) are found to be promising and are presently under Multi location trials. • Research on developing high yielding varieties of niger, sesame and other oilseed crops is under progress.
3	Need to develop technology of separating seeds from tamarind fruits & up to packaging and for this the tamarind trees of GKVK can be kept as model test trees and can be used to record necessary observations /data and creative action plan should be formulated	<ul style="list-style-type: none"> • A new Tamarind Deseeder has been developed successfully by AICRP (PHET) with a capacity of 100 kg/hr and it is operated by 5 hp, 3 hp motor. The equipment will be proposed for release in Zone-5 ZICRP 2021 Kharif Workshop and then will be taken up for commercialization through NRDC. • Protocols for Tamarind Pulp / Concentrate from deseeded tamarind has been standardized including packaging. • A Pilot Scale Plant for production of Tamarind Concentrate has been proposed to be established in AICRP (PHET) and the e-Tender for the same has been floated with available funds (21 lakhs) in AICRP (PHET). • Last season, tamarind from 9 trees in Botanical Garden, GKVK was reserved to record data on harvesting & processing costs; The tamarind fruits were harvested from those trees, processed in the developed machine in the Scheme and necessary data were recorded. However, there was a lot of variation between traditional manual harvesting / processing costs (collected from a nearby village) and our computed data. Therefore, the whole thing will be repeated again this season also

Annexure – 6: List of scientific publications published during 2016-17 to 2020-21

Sl. No.	Article	NAAS rating
2016		
1	PARVATHI, M.S., AND KARABA NATARAJA, N., 2016, Emerging tools, concepts and ideas to track the modulator genes underlying plant drought adaptive traits: An overview, <i>Plant Signaling & Behavior</i> . 11 : e1074370.	20.00
2	RAMU, S. V., SWETHA, T. N., SHEELA, S. H., BABITHA, C. K., ROHINI, S., REDDY, M. K., TUTEJA, N., REDDY, C. P., PRASAD, T. G. AND UDAYAKUMAR, M., 2016, Simultaneous expression of regulatory genes associated with specific drought-adaptive traits improves drought adaptation in peanut. <i>Plant Biotech. J.</i> , 14 :1008–1020.	12.84
3	MAGDALINE, E. E. F., HEARTWIN A. P., BRAJ KUMAR, KULKARNI S., MANJUNATHA M., RUCKMANI K., PONNUSAMI VENKATACHALAM AND PALANIMUTHU V., 2016, Physicochemical, thermal, pasting and microstructural characterization of commercial <i>Curcuma angustifolia</i> starch. <i>Food Hydrocolloids</i> , 67 : 27–36.	11.84
4	MOIN, M., BAKSHI, A., SAHA, A., UDAYAKUMAR, M. REDDY, A. R., RAO, K. V., SIDDIQ, E. A, AND KIRTI, P. B, 2016, Activation-tagging in indica rice identifies ribosomal proteins as potential targets for manipulation of water-use-efficiency and abiotic stress tolerance in plants. <i>Plant Cell & Environment</i> , 39 (11):2440-2459.	11.62
5	PRASAD J. V., SRINIVASA RAO, N. S., SRINIVAS, NAGA JYOTHI, B., VENKATESWARLU, RAMACHANDRAPPA, B. K., DHANAPAL, G. N., RAVICHANDRA, AND MISHRA, P. K., 2016, Effect to ten years of reduced tillage and recycling of organic matter on crop yields, soil organic carbon and its fractions in Alfisols of semi-arid tropics of southern India. <i>Soil & Tillage Research</i> , 156 :131-139.	10.68
6	DHANYALAKSHMI, K. H., NAIKA, M. B. N., SAJEEVAN, R. S., MATHEW, O. K., SHAFI, K. M., SOWDHAMINI, R. AND NATARAJA, K. N., 2016, An approach to function annotation for Proteins of Unknown Function (PUFs) in the transcriptome of Indian mulberry, <i>PLoS ONE</i> , 11 (3): e0151323.	10.43
7	MOHANA KUMARA, P., SRIMANY, A., ARUNAN, S., RAVIKANTH, G., UMA SHAANKER, R. AND PRADEEP, T., 2016, Desorption Electrospray Ionization (DESI) mass spectrometry imaging of the distribution of rohitukine, in the seedling of <i>Dysoxylum binectariferum</i> Hook, <i>PLoS ONE</i> , 11 (6): e0158099.	10.43
8	RAMU, S. V., PARAMANANTHAM, A., RAMEGOWDA, V., MOHAN RAJU, B., UDAYAKUMAR, M. AND SENTHIL KUMAR, M., 2016, Transcriptome analysis of sunflower genotypes with contrasting oxidative stress tolerance reveals individual and combined biotic and abiotic stress tolerance mechanisms, <i>PLoS ONE</i> 11 (6): e0157522.	10.43
9	SATISH NAGARAJ, MUTHAPPA SENTHIL KUMAR, VEMANNA S. RAMU, KERI WANG, KIRANKUMAR S., 2016, Mysore. Plant ribosomal proteins, RPL12 and RPL19, play a role in non-host disease resistance against bacterial pathogens. <i>Frontiers in Plant Science</i> , 6 : 1192.	10.11
10	NEETHU, K.C., SHARMA, A.K., HEARTWINA, PUSHPADASS, F. MAGDALINEELJEEVA EMERALD AND MANJUNATHA, M., 2016, Prediction of convective heat transfer coefficient during deep-fat frying of pantoa using neuro computing approaches. <i>Innov. Food Sci & Emerging Technol.</i> 34 : 275-284.	10.09
11	SINGH, A. KUMAR., P., GAUTAM, V., RENGASAMY, B., ADHIKARI, A., UDAYAKUMAR, M., AND SARKAR, A., K., 2016, Root transcriptome of two contrasting indica rice cultivars uncovers regulators of root development and physiological responses. <i>Sci. Rep.</i> doi: 10.1038/srep39266.	10.01

Sl. No.	Article	NAAS rating
12	SHAILAJA HITTALMANI, MAHESH H.B., MAHADEVAIAH C. AND PRASANNAKUMAR M.K., 2016, De novo genome assembly and annotation of Rice sheath rot fungus (<i>Sarocladium oryzae</i>) reveals genes involved in Helvolic acid and Cerulenin biosynthesis pathways. <i>BMC Genomics</i> , 17 : 271.	9.99
13	MAHESH, H. B., SHIRKE, M.D., SINGH, S., RAJAMANI, A., HITTALMANI, S., WANG, G. L. AND GOWDA, M., 2016, Indica rice genome assembly, annotation and mining of blast disease resistance genes. <i>BMC Genomics</i> , 17 (1): 242.	9.73
14	ASHWINI, N., SAJEEVAN, R. S., UDAYAKUMAR M. AND NATARAJA, K.N., 2016, Identification and characterization of OsWRKY72 variant in <i>Oryza sativa</i> indica genotypes., <i>Rice Sci.</i> , 23 (6): 297–305.	9.51
15	SUNDARESHA, S., SREEVATHSA ROHINI, V. K., APPANNA, MANOJ KUMAR, ARTHIKALA, N. B., SHANMUGAM, N. B., SHASHIBHUSHAN, C. M., HARI KISHORE, R., PANNERSELVAM, P. B., KIRTI, M. AND UDAYAKUMAR, 2016, Co-overexpression of <i>Brassica juncea</i> NPR1 (BjNPR1) and <i>Trigonella foenum-graecum defensin</i> (Tfgd) in transgenic peanut provides comprehensive but varied protection against <i>Aspergillus flavus</i> and <i>Cercospora arachidicola</i> . <i>Plant Cell Reports</i> , 25 (35):1189.	9.50
16	SHAMSHAD BEGUM, S., JAYALAKSHMI, H.K., VIDYAVATHI, H.G., GOPAKUMAR, G. ISAAC ABIN, MALIAKELBALU, GEETHA, K., SURESHA, S.V., VASUNDHARA, M. AND KRISHNAKUMAR, I.M., 2016, A Novel extract of Fenugreek husk (Fenu SMART) alleviates postmenopausal symptoms and helps to establish the hormonal balance: A randomized, double blind, placebo-controlled study. <i>Phytother Res.</i> , 30 (11):1775-1784.	9.20
17	RAMEGOWDA, YAMUNARANI, GEETHA GOVIND, VENKATE GOWDA RAMEGOWDA, HARSHAVARDHAN VOKKALIGA THAMME GOWDA, SHANKAR AMBARAHALLI GULIGOWDA, 2016, Genetic diversity for grain Zn concentration in finger millet genotypes: potential for improving human Zn nutrition. <i>The Crop J.</i> , 4 (3):229-234.	9.18
18	MEGHANA DEEPAK SHIRKE, MAHESH H. B. AND MALALI GOWDA, 2016, Genome-wide comparison of Rice and non-rice Magnaporthe field isolates revealed host-specific pattern of secretory proteins and transposable elements. <i>PLoS One</i> , 11 (9): e0162458.	8.87
19	MATHITHUMILAN, B., SAJEEVAN, R. S., JYOTI BIRADAR, MADHURI, T., NATARAJA, K. N. AND SHESHSHAYEE M. SREEMAN, 2016, Development and characterization of genic SSR markers from Indian mulberry transcriptome and their transferability to related species of Moraceae. <i>PLoS ONE</i> doi.10.1371/ J.pone.0162909.	8.78
20	VASUNDHARA, M., SHEETAL R. GUJARAN, ASHWINI JAYARAM AND PRIYANKA. R, 2016, Sweet Bay (<i>laurus nobilis</i> L.) Essential Oil: study on its Application in Dentistry, <i>World J. Pharmac. Med. Res.</i> , 5 : 2049-2057.	8.60
21	ROHINI BHAT VALEKUNJA, VIKRAMSHANKAR KAMAKOTI, ANITHA PETER, SHAMPURASAD PHADNIS, SHALINI PRASAD AND VINAY J. NAGARAJ, 2016, The detection of papaya ring spot virus coat protein using an electrochemical immune sensor. <i>Anal. Methods</i> , 8 :8534-8541.	8.38
22	VASUNDHARA, M., RADHIKA, B., THARA, B.S., PRIYANKA, R. AND ASHWINI JAYARAM, 2016, Organic colours for Ayurveda from kokum fruits and rinds, <i>J. Med. Pl. Studies</i> , 4 (6): 104-107.	8.00
23	VASUNDHARA, M., SHEETAL R. GUJARAN, ASHWINI JAYARAM, PRIYANKA, R. AND RADHIKA, B., 2016, Chemovariant of Melaleuca Quinquenervia (CAV.) S.T. Blake and its Anti- Pathogen Activity. <i>European J. Pharma. Medi. Res.</i> , 3 (6): 482-487.	8.00

Sl. No.	Article	NAAS rating
24	MATHIMARAN, N., MAHAVEER P. SHARMA., MOHAN RAJU, B. AND BAGYARAJ D.J., 2016, <i>Arbuscular mycorrhizal</i> symbiosis and drought tolerance in crop plants, <i>Mycosphere</i> , 8 (3): 361-376.	7.99
25	RAJU, B.R., MOHANKUMAR, M.V., SUMANTHKUMAR, K., RAJANNA, M.P., UDAYAKUMAR, M., PRASAD, T.G. AND SHESHSHASYEE, M.S., 2016, Discovery of QTL for water mining and water use efficiency traits in Rice under water-limited conditions through association mapping. <i>Molecular Breeding</i> . DOI 10.1007/s11032-016-0457-Z	7.86
26	RAHUL K. ANURAG, MANJUNATHA, M., SHYAM NARAYAN JHA AND LEENAKUMARI, 2016, Storage quality of shelled green peas under modified atmosphere packaging at different storage conditions. <i>J. Food Sci. Technol.</i> , 53 (3): 1640-1648.	7.85
27	MANJUNATHA, B.L., SINGH, H.R., RAVIKANTH, G., NATARAJA, K.N, SHANKAR, R., KUMAR, S. AND SHAANKER, R.U., 2016, Transcriptome analysis of stem wood of <i>Nothapodytes nimmoniana</i> (Graham) Mabb. identifies genes associated with biosynthesis of camptothecin, an anti-carcinogenic molecule, <i>J. Biosci.</i> , 41 (1), 119–131, DOI 10.1007/s12038-016-9591-3	7.82
28	SATHISH, A., RAMACHANDRAPP, B. K., SHANKAR, M. A., SRINKANTH BABU, P. N. CH. SRINIVAS RAO. AND SHARMA, K. L., 2016, Long term effects of organic manure and manufactured fertilizer additions on soil quality and sustainable productivity of finger millet-groundnut cropping system in southern India. <i>Soil Use and Management.</i> , 32 :311-321.	7.82
29	PAVITHRAVANI, B.V., RAMEGOWDA, SOMTA, P., RAMESH, S., MOHANRAO, A., BHANUPRAKASH, K., SRINIVES, P., GIREESH, C. AND PRAMILA, C.K., 2016, Mapping QTL for bruchid resistance in rice bean (<i>Vigna umbellata</i>). <i>Euphytica.</i> , 207 : 135-147.	7.60
30	DINESH, H. B., LOHITHASWA H. C., VISWANATHA, K. P., POONAM SINGH AND MOHAN RAO, A., 2016, Identification and marker-assisted introgression of QTL conferring resistance to bacterial leaf blight in cowpea (<i>Vigna unguiculata</i> (L.) Walp.). <i>Plant Breeding</i> , 135 (4): 506–512 (doi:10.1111/pbr.12386).	7.25
31	KEERTHI C. M., RAMESH, S., BYREGOWDA, M., MOHAN RAO, A., RAJENDRA PRASAD, B. S. AND VAIJAYANTHI, P. V., 2016, Further evidence for the genetic basis of qualitative traits and their linkage relationships in dolichos bean (<i>Lablab purpureus</i> L.). <i>J. Genetic</i> , 95 (1): 89-98.	7.11
32	NAGAVENI, B., RAMA, N., JEYARAMAN, R., CHINNUSAMY, V., NATARAJA, K.N., 2016, Ectopic expression of AtICE1 and OsICE1 transcription factor delays stress-induced senescence and improves tolerance to abiotic stresses in tobacco, <i>J. Plant Biochem. Biotechnol.</i> , 25 (3): 285-293.	7.04
33	PANNURE, A., BELAVADI, V.V. AND CARPENTER, J.M., 2016, Taxonomic studies on potter wasps (Hymenoptera: <i>Vespidae: Eumeninae</i>) of south India. <i>Zootaxa</i> , 4171 (1): 001-050.	6.99
34	ZEITY MAHRAN, SRINIVASA, N. AND CHINNAMADEGOWDA, C., 2016, New species, new records, and redescription of spider mites (Acari: Tetranychidae) from India. <i>Zootaxa</i> , 4085 (3): 416-430.	6.99
35	PRAKASH S. NAYAK, BADIADKA NARAYANA, JENNIFER FERNANDES, BALLADKA K. SAROJINI, SANA SHEIK, KENKERE S. SHASHIDHARA, KONAMBI R. CHANDRASHEKHAR AND KULLAIAHBYRAPPA, 2016, Synthesis & Characterization of 2-(Substituted-Phenyl) Acetohydrazide Analogs, 1, 3, 4-Oxadiazoles, and 1,2,4-Triazine Ring Systems: A Novel Class of Potential Analgesic and Anti-Inflammatory Agents. <i>Lett. Drug Design and Discov.</i> , 13 (6): 547-562.	6.95

Sl. No.	Article	NAAS rating
36	MISHRA B. K., SRIVASTAVA, LAL, J. P. AND SHESHSHAYEE, M. S., 2016, Physiological and biochemical adaptations in lentil genotypes under drought stress. <i>Russ. J. Plant Physiol.</i> , 63 : 695. doi:10.1134/S1021443716040117	6.94
37	AFTAB HUSSAIN I. S., PAVITHRA H. V., ROHINI SREEVATHSA, NATARAJA K. N. AND NAVEEN BABU, 2016, Development of transgenic pigeonpea (<i>Cajanus cajan</i> . L Millsp) overexpressing citrate synthase gene for high phosphorus uptake. <i>Indian J. Expt. Biology</i> , 54 : 493-501.	6.93
38	SAVITHA, B. S., DESAI, S. A., BIRADAR, S. S., NAIK, R. AND LOHITHASWA, H. C., 2016, Identification of SSR Marker Linked to Leaf Rust Resistant Gene Lr24and Marker Assisted Transfer of Leaf Rust Resistance Genes into Bread Wheat. <i>J. Agril Sci and Technol</i> , 18 :545-552.	6.83
39	AMITHA MITHRA, S. V., KAR, M. K., MOHAPATRA, T., ROBIN, S., SARLA, N., SHESHSHAYEE, M. S., SINGH, K., SINGH, A. K., SINGH N. K. AND SHARMA, R. P., 2016, DBT propelled national effort in creating mutant resource for functional genomics in rice. <i>Current Sci.</i> , 110 (4): 543-548.	6.76
40	NAGARJUNA, K. N., PARVATHI, M. S., SAJEEVAN, R. S., PRUTHVI, V., MAMRUTHA, H. M. AND NATARAJA, K. N., 2016, Molecular cloning and expression analysis of CIPK31-like gene identified from a drought hardy crop finger millet (<i>Eleusine coracana</i> (L.) Gaertn.). <i>Current Sci</i> , 111 (5): 890-894.	6.76
41	DEVAGIRI, G. M., KHAPLE, A. K., MOHAN, S., VENKATESHA MURTHY, P., SANJAY TOMAR, A. N., ARUNKUMAR AND GEETHA JOSHI, 2016, Species diversity, regeneration and dominance as influenced by canopy gaps and their characters in tropical evergreen forests of Western Ghats, India. <i>J. Forestry Res.</i> , 27 (4): 799-810.	6.75
42	YAMUNARANI, R., RAMEGOWDA, V., GEETHA, G., JALENDRAKUMAR, H.G., UDAYAKUMAR, M., AND SHANKAR, A.G., 2016, Effect of Zn application on its uptake, distribution and concentration of Fe and Cu in finger millet [<i>Eleusine coracana</i> (L.)]. Gaertn. <i>J. Plant Nutri.</i> , 39 (4):569-580.	6.75
43	KAHANI, F. AND SHAILAJA HITTMANI, 2016, Identification of F2 and F3 Segregants of fifteen rice crosses suitable for cultivation under aerobic situation. <i>SABRAO. J. Breeding and Genetics</i> , 48 (2) 219-229.	6.71
44	RAMACHANDRAPP, B. K., MARUTHI SANKAR, G. R., SATHISH, A., DHANAPAL, G. N., SHANKAR, M. A., RAJU, B. M. K., SHARMA, K. L., OSMAN, M., RAVINDRA CHARY, G., SRINIVASA RAO AND NAGARJUNA KUMAR, R., 2016, Statistical assessment of sustainability of finger millet yield through rainfall and soil fertility variables using regression and principal component models in rainfed semiarid Alfisols. <i>Communications in Soil Science and Plant Analysis</i> , 47 (12):1476-1492.	6.69
45	NETHRA, N., UMA RANI, K., RAME GOWDA, RAJENDRA PRASAD, S., AND NARAYANA SWAMY, S., 2016, Effect of packaging and desiccants on storability of soybean seeds. <i>J. Seed Sci Technol.</i> , 44 : 1-5.	6.63
46	RAMACHANDRAPP, B. K. AND THIMMEGOWDA, M. N., 2016, Soil conservation, crop water planning and its use efficiency in rainfed agriculture. <i>Geo. Soc. India</i> , 5 : 29-35.	6.55
47	SHARMA, K. L., RAMACHANDRAPP, B. K., SUMA CHANDRIKA, D., SATHISH, A., DHANAPAL, G. N., CH. SRINIVASA RAO, SHANKAR, M. A., KUSUMA GRACE, J., MARUTHI SANKAR, G. R., RAVINDRA CHARY, G., MUNNALAL, SATISH KUMAR, T., USHA RANI, K. AND VENKATESWARLU, B., 2016, Effect of organic manure and crop residues based long term nutrient management systems on soil quality changes under sole finger millet (<i>Eleusine coracana</i> (L.) Gaertn.) and groundnut (<i>Arachis hypogaea</i> L.) - finger millet rotation in rainfed Alfisols. <i>Commn. Soil Pl. Anal.</i> , 47 : 899-914.	6.53

Sl. No.	Article	NAAS rating
48	NETHRA, N., PUSHPA, C., UMA RANI, K., RAME GOWDA AND RAJENDRA PRASAD, S., 2016, Fingerprinting and genetic purity assessment of rice varieties and hybrids through microsatellite markers. <i>J. Seed Sci. & Technol.</i> , 44 (3): 1-10.	6.52
49	MUDALAGIRIYAPPA, SAMEER ALI, M., RAMACHANDRAPPA, B. K., NAGARAJU, AND SHANKARALINGAPPA, B. C, 2016, Effect of foliar application of water-soluble fertilizers on growth, yield and economics of chickpea (<i>Cicer arietinum</i> L.). <i>Legume Research</i> , 39 (4) :610-613.	6.34
50	NIRANJANA KUMARA, B., DHARMARAJ, P.S., KUCHNUR, P.H. AND MUNISWAMY, S., 2016, Stability analysis for yield and its attributing traits in advanced genotypes of pigeonpea [<i>Cajanus cajan</i> (L.) Millsp.]. <i>Legume Res: An Int. J.</i> , 39 (2):194-197.	6.34
51	SANDHYA KIRANMAI, M., VENKATARAVANA. P. AND PUSHPA, H. D., 2016, Correlation and path analysis studied in groundnut under different environments. <i>Legume Res.</i> , 39 (6): 1048-1050.	6.34
52	UMA, M. S., NIRANJAN HEGDE AND SHAILAJA HITTALMANI, 2016, Identification of SSR marker associated with rust resistance in cowpea (<i>Vigna unguiculata</i> L.) using bulk segregant analysis. <i>Legume Res.</i> , 39 (1) :39-42.	6.34
53	PRASHANTHA, C. AND BELAVADI, V.V., 2016, Large carpenter bees, <i>Xylocopa</i> from central Western Ghats of India: taxonomic notes on subgenus <i>Koptortosoma</i> (Hymenoptera: Apidae: Xylocopinae), <i>Oriental Insects</i> , 51 (2): 1-19.	6.28
54	ZEITY MAHRAN, SRINIVASA, N. AND CHINNAMADEGOWDA, C., 2016, New records of spider mites, and description of male of <i>Stylophoronychus baghensis</i> Prasad (Acari: Tetranychidae) from India. <i>Oriental Insects</i> , online 1-10 pages. DOI:10.1080/00305316.2016.1194777.	6.28
55	JAYALAXMI, B., VIJAYALAKSHMI, D., USHA, R., REVANNA, M. L., CHANDRU, R., 2016, Effect of different processing methods on proximate, mineral and antinutrient content of lima bean (<i>Phaseolus lunatus</i>) seeds. <i>Legume Res.- An Int. J.</i> , 39 (4), 543-549.	6.15
56	DARSHAN, M. B., KAR, A. AND MOHAPATRA, D., 2015, Development of spray freezer for production of freeze granulations. <i>Indian J. Agril. Sci.</i> , 85 (110): 1523-1528.	6.14
57	NANDA, C., MOHAN RAO, A., RAMESH, S., HITTALMANI, S. AND PRATHIBHA, V. H., 2016, Tagging SSR markers associated with genomic regions controlling anthracnose resistance in chilli (<i>Capsicum baccatum</i> L.). <i>Vegetos</i> , 29 (3): 1-5.	6.13
58	LAXMI K., VAJAYANTHI, P.V., KEERTHI, C.M., SHIVAKUMAR, M.S., RAMESH, S. AND MOHAN RAO, A., 2016, Genotype-dependent photoperiod-induced sensitivity to flowering time in dolichos bean (<i>Lablab purpureus</i> L. Sweet) var. lignosus. <i>Bangladesh J. Bot.</i> , 45 (3): 471-476.	6.00
59	PUNIT KUMAR, N.D., KAREGOWDA, C., RUDRAPPA, K.B., MAHESH, M., MANU, T.G., MURALI, R., NAGARAJ, H., MAHANTESH, B. AND KAVITA, T.H., 2016, Influence of Carbon, Nitrogen, temperature and pH on the growth of <i>Cercospora nicotianae</i> causes frog eye leaf spot disease of tobacco. <i>J Pure & Applied Microbiol.</i> , 10 (2): 1603-1606.	6.00
60	MANOJ KUMAR, H. B, MANASA, K. S., HARINIKUMAR, K. M., DEEPAK, C.A., SAVITHA, G., MAYA G., 2016, Molecular characterization of important biofuel plant species through RAPD markers, <i>ISJRT</i> , 2 (9):101-108.	5.88
61	BASAVARAJ, K., JAGADISH, K. S., SOUMYA SHETTAR, SRINIVASA REDDY, K.M. AND SHADAKSHARI, Y.G., 2016, Bee foraging on elite sunflower cultivars and its impact on seed and oil yield, <i>J. Expt. Zool.</i> , 19 (2):1191-1194.	5.51

Sl. No.	Article	NAAS rating
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1142	PATEL, P.S, SANATH KUMAR, V.B., KIRAN KUMAR, N., CHANDRAPPA AND LINGARAJ, B., 2020, Survey on black spot of papaya in major papaya growing areas of Southern Karnataka. <i>Int. J. Chem. Studies</i> , 8 (1): 1795-1799.	5.21
1143	POORNIMA, AYYANAGOWDAR, M.S., POLISGOWADAR, B.S., NEMICHANDRAPPA, M., RAVI, M. V., LATA, H. S. AND RAMESH, G., 2020, Estimation of crop water requirement and irrigation scheduling of baby corn using CROPWAT model <i>J. Pharmac. Phy. Chem.</i> , 9 (1): 1944-1949.	5.21
1144	ROOPA B. PATIL, VIJAYALAKSHMI, K.G. AND VIJAYALAKSHMI, D., 2020, Physical, functional, nutritional, phytochemical and antioxidant properties of kodo millet (<i>Paspalum scrobiculatum</i>). <i>J. Pharmac. Phy. Chem.</i> , 9 (5): 2390-2393.	5.21
1145	SAFEENA MAJEED, A. A. AND SRINIVASA, N., 2020, Qualitative damage of spider mites on selected medicinal plants and the corresponding biochemical changes. <i>J. Pharmac. Phy. Chem.</i> , 9 (6): 1880-1885.	5.21
1146	SAGAR, R., KADALLI G. G., ANANTHAKUMAR, M. A, JAYARAMAIAH, R. AND ASHA, N. N., 2020, Nutrient status of soil as influenced by micronutrients fortified humic substance. <i>J. Pharmac. Phy. Chem.</i> , 9 (1): 1006-1009.	5.21
1147	SANTOSH, G.M., ASOKAN, R., HARINI KUMAR, K.M., MURALI MOHAN, DAYAL DOSS, D., DEVA KUMAR, A.S., MAHADEVA SWAMY, H.M. AND RAMESH, A.N., 2020, Role of genome editing of plants by CRISPR/Cas9 for virus resistance: Patent analytics. <i>J. Pharmac. Phy. Chem.</i> , 9 (6): 1452-1464.	5.21
1148	SANTOSH RATHOD, CHANNAKESHAVA, S., BASAVARAJU, B. AND SHASHIDHARA, K.S., 2020, Effect of soil and foliar application of zinc and boron on growth, yield and, micronutrient uptake of chickpea. <i>J. Pharmac. Phy. Chem.</i> , 9 (4):3356-3360.	5.21
1149	SATHISHA, G.S., DESAI, B.K., SATYANARAYANA RAO, LATHA, H.S. AND YOGESH, L. N., Effect of agronomic fortification of zinc and iron on growth parameters and yield of foxtail millet [<i>Setaria italica</i> (L.)] genotypes, <i>J. Pharmac. Phy. Chem.</i> , 8 (3): 2753-2756.	5.21
1150	SHARANABASAV, H., PRAMESH, D., CHIDANANDAPPA, E., SADDAMHUSEN, A., CHITTARAGI, A., RAGHUNANDANA, A., PRASANNA KUMAR, M. K., RAGHAVENDRA, B. T., HARISCHANDRANAIAK, R., MALLESH, S. B., MAHANTASHIVAYOGAYYA, K., SUJAYHURULI, REDDY, B. G. M. AND GOWDAR, S. B., 2020, Field evaluation of fungicides against false smut disease of rice, <i>J. Pharmac. Phy. Chem.</i> , 9 (3) :1453-1456.	5.21
1151	SHARANAPPA, LATHA, H. S. AND RAVI, M.V., 2020, Studies on agronomic bio-fortification with zinc and iron on nutrient availability, uptake and yield in pearl millet [<i>Pennisetum glaucum</i> (L.)] genotypes. <i>J. Pharmac. Phy. Chem.</i> , 9 (4): 721-725.	5.21
1152	SHASHANK YADAV, K. S., SHIVARAMU, K., GADDI, G.M AND MURTHY, M. A., 2020, Economics of davanam production under contract farming. <i>J. Pharmac. Phy. Chem.</i> , 9 (3): 100-103.	5.21

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1153	SHASHANK YADAV, K.S., SHIVARAMU, K., GANAPATHY, M.S. AND MURTHY, M.A., 2020, Extent of adoption of recommended package of practices in davanam by contract farming farmers. <i>J. Pharmac. Phy. Chem.</i> , 9 (3):104-108.	5.21
1154	SHEKARA. B. G., MAHADEVU, P., CHIKKARUGI, N. M. AND MANASA, N., 2020, Response of multi-cut fodder pearl millet (<i>Pennisetum glaucum</i> L.) genotypes to varied nitrogen levels in the southern dry zone of Karnataka. <i>J. Pharmac. Phy. Chem.</i> , 9 (5):2665-2668.	5.21
1155	SHISHIRA, D., ESWARAPPA, G., SHWETHA, B.V. AND KUBERAPPA, G.C., 2020, Antimicrobial activity of honey against pathogenic bacteria (<i>Escherichia coli</i>). <i>J. Pharmac. Phy. Chem.</i> , 9 (2):1815-1817.	5.21
1156	SHWETHA N.V., SHIVALINGAIAH, Y.N. AND SURESHA, S. V., 2020, Relative economics of farmers practicing different farming systems and their impact on livelihood security in Chikkaballapur district of Karnataka. <i>J. Pharmac. Phy. Chem.</i> , 9 (1):1018-1022.	5.21
1157	SOMU, G., KANA VI, M.S.P., SHASHIKUMAR, C., SHIVARAY NAVI, MEENA, N., DRUVAKUMAR, M. AND KRISHNA KISHORE, R., 2020, Analysis of variance, range and mean for different characters in first clonal stage of sugarcane (<i>Saccharum officinarum</i> L.). <i>J. Pharmac. Phy. Chem.</i> , 9 (2): 425-429.	5.21
1158	SOMU, G., MEENA, N., SHASHIKUMAR, C., SHIVARAY NAVI, DRUVAKUMAR, M., KANA VI, M.S.P. AND KRISHNA KISHORE, R., 2020, Economics of the sorghum genotypes at different intervals of sowing. <i>J. Pharmac. Phy. Chem.</i> , 9 (2): 33-34.	5.21
1159	SOMU, G. AND NAGARAJA, T. E., 2020, Genetic divergence studies in first clonal stage of sugarcane (<i>Saccharum officinarum</i> L.). <i>J. Pharmac. Phy. Chem.</i> , 9 (6):1364-1368.	5.21
1160	SOMU, G., MEENA, N., SHASHIKUMAR, C., SHIVARAY NAVI, DRUVAKUMAR, M. AND KANA VI, M. S. P., 2020, Performance of sorghum under sorghum legume intercropping system. <i>J. Pharmac. Phy. Chem.</i> , 9 (1): 2320-2322.	5.21
1161	SUMA, A.M., MALLIKARJUNA GOWDA, A.P., THIMMEGOWDA, M.N., MARUTHIPRASAD, B.N., PRAGATH, U.B. AND PRANEETH, Y.S., 2020, Effect of seed treatment and nutrient levels on growth, yield and quality of Shankapushpi (<i>Clitoria ternatea</i> L.). <i>J. Pharmac. Phy. Chem.</i> , 8 (4):1515-1517.	5.21
1162	SUMALATA BYADAGI, SAHANA, N. AND SIDDARAJU, R., 2020, Influence of integrated nutrient sources and seed priming on growth seed yield and quality in nutri-cereal proso millet. <i>J. Pharmac. Phy. Chem.</i> , 9 (2): 1074-1078	5.21
1163	SWATHI SHETTY, Y., SANATH KUMAR, V. B., KIRAN KUMAR, N., ASHOKA, K. R. AND CHANDRAPPA, 2020, Potentiality of bioagents and botanicals against papaya black spot fungus: <i>Asperisporium caricae</i> . <i>J. Pharmac. Phy. Chem.</i> , 9 (5): 3099-3102	5.21
1164	SWATHI SHETTY, Y., SANATH KUMAR, V. B., KIRAN KUMAR, N., ASHOKA, K. R. AND MAHESH, H. B., 2020, <i>In-vitro</i> evaluation of fungicides against <i>Asperisporium caricae</i> causing papaya black spot. <i>Int. J. Chem. Studies</i> , 8 (4): 3523-3527.	5.21
1165	UMARJI, V.K. AND VIJAYALAXMI, K.G. 2020, Organoleptic, physical, nutritional characteristics and storage stability of value added Kodo masala khakhra. <i>J. Pharmac. Phy. Chem.</i> , 9 (5) Sp. :326-333.	5.21
1166	VIDYASHREE, S., RAMAKRISHNA NAIKA, JYOTI BIRADAR, NAVEEN, D.V., PALLAVI. AND BHARATHI, V.P., 2020, Natural alkaloid DNJ in mulberry and its application: An overview. <i>J. Pharmac. Phy. Chem.</i> , 9 (4): 1646-1654.	5.21

Sl. No.	Article	NAAS rating
1167	VINOD GODI, MAHABALESHWAR HEGDE, VIDYA, A., THIMMEGOUDA, M. N., SUBBARAYAPPA, C. T., SHIVANNA, B. AND HANAMANTHARAYA, B. G., 2020, Effect of different irrigation and fertilizer levels on growth, yield and cost economics of papaya (<i>Carica papaya</i> L.) cv. red lady under open field conditions. <i>Int. J. Chem. Sci.</i> , 9(11): 3288-3304.	5.21
1168	MAMATHA, H.S, SHIVALEELA, H.B. AND SURESHA, S.V., 2020, A Study on awareness and adoption of food safety measures by women entrepreneurs of Tumkur district, Karnataka, India. <i>J. Multilogic Sci.</i> , 9 (33): 419-422.	5.20
1169	SANJAY YADAV, MADHU PRASAD, V.L. AND HARSHITHA, D., 2020, Members profile and correlates with performance of mahila mandals of Nehru Yuva Kendras in Tumkur district. <i>J. Multilogic in Sci.</i> , 6 (12): 437-438.	5.20
1170	KIRAN, S.C., NAGARAJIAH, C. AND MOHAN KUMAR, T.L. 2020, Heavy metal accumulation in cabbage and soil irrigated with different concentration of open dumping yard leachate in Bangalore, <i>Int. J. Ecol. and Environ. Sci.</i> , 2(4):508-513.	5.18
1171	MANOJ, K.N., SHEKARA, B.G. AND SHOBA, D., 2020, Production potential and forage quality of cereal-legume intercropping systems in Cauvery command area of Karnataka. <i>Int. J. of Curr. Microbiol. and Appl. Sci.</i> , 9(5): 3175-3182.	5.18
1172	MANOJ, K.N., SHEKARA, B.G., SHOBA, D., KALYANA MURTHY, K.N., MUDALAGIRIYAPPA AND PRAKASHA, H. C., 2020, Qualitative forage production potential of different cereal and legume fodder crops under southern dry zone of Karnataka. <i>Int. J. Ecol. Env. Sci.</i> , 2 (4): 268-271.	5.18
1173	SUMA, R. AND MADHUSHREE, K.H, 2020, Changes in chemical properties of sandy loam soil and performance of maize with application of primary treated distillery spent wash, <i>Int.J. Eco and Env. Sci.</i> , 2 (4): 567-572.	5.18
1174	RAGHAVENDRA, M., SANJAY, M.T., KALYANMURTHY, K.N., DHANAPAL, G.N., NAGARAJU, N. AND JAGADISH, K.S., 2020, Growth and yield of direct seeded rice as influenced by different weed management practices, <i>Indian J. Plant Prot.</i> , 48 (1&2): 104-107.	5.07
1175	MAMATHA, H.S., SURESHA, S. V. AND SHIVALEELA, H. B., 2020, Social participation mass media access and financial benefits availed by women entrepreneurs in food enterprise. <i>The Pharma Innov. Int. J.</i> , 9(1): 472-475.	5.03
1176	SUPRIYA KAVALI, SHOBHA, D. AND SHEKAR NAIK, R., 2020, Effect of cooking on nutritional and anti-nutritional components of quinoa incorporated products. <i>The Pharma Innovation J.</i> , 9(5): 346-353.	5.03
1177	UMA M.S. AND USHA RAVINDRA, 2020, Economic impact of cultivation of nutritive crop varieties by Soliga farmers at MM Hills of Karnataka. <i>The Pharma Innovation J.</i> , 9(125):101-104	5.03
1178	YAMANURA AND MOHAN KUMAR, R., 2020, Study of genetic variability, path coefficient and genetic diversity in castor (<i>Ricinus communis</i> L.). <i>The Pharma Innovation J.</i> , 9(8):285-292.	5.03
1179	KAMALA BAI, S., SYED MAZHAR ALI, KESHAVA REDDY, G., LATHA R. KULKARNI AND RANGANATH, S.C., 2020, Impact of improved production technology and mechanized decortications of groundnut (<i>Arachis hypogea</i> L.) on productivity and income of farmers in Ramanagara district of Karnataka. <i>J. Oilseed Res.</i> , 36 (1): 105-109.	5.02
1180	MOHAN KUMAR, R. AND YAMANURA, 2020, Performance of castor <i>Ricinus communis</i> L. hybrids and varieties under rainfed Alfisols. <i>J. Oilseeds Research</i> , 37 (Spl.):144 -145.	5.02

Sl. No.	Article	NAAS rating
1181	YAMANURA AND MOHAN KUMAR, R., 2020, Agro-morphological characterization of castor <i>Ricinus communis</i> L. genotypes. <i>J. Oilseeds Res.</i> , 37 (Spl.) 143 -144.	5.02
1182	SRAVIKA, A., SHYLESHA, A.N., JAGADHEESH, K.S., SHIVALINGASWAMY T.M., NAGARAJU, N. AND SHESHASHAYEE, M.S., 2020, Biology and potential pf pentatomid predator <i>Eocanthecona furcellata</i> (Hemiptera: Pentatomidae) on fall army worm, <i>Spodoptera furgiperda</i> (Smith). <i>J. Biol. Control</i> , 34 (1):26-29.	5.00

Annexure 7: Participation of Faculty in Seminars / Symposia / Workshops / Conferences during the reporting period

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1	2016-17	CoA, GKVK	International	Dr. G.N. Nagaraja	3 rd International Agribusiness Congress 2016
2	2016-17	CoA, GKVK	International	Dr. Sharanappa	4 th International Agronomy Congress
3	2016-17	CoA, GKVK	International	Dr. Veena S Anil	Female Leaders in Agricultural and Crop Sciences
4	2016-17	CoA, GKVK	International	Dr. D.L. Savithamma	Genetic and Protein Engineering, Atlanta, Georgia, USA
5	2016-17	CoA, GKVK	International	Dr. V.V. Belavadi	International Agro Biodiversity Congress
6	2016-17	CoA, GKVK	International	Dr. M. Vasundhara	International Seminar Congress & Expo- New Delhi
7	2016-17	CoA, Hassan	International	Dr. G.G. Kadalli	To undergo Hands on Experience on Phytoliths
8	2016-17	CoA, Hassan	International	Dr. N. Devakumar	BIOFAC India - 2017, Organic World Congress, Noida
9	2016-17	CoA, Hassan	International	Dr. N. Devakumar	Trade Fair on Millets and Organics, Bangalore
10	2016-17	CoS, Chintamani	International	Dr. M. Pappi Reddy	Genetic and Protein Engineering, Atlanta, Georgia, USA
11	2016-17	CoS, Chintamani	International	Dr. M. Pappi Reddy	Green Technologies for Sustainable Ecosystem and Trade Show, St. Joseph College, Bengaluru, Karnataka
12	2016-17	CoS, Chintamani	International	Dr. M.V. Srinivas Reddy	Innovative Digital Applications for Sustainable Development, UAS, Bangalore
13	2016-17	CoS, Chintamani	International	Dr. M. Pappi Reddy	Innovative Digital Applications for Sustainable Development, UAS, Bangalore
14	2016-17	CoS, Chintamani	International	Mrs. V.P. Bharati	Sericulture and Silk Industry - Silk for the Green World and Sustainable Development, Bangkok, Thailand
15	2016-17	Directorate of Extn.	International	Dr. K.N. Srinivasappa	Horticulture, Extension and Related Fields
16	2016-17	Directorate of Extn.	International	Dr. K.N. Srinivasappa	American Society for Horticulture Science
17	2016-17	Directorate of Extn.	International	Dr. D. Raghupathi	Innovative Digital Applications for Sustainable Development, UAS, Bangalore
18	2016-17	Directorate of Extn.	International	Dr. M.H. Shankara	Innovative Digital Applications for Sustainable Development, UAS, Bangalore
19	2016-17	Directorate of Extn.	International	Mr. Chandrashekhara S. Kallimani	Sericulture and Silk Industry - Silk for the Green World and Sustainable Development, Bangkok, Thailand
20	2016-17	Directorate of Research	International	Dr. B.C. Mallesha	Mushroom Production and Processing
21	2016-17	Directorate of Research	International	Dr. B.V. Krishnamurthy	Responsible Aquaculture Development for Food Security and Economic Progress

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
22	2016-17	Directorate of Research	International	Dr. R. Muthuraju	Agricultural Sciences and Food Technologies for Sustainable Productivity and Nutritional Security
23	2016-17	Directorate of Research	International	Dr. Umashankar	Interactions of Plant Growth Promoting Rhizo bacteria and Microbial Energy Production
24	2016-17	CoA, GKVK	National	Dr. Veena S Anil	IBSC meeting NITTE, Mangalore
25	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Annual Group Meet on Pulses
26	2016-17	CoA, GKVK	National	Dr. R. Jayanthi	Annual Group Meeting
27	2016-17	CoA, GKVK	National	Dr. K.B. Umesh	Annual Review Meeting of ISCB Project on Ragi
28	2016-17	CoA, GKVK	National	Dr. K.B. Umesh	Annual Review Meeting of ISCB Project on Ragi
29	2016-17	CoA, GKVK	National	Dr. C.P. Gracy	Annual Review workshop KAPC project on COC & Market Intelligence Cell
30	2016-17	CoA, GKVK	National	Dr. M.S. Jayaram	Annual Review Workshop Network Project on Market Intelligence
31	2016-17	CoA, GKVK	National	Dr. C.P. Gracy	Annual Review Workshop Network Project on Market Intelligence
32	2016-17	CoA, GKVK	National	Dr. C.P. Gracy	Annual Review Workshop NIAP Project on Market Intelligence
33	2016-17	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Review Meeting of Agri-CRP on Water
34	2016-17	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Review of IMRD Program and Inclusion of VLIR – Track in to IMRD
35	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	GIS Digital Library
36	2016-17	CoA, GKVK	National	Dr. G.C. Jayashree	Tractors and Farm Equipment
37	2016-17	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	3rd Workshop Interaction Meeting of the Project
38	2016-17	CoA, GKVK	National	Dr. P.H. Ramanjini Gowda	4 th Annual South Asia Biosafety
39	2016-17	CoA, GKVK	National	Dr. P.H. Ramanjini Gowda	5 th Innovators Meet
40	2016-17	CoA, GKVK	National	Dr. B.V. Chinnappa Reddy	76 th Annual Conference of IJAE
41	2016-17	CoA, GKVK	National	Dr. T. Chikkaramappa	81 st Annual Convention of Indian Society of Soil Science
42	2016-17	CoA, GKVK	National	Dr. Neena Joshi	Advance in Science and Technology, Eternal University, Baru Saheb
43	2016-17	CoA, GKVK	National	Dr. A. Sathish	Advanced Geospatial Application for Grass Root Governance, TRIMBLE, ITC Windsor, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
44	2016-17	CoA, GKVK	National	Dr. Usha Ravindra	Agriculture in Mass media
45	2016-17	CoA, GKVK	National	Dr. R. Jayanthi	AICRP on Farm Implements and Machinery
46	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	ATCHA Project – NBSS & LUP
47	2016-17	CoA, GKVK	National	Dr. K. Murali Mohan	Behavioural Ecology and Management of Agriculturally Important Animals
48	2016-17	CoA, GKVK	National	Dr. S. Ramesh	Climate Change Adaptation and Biodiversity: Ecological sustainability and Resource Management for Livelihood
49	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Composting of Urban Solid Waste and Faecal Sludge for Agricultural Use – CDD Society
50	2016-17	CoA, GKVK	National	Dr. R. Krishna Manohar	Cotton, Maize, Vegetable and Post-Harvest Technology
51	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	DPR Preparation for Saturation Districts
52	2016-17	CoA, GKVK	National	Mr. B.A. Anand	Eco Friendly Renewable Energy Technologies for sustainable Power Generation and Energy Conservation
53	2016-17	CoA, GKVK	National	Dr. V. Govinda Gowda	Emerging Challenges & Opportunities in Agriculture
54	2016-17	CoA, GKVK	National	Dr. A. Mohan Rao	Enhancing Employability of Agricultural Graduates
55	2016-17	CoA, GKVK	National	Dr. M. Shivamurthy	Enhancing Nutritional Security through Climate Smart Farming Practices
56	2016-17	CoA, GKVK	National	Dr. K.B. Umesh	Environmental Impact Assessment
57	2016-17	CoA, GKVK	National	Mr. K.S. Rajashekarappa	Farmers Strategies for Adaption World Food Day - 2016
58	2016-17	CoA, GKVK	National	Dr. M. Shivamurthy	Food Security in India: The Interactions of Climate Change, Economics, Politics & trade
59	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Food Security Issues and Environmental Challenges for Indian Agriculture in the Next Decades
60	2016-17	CoA, GKVK	National	Dr. M.N. Venkataramana	GOI- CCS
61	2016-17	CoA, GKVK	National	Dr. R. Krishna Manohar	Green House Technology to the Officers
62	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Hydrology
63	2016-17	CoA, GKVK	National	Dr. D. Vijayalakshmi	Importance of Millets
64	2016-17	CoA, GKVK	National	Dr. M. Shivamurthy	Information and Communication Management Concerning Climate Smart Agriculture for Sustainable Development and Poverty Alleviation

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
65	2016-17	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Interaction Meet with Farmers, Scientists and Officials of Department of Horticulture, GOK
66	2016-17	CoA, GKVK	National	Dr. G.N. Nagaraja	Investment Opportunities in Pennsylvania
67	2016-17	CoA, GKVK	National	Dr. M.R. Girish	ISCB – Genetic Enhancement and Bio-availability of Finger Millet (Ragi)
68	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	ISSS 81 st Annual Convention
69	2016-17	CoA, GKVK	National	Dr. S. Rangaiah	Karnataka Agricultural Engineers Association
70	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	Karnataka Multy-Sectorial Nutrition Pilot Project
71	2016-17	CoA, GKVK	National	Dr. M. Shivamurthy	Karnataka State Water Policy with Special Reference to Climate Change
72	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	NAMASTE Programme
73	2016-17	CoA, GKVK	National	Dr. V.V. Belavadi	National Entomologists Meet
74	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	National Trade Fair-2017 Organic & Millets Curtain Raising Ceremony
75	2016-17	CoA, GKVK	National	Dr. S. Ramesh	NGS Data Analysis
76	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	Organic & Millets for Health
77	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	Organic & Millets for Health
78	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	Organic & Millets for Health
79	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	Organic & Millets for Health
80	2016-17	CoA, GKVK	National	Dr. R. Krishna Manohar	Precession Farming, Drip irrigation – Quality control, Poly House and Green House Structures to the Farmers
81	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Preparation of DPR FPR Saturation of Hebbur Sub Watershed
82	2016-17	CoA, GKVK	National	Dr. S. Shyamamma	Promotion of Jackfruit as Livelihood Enterprise
83	2016-17	CoA, GKVK	National	Dr. Shailaja Hittalamani	RCGM meeting
84	2016-17	CoA, GKVK	National	Mr. B.A. Anand	Real Time simulation of power Electronics, Power Systems, Control and Instrumentation using LABVIEW
85	2016-17	CoA, GKVK	National	Dr. R.N. Bhaskar	Responsible Use of Antibiotics in Medical, Veterinary, Agriculture and Aquaculture
86	2016-17	CoA, GKVK	National	Dr. Veena S Anil	Science Week - 2016
87	2016-17	CoA, GKVK	National	Dr. H.C. Prakasha	Science Week - 2016

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
88	2016-17	CoA, GKVK	National	Dr. M. Shivamurthy	Small Farmers Production Systems: Way Forward
89	2016-17	CoA, GKVK	National	Mr. B.A. Anand	Smart Grid Technologies: Recent Initiatives, Challenges and Opportunities
90	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	Socio Economic Survey
91	2016-17	CoA, GKVK	National	Dr. M.R. Girish	Strategies for Development of Rural Livelihoods
92	2016-17	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Sustainable Agriculture: Perspectives and Development, New Delhi.
93	2016-17	CoA, GKVK	National	Dr. H.G. Ashoka	Testing of Agriculture Machinery
94	2016-17	CoA, GKVK	National	Dr. M.R. Girish	UAS (B) - Infosys Collaboration
95	2016-17	CoA, GKVK	National	Dr. R. Krishna Manohar	Water Management in Horticulture Crops Green House Technology and Drip Irrigation System
96	2016-17	CoA, GKVK	National	Dr. M. Chandre Gowda	World Cashew Convention
97	2016-17	CoA, GKVK	National	Dr. L. Krishna Naik	XIII Agricultural Science Congress, UAS, Bengaluru
98	2016-17	CoA, GKVK	National	Dr. Fatima Sadatulla	XIII Agricultural Science Congress, UAS, Bengaluru
99	2016-17	CoA, GKVK	National	Dr. Neelu Nangia	XIII Agricultural Science Congress, UAS, Bengaluru
100	2016-17	CoA, GKVK	National	Dr. Chikkalingaiah	XIII Agricultural Science Congress, UAS, Bengaluru
101	2016-17	CoA, GKVK	National	Dr. S. Chandrashekar	XIII Agricultural Science Congress, UAS, Bengaluru
102	2016-17	CoA, GKVK	National	Dr. T.K. Narayanaswamy	XIII Agricultural Science Congress, UAS, Bengaluru
103	2016-17	CoA, GKVK	National	Dr. H.B. Shivaleela	XIII Agricultural Science Congress, UAS, Bengaluru
104	2016-17	CoA, GKVK	National	Dr. Usha Ravindra	XIII Agricultural Science Congress, UAS, Bengaluru
105	2016-17	CoA, GKVK	National	Dr. K.G. Vijayalakshmi	XIII Agricultural Science Congress, UAS, Bengaluru
106	2016-17	CoA, GKVK	National	Dr. K.G. Vijayalakshmi	XIII Agricultural Science Congress, UAS, Bengaluru
107	2016-17	CoA, GKVK	National	Dr. R.N. Bhaskar	XIII Agricultural Science Congress, UAS, Bengaluru
108	2016-17	CoA, GKVK	National	Dr. G.P. Brahmaprakash	XIII Agricultural Science Congress, UAS, Bengaluru
109	2016-17	CoA, GKVK	National	Dr. T. Chikkaramappa	XIII Agricultural Science Congress, UAS, Bengaluru
110	2016-17	CoA, GKVK	National	Dr. G.R. Hareesh	XIII Agricultural Science Congress, UAS, Bengaluru
111	2016-17	CoA, GKVK	National	Dr. H.C. Prakasha	XIII Agricultural Science Congress, UAS, Bengaluru
112	2016-17	CoA, GKVK	National	Dr. J. Saralakumari	XIII Agricultural Science Congress, UAS, Bengaluru

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
113	2016-17	CoA, GKVK	National	Dr. N.B. Prakash	XIII Agricultural Science Congress, UAS, Bengaluru
114	2016-17	CoA, GKVK	National	Dr. C.T. Ramachandra	XIII Agricultural Science Congress, UAS, Bengaluru
115	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	XIII Agricultural Science Congress, UAS, Bengaluru
116	2016-17	CoA, GKVK	National	Dr. T.C. Chamegowda	XIII Agricultural Science Congress, UAS, Bengaluru
117	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	XL Indian Social Science Congress – 2016
118	2016-17	CoA, GKVK	National	Dr. V.R.R. Parama	XXIX Annual Conference of National Environmental Science Academy
119	2016-17	CoA, Hassan	National	Dr. R. Vinay Kumar	Personality Development Programme to Post Graduate Faculty
120	2016-17	CoA, Hassan	National	Dr. B. Tambat	Abiotic & Heavy Metal Stress Management in Crop through Physiology Phyto Remediation & Proximate Sensing Approaches
121	2016-17	CoA, Hassan	National	Dr. K.S. Shashidhara	Advances & Accomplishment of Innovative Resistance Breeding Techniques in Crop Improvement
122	2016-17	CoA, Hassan	National	Mr. A.S. Kamble	Application of Advanced Statistical Tools in Agril Research
123	2016-17	CoA, Hassan	National	Dr. B.S. Basavaraju	Behavioural Ecology and Management of Agriculturally Important Insects and Other Animals
124	2016-17	CoA, Hassan	National	Dr. B. Veena	Engineering & Tech. Innovations in Developing Health Foods
125	2016-17	CoA, Hassan	National	Dr. G. Nagesha	Experiencing Advanced Analytical Method in Agril. Extension Research
126	2016-17	CoA, Hassan	National	Dr. N. Devakumar	Food Industries Leaders Consortium for Organic Millets (Filcom), Cochin
127	2016-17	CoA, Hassan	National	Dr. N. Umashankar Kumar	Frontiers in Life Sciences – 2017
128	2016-17	CoA, Hassan	National	Mr. Shivabasappa	Jio Web Services & Jio Portal Application
129	2016-17	CoA, Hassan	National	Dr. B.T. Krishnaprasad	National Agricultural Science Congress
130	2016-17	CoA, Hassan	National	Mrs. H.N. Ramya	Packaging Waste Challenges and Opportunities
131	2016-17	CoA, Hassan	National	Dr. Prakash Koler	Physiological & Molecular Aspects of Improving the Crop Adaptation to Drought
132	2016-17	CoA, Hassan	National	Dr. B.T. Krishnaprasad	Plant Physiology
133	2016-17	CoA, Hassan	National	Dr. M.S.P. Kanavi	Pre-breeding Using Wild Species for Sustainable Yield in Crops
134	2016-17	CoA, Hassan	National	Dr. H.C. Girisha	Probiotics the Therapeutics of 21 st Century
135	2016-17	CoA, Hassan	National	Mr. Vishwantha Angadi	Probiotics the Therapeutics of 21 st Century

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
136	2016-17	CoA, Hassan	National	Dr. S. Raghavendra	Remote Sensing & GIS in Forestry & Ecology
137	2016-17	CoA, Hassan	National	Dr. R. Vinay Kumar	Science and Technology: Future Challenges and Solutions (STFCS-2016)
138	2016-17	CoA, Hassan	National	Dr. B.S. Basavaraju	XI National Symposium on Soil Biology & Ecology
139	2016-17	CoA, Hassan	National	Dr. N. Umashankar Kumar	XI National Symposium on Soil Biology & Ecology
140	2016-17	CoA, Hassan	National	Dr. N. Umashankar Kumar	XI National Symposium on Soil Biology & Ecology
141	2016-17	CoA, Mandya	National	Dr. V.B. Sanath Kumar	KVK Annual Review Workshop
142	2016-17	CoA, Mandya	National	Dr. M.S. Uma	Agrobiodiversity Conservation, Sustainable Livelihoods and Need for Climate Change Adaptation
143	2016-17	CoA, Mandya	National	Dr. S.B. Yogananda	Capacity Building and Skill Development in Hybrid Seed Production Technology
144	2016-17	CoA, Mandya	National	Mr. D.S. Janardhan	Emerging Trends in Communication and Essential Skills Sets of Extension Professionals for Effective Technology Transfer
145	2016-17	CoA, Mandya	National	Dr. D. Raghupathi	ICAR Short course on Competency Skill Enhancement for Extension Professionals
146	2016-17	CoA, Mandya	National	Dr. N. Kiran Kumar	Personality Development and Self-Motivation for Enhanced Performance of Agricultural Scientists
147	2016-17	CoA, Mandya	National	Dr. S.B. Yogananda	Right to Information Act 2005
148	2016-17	CoA, Mandya	National	Dr. S.B. Yogananda	Training cum Interaction Meet on Seed Production Technology
149	2016-17	CoA, Mandya	National	Dr. M.S. Uma	Varietal Registration Meeting & Inter Institutional Consultative Meeting on Issues Related to GM crops
150	2016-17	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Community Radio Station Establishment
151	2016-17	CoA, Mandya	National	Dr. H.C. Lohithaswa	Importance and Impact of Genome Editing Technology
152	2016-17	CoA, Mandya	National	Dr. H.C. Lohithaswa	Role of plant breeding and genetics in meeting sustainable development goals
153	2016-17	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Strengthening of Extension Technologies
154	2016-17	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Strengthening of Extension Technologies
155	2016-17	CoA, Mandya	National	Dr. M.S. Uma	Sustainable and Self - Sufficient Production of Pulses through an Integrated Approach
156	2016-17	CoA, Mandya	National	Dr. K. Pushpa	Sustainable Organic Production Practices an Approach to Mitigate Climate Change and Rural Livelihood Security

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
157	2016-17	CoA, Mandya	National	Dr. H.C. Lohithaswa	Workshop on Interface between Private and Public Sector Breeders
158	2016-17	CoA, Mandya	National	Dr. H.C. Lohithaswa	XIII Agricultural Science Congress, UAS, Bengaluru
159	2016-17	CoA, Mandya	National	Dr. N. Kiran Kumar	XIII Agricultural Science Congress, UAS, Bengaluru
160	2016-17	CoA, Mandya	National	Dr. S.B. Yogananda	XIII Agricultural Science Congress, UAS, Bengaluru
161	2016-17	CoA, Mandya	National	Dr. V.B. Sanath Kumar	ZREP - Zone 6, ZARS, Mandya
162	2016-17	CoS, Chintamani	National	Dr. D.V. Naveen	Examiner for Setting Question Paper for Andhra Pradesh Public Service Commission
163	2016-17	CoS, Chintamani	National	Mrs. V.P. Bharati	Examiner for Setting Question Paper for Public Service Commission, Odisha
164	2016-17	CoS, Chintamani	National	Dr. Karale Gangadhar Yamaji	Agricultural & Rural innovations for Sustainable Empowerment (ARISE-2016)
165	2016-17	CoS, Chintamani	National	Dr. M. Savitha	Challenges in Crop Physiology Research: From Molecular to Whole Plant, Dept. of Crop Physiology GKVK, Bangalore
166	2016-17	CoS, Chintamani	National	Dr. Manjunath Gowda	Innovations in Biological Research on Health and Disease, CSIR-CFTRI, Mysuru, India
167	2016-17	CoS, Chintamani	National	Dr. Manjunath Gowda	Management of Amur Common Carp, Fisheries Research & information Centre (Inland), Bengaluru
168	2016-17	CoS, Chintamani	National	Dr. M. Mahesh	Recent Trends in Plant Pathological Research and Education, Department of Plant Pathology, UAS, Raichur
169	2016-17	Directorate of Extn.	National	Dr. K.H. Nagaraj	Annual Review Zonal Level
170	2016-17	Directorate of Extn.	National	Mr. A.B. Mohankumar	KVK 8th Zonal Meet
171	2016-17	Directorate of Extn.	National	Mr. H.R. Umesh	Advances in Soil Testing and Soil Test Crop Response (STCR) Based Fertilizer Management, ICAR-IISS, Bhopal
172	2016-17	Directorate of Extn.	National	Dr. N. Manjula	Agriculture in Mass media
173	2016-17	Directorate of Extn.	National	Mr. Syed Mohammed Ali	Conservation Agriculture & Mechanization Sustainable Intensification in Karnataka
174	2016-17	Directorate of Extn.	National	Dr. Deveraja	Establishment of Mother Cultures of Different Bio-control Agents & Mycorrhiza
175	2016-17	Directorate of Extn.	National	Dr. B. Manjunath	Establishment of Mother Cultures of Different Bio-control Agents & Mycorrhiza
176	2016-17	Directorate of Extn.	National	Dr. B.G. Hanumantharaya	Fruit wealth on Indian Perspective
177	2016-17	Directorate of Extn.	National	Dr. N. Manjula	Gram Panchayath Development Plan
178	2016-17	Directorate of Extn.	National	Mr. Atheekur Rehman	Integrated Farming System for Sustainable Livelihood

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
179	2016-17	Directorate of Extn.	National	Dr. T.S. Manjunathaswamy	Madyamagalalli Krishi
180	2016-17	Directorate of Extn.	National	Dr. M. Padmavathi	Personality Development and Self-Motivation for Enhanced Performance of Agricultural Scientists
181	2016-17	Directorate of Extn.	National	Dr. N. Manjula	Personality Development Programme to Post Graduate Faculty
182	2016-17	Directorate of Extn.	National	Mrs. Geetha M Yankanchi	Personality Development Programme to Post Graduate Faculty
183	2016-17	Directorate of Extn.	National	Dr. H.K. Pankaja	Personality Development Programme to Post Graduate Faculty
184	2016-17	Directorate of Extn.	National	Dr. S. Kamala Bai	PMKSY
185	2016-17	Directorate of Extn.	National	Dr. Deveraja	Post-Harvest Management and Seeds
186	2016-17	Directorate of Extn.	National	Dr. S. Kamala Bai	Precision Conservation Agriculture for Climate Change Adaptation & Mitigation in Cereals
187	2016-17	Directorate of Extn.	National	Dr. B.G. Hanumantharaya	Production of Quality Seed & Planting Material in Horticulture Crops & Cultivation
188	2016-17	Directorate of Extn.	National	Dr. M. Shalini	Protected Cultivation of High Value Horticulture Crops, UAS, Bangalore
189	2016-17	Directorate of Extn.	National	Dr. G. Keshav Reddy	Regional Plant Health System Analysis
190	2016-17	Directorate of Extn.	National	Dr. Manjunath Gowda	Right to Information Act 2005
191	2016-17	Directorate of Extn.	National	Dr. T.S. Manjunathaswamy	Rural Entrepreneurship Development
192	2016-17	Directorate of Extn.	National	Dr. N. Manjula	Skill Development in Agriculture
193	2016-17	Directorate of Extn.	National	Dr. N. Manjula	SREP Preparation
194	2016-17	Directorate of Extn.	National	Dr. H.K. Pankaja	Strategic Research Extension Programme for Field Functionaries
195	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Adoption of Information and Communication Tools in Agriculture
196	2016-17	Directorate of Extn.	National	Dr. M.R. Anand	Conservation Agriculture & Mechanization Sustainable Intensification in Karnataka
197	2016-17	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Doubling of Farmers Income by 2022
198	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Emerging Trends in Plant Health Management in Relation to Climate Change, College of Horticulture, GKVK, UHS, Bagalkot
199	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Establishment of Mother Cultures of Different Bio-control Agents & Mycorrhiza

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
200	2016-17	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Food Security Issues and Environmental Challenges for Indian Agriculture in the Next Decades
201	2016-17	Directorate of Extn.	National	Dr. M.R. Anand	Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming
202	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming
203	2016-17	Directorate of Extn.	National	Dr. B.G. Vasanthi	Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming
204	2016-17	Directorate of Extn.	National	Dr. K.H. Nagaraj	Frontline Extension Programmes for Realizing Higher Productivity and Profitability in Farming
205	2016-17	Directorate of Extn.	National	Dr. B. Manjunath	Importance and Impact of the Genome Editing (CRISPR) Technology and GM Crops
206	2016-17	Directorate of Extn.	National	Dr. B.G. Hanumantharaya	Skill Development in Agriculture
207	2016-17	Directorate of Extn.	National	Dr. M. Padmavathi	Strategic Research Extension Programme for Field Functionaries
208	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Sustainable & Self-Sufficient Production of Pulses Through an Integrated Approach
209	2016-17	Directorate of Extn.	National	Dr. B. Manjunath	Sustainable & Self-Sufficient Production of Pulses Through an Integrated Approach
210	2016-17	Directorate of Extn.	National	Mr. Atheekur Rehman	Sustainable Food and Agriculture-Role of Fertilizer Policy
211	2016-17	Directorate of Extn.	National	Dr. H.S. Mamatha	Techno-vision 2035 at Visvesvaraya Industrial and Technologies Museum, Bangalore
212	2016-17	Directorate of Extn.	National	Mrs. G.R. Aruna	Value Addition to Seri By-products
213	2016-17	Directorate of Extn.	National	Dr. K. Narayanagowda	XIII Agricultural Science Congress, UAS, Bengaluru
214	2016-17	Directorate of Extn.	National	Dr. B.N. Manjunatha	XIII Agricultural Science Congress, UAS, Bengaluru
215	2016-17	Directorate of Extn.	National	Dr. V.L. Madhuprasad	XIII Agricultural Science Congress, UAS, Bengaluru
216	2016-17	Directorate of Extn.	National	Dr. M. Shalini	XIII Agricultural Science Congress, UAS, Bengaluru
217	2016-17	Directorate of Extn.	National	Dr. S.V. Suresha	XIII Agricultural Science Congress, UAS, Bengaluru
218	2016-17	Directorate of Extn.	National	Dr. H.S. Mamatha	XIII Agricultural Science Congress, UAS, Bengaluru
219	2016-17	Directorate of Extn.	National	Dr. S. Shamshad Begum	XIII Agricultural Science Congress, UAS, Bengaluru
220	2016-17	Directorate of Extn.	National	Dr. Banu Deshpande	XIII Agricultural Science Congress, UAS, Bengaluru
221	2016-17	Directorate of Extn.	National	Dr. H.K. Pankaja	XIII Agricultural Science Congress, UAS, Bengaluru

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
222	2016-17	Directorate of Extn.	National	Mr. C.V. Venkatesha Murthy	XIII Agricultural Science Congress, UAS, Bengaluru
223	2016-17	Directorate of Extn.	National	Dr. K. Shivaramu	XIII Agricultural Science Congress, UAS, Bengaluru
224	2016-17	Directorate of Extn.	National	Dr. Narayanareddy	XIII Agricultural Science Congress, UAS, Bengaluru
225	2016-17	Directorate of Extn.	National	Mr. Atheekur Rehman	XIII Agricultural Science Congress, UAS, Bengaluru
226	2016-17	Directorate of Extn.	National	Dr. K.R. Shreenivasa	XIII Agricultural Science Congress, UAS, Bengaluru
227	2016-17	Directorate of Extn.	National	Dr. B. Manjunath	XIII Agricultural Science Congress, UAS, Bengaluru
228	2016-17	Directorate of Research	National	Dr. B.V. Krishnamurthy	Evaluation of the Project Proposal: 11th Meeting of Expert Committee
229	2016-17	Directorate of Research	National	Dr. R. Muthuraju	Life Skills Training Workshop for NSS officers
230	2016-17	Directorate of Research	National	Dr. R. Muthuraju	Microbial Technologies to Mitigate Climate Change Impacts
231	2016-17	Directorate of Research	National	Dr. Umashankar	Soil Biology and Ecology
232	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	2nd KVK Symposium on Tech Delivery Mechanism for Higher Productivity and Profitability
233	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	2nd KVK Symposium on Tech Delivery Mechanism for Higher Productivity and Profitability
234	2016-17	Directorate of Research	National	Dr. Jahir Basha	AICRP (G) Workshops at Junagadh, Gujarat
235	2016-17	Directorate of Research	National	Dr. Jahir Basha	AICRP (G) Workshops at Junagadh, Gujarat
236	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	Conservation Agriculture and Farm Mechanization for Sustainable Intensification in Karnataka
237	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	Conservation Agriculture and Farm Mechanization for Sustainable Intensification in Karnataka
238	2016-17	Directorate of Research	National	Dr. Jagannath Olekar	National Workshop on CCS
239	2016-17	Directorate of Research	National	Dr. Jahir Basha	Plant Protection and Health Management
240	2016-17	Directorate of Research	National	Dr. Jahir Basha	Plant Protection and Health Management
241	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	Pulse Production Technology
242	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	Pulse Production Technology
243	2016-17	Directorate of Research	National	Dr. V.C. Suvarana	XIII Agricultural Science Congress, UAS, Bengaluru

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
244	2016-17	Directorate of Research	National	Dr. Umashankar	XIII Agricultural Science Congress, UAS, Bengaluru
245	2016-17	Directorate of Research	National	Dr. B.V. Krishnamurthy	XIII Agricultural Science Congress, UAS, Bengaluru
246	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	XIII Agricultural Science Congress, UAS, Bengaluru
247	2016-17	Directorate of Research	National	Dr. Syed Mazar Ali	XIII Agricultural Science Congress, UAS, Bengaluru
248	2017-18	CoA, GKVK	International	Dr. V.R.R. Parama	Bi monthly Review of Indo German project
249	2017-18	CoA, GKVK	International	Dr. K.B. Umesh	Bi-Monthly Review Meeting of Indo-German Project
250	2017-18	CoA, GKVK	International	Dr. K. Chandrashekar	Indo-German Collaborative Research Project, UAS, Bangalore
251	2017-18	CoA, GKVK	International	Dr. K.B. Umesh	International Summer School
252	2017-18	CoA, GKVK	International	Mr. Naresh Annem	Images of Women: Exploration of Thamma in the Shadow Lines of Amitav Ghosh
253	2017-18	CoA, GKVK	International	Mr. Naresh Annem	Contemporary Musing of World Literature
254	2017-18	CoA, GKVK	International	Dr. P. Venkatesha Murthy	Current Trends in Biosciences
255	2017-18	CoA, GKVK	International	Dr. B.N. Sathyanarayana	Current Trends in Biosciences
256	2017-18	CoA, GKVK	International	Dr. A. Vidya	Current Trends in Biosciences
257	2017-18	CoA, GKVK	International	Mr. Naresh Annem	Dweepa-in Aquatic Literature
258	2017-18	CoA, GKVK	International	Dr. M. Shivamurthy	Food Science and Bioprocess Technology
259	2017-18	CoA, GKVK	International	Dr. M. Shivamurthy	Indian and German Researchers under the Collaborating Agreements between DST & DFG
260	2017-18	CoA, GKVK	International	Dr. B.V. Chinnappa Reddy	International Co-operation, DBT New Delhi
261	2017-18	CoA, GKVK	International	Dr. B.V. Chinnappa Reddy	Mobility, Employability and Internationalization of Indian Higher Education System
262	2017-18	CoA, Hassan	International	Dr. B.S. Basavaraju	Recent trend in Agriculture, Biotechnology & Food processing
263	2017-18	CoA, Mandya	International	Dr. S.B. Yogananda	Silicon in Agriculture, UAS, GKVK, Bangalore
264	2017-18	CoA, Mandya	International	Dr. S.S. Prakash	The International Conference ASEAN+6 Organic Forum
265	2017-18	CoA, Mandya	International	Dr. K.V. Shivakumar	Weeds and Society: Challenges and Opportunities
266	2017-18	CoS, Chintamani	International	Mr. Rudragouda Chilur	Annual Congress-2017 on the Post Graduate institute of Agriculture, PGIA, University of Peradeniya, Sri Lanka

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267	2017-18	CoS, Chintamani	International	Dr. M. Mahesh	Global Research Initiatives for Sustainable Agriculture & Allied Sciences, MPUAT, Udaipur, Rajasthan, India
268	2017-18	CoS, Chintamani	International	Dr. M. Savitha	India Nano 2017, Dept. of IT BT and S&T, Govt. of Karnataka
269	2017-18	CoS, Chintamani	International	Dr. R. Manjunatha	Recent Trends in Agriculture, Biotechnology & Food Processing, Hassan
270	2017-18	Directorate of Extn.	International	Dr. Vijayalaxmi Kamaraddi	Food Properties, Sharjah, Dubai, UAE
271	2017-18	Directorate of Extn.	International	Dr. K. Narayanagowda	Forestry Extension, Evora, Portugal
272	2017-18	Directorate of Extn.	International	Mr. H.R. Umesh	Silicon in Agriculture, UAS, GKVK, Bangalore
273	2017-18	Directorate of Extn.	International	Dr. S. Channakeshava	Silicon in Agriculture, UAS, GKVK, Bangalore
274	2017-18	Directorate of Extn.	International	Dr. V.L. Madhuprasad	Wild Silk Moths, Guwahati Assam
275	2017-18	Directorate of Research	International	Dr. Umashankar	Dr. B.R. Ambedkar International Conference
276	2017-18	CoA, GKVK	National	Dr. M. Vasundhara	11 th Annual Review Meeting of the schemes on Spices & Aromatic Plants -Mission for Integrated Development of Horticulture (MIDH) Under NHM-CSS
277	2017-18	CoA, GKVK	National	Dr. A. Nagaraja	Annual Group Meeting
278	2017-18	CoA, GKVK	National	Dr. K.B. Umesh	Annual Review Workshop of Indo-German Project (Food insecurity project)
279	2017-18	CoA, GKVK	National	Dr. K.B. Umesh	Annual Review Workshop of ISCB (Ragi Project)
280	2017-18	CoA, GKVK	National	Dr. V.V. Belavadi	Indo-German Collaborative Research Project, UAS, Bangalore
281	2017-18	CoA, GKVK	National	Dr. B.V. Chinnappa Reddy	Meeting convened by Deputy Commissioner
282	2017-18	CoA, GKVK	National	Dr. C.P. Gracy	Millet for Dieticians / Chefs'
283	2017-18	CoA, GKVK	National	Dr. T. Chikkaramappa	Partners Progress Review Meeting of KWDP-II (Sujala-III) in Watershed Development
284	2017-18	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Review Meeting of Agri-CRP on Water
285	2017-18	CoA, GKVK	National	Dr. R. Jayanthi	Review Meeting on Seed Production
286	2017-18	CoA, GKVK	National	Dr. B.V. Chinnappa Reddy	Review of Data Management Infrastructure
287	2017-18	CoA, GKVK	National	Dr. C.P. Gracy	Capacity Building Programme for Arecanut

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
288	2017-18	CoA, GKVK	National	Dr. K.S. Somashekar	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
289	2017-18	CoA, GKVK	National	Mr. G. Ranganath	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
290	2017-18	CoA, GKVK	National	Dr. H.M. Atheekur Rehman	Training of Masters Trainers Training
291	2017-18	CoA, GKVK	National	Dr. M. Vasundhara	Training of Trainers for Skill Development Activities 2017-18
292	2017-18	CoA, GKVK	National	Dr. N.S. Shivalinge Gowda	17 th Professor- IFFCO Chair Conference
293	2017-18	CoA, GKVK	National	Dr. G.S. Mahadevaiah	25 th Annual AERA Conference
294	2017-18	CoA, GKVK	National	Dr. Murtuza Khan	25 th Annual AERA Conference
295	2017-18	CoA, GKVK	National	Mr. Naresh Annem	9 th TELF National Conference
296	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	Agribusiness Curriculum and Teaching Methodology Workshop
297	2017-18	CoA, GKVK	National	Dr. C.T. Ramachandra	Analytical, Instrumental & Imaging Techniques relevant to Food Safety Management
298	2017-18	CoA, GKVK	National	Dr. R. Vasantha Kumari	Application of Radioisotopes and Radiation Technology in Agriculture, Industry and Health care
299	2017-18	CoA, GKVK	National	Dr. A. Vidya	Application of Radioisotopes and Radiation Technology in Agriculture, Industry and Health care
300	2017-18	CoA, GKVK	National	Dr. S. Shamshad Begum	Backward and Forward Linkages in Food Processing Sector
301	2017-18	CoA, GKVK	National	Dr. K.G. Vijayalaxmi	Backward and Forward Linkages in Food Processing Sector
302	2017-18	CoA, GKVK	National	Dr. D. Vijayalakshmi	Backward and Forward Linkages in Food Processing Sector
303	2017-18	CoA, GKVK	National	Dr. Umadevi Hiremath	Backward and Forward Linkages in Food Processing Sector
304	2017-18	CoA, GKVK	National	Dr. K.V. Jamuna	Backward and Forward Linkages in Food Processing Sector
305	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Backward and Forward Linkages in Food Processing Sector
306	2017-18	CoA, GKVK	National	Dr. C.T. Ramachandra	Backward and Forward Linkages in Food Processing Sector
307	2017-18	CoA, GKVK	National	Dr. C.P. Gracy	Bamboo Cultivation and Industry - Interface
308	2017-18	CoA, GKVK	National	Dr. M.S. Ganapathy	Bioinformatics in Agriculture, NAARM, Hyderabad

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
309	2017-18	CoA, GKVK	National	Dr. Y.A. Nanjareddy	Bioinformatics in Agriculture, NAARM, Hyderabad
310	2017-18	CoA, GKVK	National	Dr. V.R.R. Parama	Climate change: State of science & policy in India
311	2017-18	CoA, GKVK	National	Dr. C.P. Gracy	COC & MI Cells
312	2017-18	CoA, GKVK	National	Dr. M.R. Girish	Cost of Cultivation and Market Intelligence Cells
313	2017-18	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Cost of Cultivation Scheme
314	2017-18	CoA, GKVK	National	Dr. Murukannappa	Design and Development of Processing Farm Machineries
315	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	Doing Business in Argentina
316	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	Dr.B.R.Ambedkar's Thoughts about Agriculture and Women.
317	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Dr.B.R.Ambedkar's Thoughts about Agriculture and Women.
318	2017-18	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Drought Management Strategies
319	2017-18	CoA, GKVK	National	Dr. C.P. Gracy	Emerging Scenario in Agribusiness-ICESAB
320	2017-18	CoA, GKVK	National	Mr. G. Ranganath	Emerging Scenario in Agribusiness-ICESAB
321	2017-18	CoA, GKVK	National	Dr. M.S. Ganapathy	Emerging Scenario in Agribusiness-ICESAB
322	2017-18	CoA, GKVK	National	Dr. M.R. Girish	Enhancing Farmers Income and Welfare
323	2017-18	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Enhancing Farmers' Income and Welfare in Karnataka, KAPC, GOK, Bengaluru
324	2017-18	CoA, GKVK	National	Dr. A.R. Radhakrishna	Enhancing Water and Nutrient Use Efficiency in Indian Farming System through Precision Agriculture
325	2017-18	CoA, GKVK	National	Dr. B. Krishnamurthy	Entrepreneurship Development and Management for Scientists and Technologists Working with Govt. Sector
326	2017-18	CoA, GKVK	National	Dr. Neena Joshi	Food Based Approaches for Translational Nutrition, Manasagangotri Campus, Mysuru
327	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Health Wellness through Organic and Millets
328	2017-18	CoA, GKVK	National	Dr. Neena Joshi	Highlight of Research and Extension Activities and New Proposal for FSN Faculty
329	2017-18	CoA, GKVK	National	Dr. T. Chikkaramappa	Implementing Partners and Procurement Officials of DOH & WDD Under KWDP - II (Sujala-III) in Watershed Development.
330	2017-18	CoA, GKVK	National	Dr. V.R.R. Parama	Incorporation of Hydrology Components in Atlas
331	2017-18	CoA, GKVK	National	Dr. C.T. Ramachandra	Indian Technology Congress

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
332	2017-18	CoA, GKVK	National	Dr. G.C. Jayashree	Indian Technology Congress
333	2017-18	CoA, GKVK	National	Dr. A.R. Radhakrishna	Indian Technology Congress
334	2017-18	CoA, GKVK	National	Dr. H.G. Ashoka	Indian Technology Congress
335	2017-18	CoA, GKVK	National	Dr. M.J. Anjan Kumar	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
336	2017-18	CoA, GKVK	National	Dr. K. Murali Mohan	Insect Resistance to Bt-toxins and Insecticides in Cotton
337	2017-18	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	International Research and Training Group (IRTG)
338	2017-18	CoA, GKVK	National	Dr. M. Shivamurthy	International Research and Training Group (IRTG)
339	2017-18	CoA, GKVK	National	Dr. D. Vijayalakshmi	International Women's Day
340	2017-18	CoA, GKVK	National	Dr. T. Chikkaramappa	Issues Regarding Baseline Survey Software in Watershed Development Department
341	2017-18	CoA, GKVK	National	Dr. Mahabaleshwar Hegde	Job Roles of Greenhouse Operator & Micro Irrigation Technician
342	2017-18	CoA, GKVK	National	Dr. N. Nagesha	Mainstreaming Biodiversity Act, National Biodiversity Targets
343	2017-18	CoA, GKVK	National	Dr. R. Krishna Manohar	Micro Irrigation and Greenhouse Technology
344	2017-18	CoA, GKVK	National	Dr. T. Chikkaramappa	National Conference on Drought Management Strategies
345	2017-18	CoA, GKVK	National	Dr. S. Shyamamma	North East Calling 2017
346	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	NSS-ETI for Karnataka
347	2017-18	CoA, GKVK	National	Dr. H.B. Shivaleela	NTF-2017: Organic and Millets Running Dietitian Desk, Products Display Organic & Millets, Bangalore
348	2017-18	CoA, GKVK	National	Dr. S. Shamshad Begum	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
349	2017-18	CoA, GKVK	National	Dr. K.G. Vijayalaxmi	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
350	2017-18	CoA, GKVK	National	Dr. D. Vijayalakshmi	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
351	2017-18	CoA, GKVK	National	Dr. Umadevi Hiremath	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
352	2017-18	CoA, GKVK	National	Dr. K.V. Jamuna	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
353	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Nutri rich Product Preparation to Reduce Malnutrition, GKVK
354	2017-18	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Nutrition Security for Planetary Health, GKVK, Bangalore
355	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Opportunities for Organic Products & Millet in Rural sector

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
356	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Organic & Millets for Health
357	2017-18	CoA, GKVK	National	Dr. Usha Ravindra	Organic and Millet Run
358	2017-18	CoA, GKVK	National	Dr. B.G. Hanumantharaya	Protected Cultivation of Vegetables and Flowers
359	2017-18	CoA, GKVK	National	Dr. A. Vidya	Recent Advance in Micro –Irrigation and Fertigation for Enhancing Water and Crop Productivity Under Open and Protected Environment
360	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	Recent Changes in Agril. Mktg. at Chitradurga
361	2017-18	CoA, GKVK	National	Dr. S. Chandrashekar	Republic Day Parade Training Camp
362	2017-18	CoA, GKVK	National	Dr. V.R.R. Parama	Safe Reuse Practices of Human Waste and Waste Water in Agriculture
363	2017-18	CoA, GKVK	National	Dr. S. Chandrashekar	Seri Bio Mix
364	2017-18	CoA, GKVK	National	Dr. C. Narayanaswamy	Skill Development in Agriculture
365	2017-18	CoA, GKVK	National	Dr. K.G. Vijayalaxmi	Strengthening of Backward and Forward Linkages in Food Processing
366	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	Sustainable Tourism Road Map for Karnataka
367	2017-18	CoA, GKVK	National	Dr. S. Shyamamma	Underutilized Fruits of Western Ghats
368	2017-18	CoA, GKVK	National	Dr. G.N. Nagaraja	WhatsHapp-3
369	2017-18	CoA, GKVK	National	Dr. S. Chandrashekar	Wild Silk Moths, Guwahati Assam
370	2017-18	CoA, GKVK	National	Dr. R. Vasantha Kumari	Women Safety
371	2017-18	CoA, GKVK	National	Dr. M. Vasundhara	Women Safety
372	2017-18	CoA, GKVK	National	Dr. A. Vidya	Women Safety
373	2017-18	CoA, GKVK	National	Dr. R. Jayanthi	Women Safety
374	2017-18	CoA, GKVK	National	Dr. C. Seenappa	ZREP - Zone 5, GKVK, Bangalore
375	2017-18	CoA, GKVK	National	Dr. K.B. Umesh	ZREP - Zone 5, GKVK, Bangalore
376	2017-18	CoA, GKVK	National	Dr. B.V. Chinnappa Reddy	ZREP - Zone 5, GKVK, Bangalore
377	2017-18	CoA, GKVK	National	Dr. B.N. Sathyanarayana	ZREP - Zone 5, GKVK, Bangalore
378	2017-18	CoA, GKVK	National	Dr. M. Vasundhara	ZREP - Zone 5, GKVK, Bangalore
379	2017-18	CoA, GKVK	National	Dr. R. Jayanthi	ZREP - Zone 5, GKVK, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
380	2017-18	CoA, GKVK	National	Dr. K.B. Umesh	ZREP - Zone 6, ZARS, Mandya
381	2017-18	CoA, Hassan	National	Dr. C. Ramkumar	Recent Advances in Sub-Baric Evaporation and Spray Drying Technologies for Processing and Value Addition of Milk, Food and Fruit Products
382	2017-18	CoA, Hassan	National	Dr. B.T. Krishnaprasad	Bio Entrepreneurship Development
383	2017-18	CoA, Hassan	National	Dr. S.N. Nagesha	Bioinformatics in Agriculture, NAARM, Hyderabad
384	2017-18	CoA, Hassan	National	Dr. N. Devakumar	Futuristic Agriculture for Sustainable Food Security at Tirupati
385	2017-18	CoA, Hassan	National	Dr. M.S.P. Kanavi	Next Generation Crop Breeding
386	2017-18	CoA, Hassan	National	Dr. N. Devakumar	Organic Farming in Association, NNS Events & Exhibition Pvt. Ltd., New Delhi
387	2017-18	CoA, Hassan	National	Dr. M.S.P. Kanavi	Plant Breeding in Genomic Era - 2018, Dept of Genetics and Plant Breeding, UAS Bangalore
388	2017-18	CoA, Hassan	National	Dr. K.S. Shashidhara	Plant Breeding in Genomic Era - 2018, Dept. of Genetics and Plant Breeding, UAS Bangalore
389	2017-18	CoA, Hassan	National	Dr. B.T. Krishnaprasad	Recent trend in Agriculture, Biotechnology & Food processing
390	2017-18	CoA, Hassan	National	Dr. R. Vinay Kumar	Recent trends in Agriculture, Biotechnology and Food Processing
391	2017-18	CoA, Mandya	National	Dr. D. Raghupathi	Development of Blue Print and Implementation of District Level "Vision 2025 document" with respect to Agriculture Allied Activities with Rural Development
392	2017-18	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Kharif work shop
393	2017-18	CoA, Mandya	National	Dr. N.S. Pankaja	Biofertilizers and Biopesticides in Horticulture Crops
394	2017-18	CoA, Mandya	National	Dr. B.S Somyalatha	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
395	2017-18	CoA, Mandya	National	Mr. M. Venkatesh	Raitapara Krushi Lekhanagalu
396	2017-18	CoA, Mandya	National	Dr. N.N. Asha	Raitha Para Krishi Khanagalu
397	2017-18	CoA, Mandya	National	Dr. S.S. Prakash	Science, Governance and Management
398	2017-18	CoA, Mandya	National	Dr. K.R. Ashoka	Waste to Wealth : Bio-compost Production & Utilization Innovation in Organic Agriculture
399	2017-18	CoA, Mandya	National	Dr. B.S Somyalatha	Ways to Increase Water Productivity in Different Crops and Cropping Systems in Cauvery Command Area

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400	2017-18	CoA, Mandya	National	Dr. B.S Somyalatha	Ways to Increase Water Productivity in Different Crops and Cropping Systems in Cauvery Command Area
401	2017-18	CoA, Mandya	National	Dr. S.S. Prakash	9 th Bengaluru India Nano, 2017
402	2017-18	CoA, Mandya	National	Mr. M. Raju	Biodiversity and Bio-prospecting for Sustainable Development (BBSD-2018)
403	2017-18	CoA, Mandya	National	Mr. M. Raju	Current Development in Plant Science
404	2017-18	CoA, Mandya	National	Mr. M. Venkatesh	Dr.B.R.Ambedkar's Thoughts about Agriculture and Women.
405	2017-18	CoA, Mandya	National	Dr. J. Mahadeva	International Annual Tri-society Meetings, Tampa Convention Centre, Florida, USA.
406	2017-18	CoA, Mandya	National	Dr. N. Kiran Kumar	Nano Technological Approaches in Pest and Disease Management
407	2017-18	CoA, Mandya	National	Dr. B.S Somyalatha	On eve of World water day : Nature for water-Exploring nature-based solution to water challenge
408	2017-18	CoA, Mandya	National	Mr. M. Raju	Seri Biomics: Challenges, Innovations and Solutions
409	2017-18	CoS, Chintamani	National	Mr. Rudragouda Chilur	Doubling Farmers' Income through Technological interventions, Anand Agricultural University, Anand, Gujarat, India
410	2017-18	CoS, Chintamani	National	Dr. M. Mahesh	Emerging Trends in Plant Health Management in Relation to Climate Change, College of Horticulture, GKVK, UHS, Bagalkot
411	2017-18	CoS, Chintamani	National	Dr. Karale Gangadhar Yamaji	Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2017) at Udaipur, Rajasthan
412	2017-18	CoS, Chintamani	National	Dr. M. Pappi Reddy	Plant Breeding in Genomic Era - 2018, Dept of Genetics and Plant Breeding, UAS Bangalore
413	2017-18	CoS, Chintamani	National	Dr. M. Mahesh	Plant- Microbe Interaction, Environmental Conservation-Challenges and Strategies (PMECS- 2017), Department of Botany and Microbiology, Acharya Nagarjuna University, Guntur - 522510
414	2017-18	CoS, Chintamani	National	Dr. M. Mahesh	Promoting and Reinvigorating Agri-Horti, Technological Innovations, Pragati 2017, PPD at Sambodhi Retreat, Dhanbad, Jharkhand
415	2017-18	CoS, Chintamani	National	Dr. M. Mahesh	Smart Summit 2017, Pearl – A Foundation for Educational Excellence Fortune Pandian Hotel, Madurai
416	2017-18	CoS, Chintamani	National	Mr. Rudragouda Chilur	Trends in Farm Mechanisation and Engineering Interventions for Sustainable Agriculture, Tirupati (AP) - 517502

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417	2017-18	CoS, Chintamani	National	Dr. M. Savitha	XIII Agricultural Science Congress, UAS, Bengaluru
418	2017-18	CoS, Chintamani	National	Dr. Deveraja	XIII Agricultural Science Congress, UAS, Bengaluru
419	2017-18	Directorate of Extn.	National	Dr. Somanath Agasimani	Advances in Seed Production and Certification
420	2017-18	Directorate of Extn.	National	Dr. H.S. Mamatha	Baking Science and Technology at CFTRI, Mysore
421	2017-18	Directorate of Extn.	National	Dr. S. Kamala Bai	Current Issues and Trends in Seed Industry
422	2017-18	Directorate of Extn.	National	Dr. B. Gayathri	Developing Winning Research Project Proposals, NAARM, Hyderabad
423	2017-18	Directorate of Extn.	National	Mr. Chandrashekhara S. Kallimani	Dryland Farming Research, Arjia, Bhilwara, Rajasthan
424	2017-18	Directorate of Extn.	National	Mrs. D.C. Preethu	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
425	2017-18	Directorate of Extn.	National	Dr. H.K. Pankaja	Personality Development and Self-Motivation for Enhanced Performance of Agricultural Scientists
426	2017-18	Directorate of Extn.	National	Mrs. G.R. Aruna	Propelling Farming to Business- Shifting Paradigm
427	2017-18	Directorate of Extn.	National	Mr. N.T. Naresh	Raitapara Krushi Lekhanagalu
428	2017-18	Directorate of Extn.	National	Mr. Syed Mohammed Ali	Tractor Operation and Maintenance
429	2017-18	Directorate of Extn.	National	Dr. N. Manjula	Training of Master Trainers under Agriculture Skill Council of India
430	2017-18	Directorate of Extn.	National	Mr. B. Pampana Gouda	Training of Master Trainers under Agriculture Skill Council of India
431	2017-18	Directorate of Extn.	National	Dr. G.S. Yogesh	Training of Master Trainers under Agriculture Skill Council of India
432	2017-18	Directorate of Extn.	National	Mr. Atheekur Rehman	Consultation Small farmer production system – Way forward
433	2017-18	Directorate of Extn.	National	Dr. S. Kamala Bai	Doubling Farmers' Income through Technological interventions, Anand Agricultural University, Anand, Gujarat, India
434	2017-18	Directorate of Extn.	National	Dr. B. Manjunath	Emerging Trends in Plant Health Management in Relation to Climate Change, College of Horticulture, GKVK, UHS, Bagalkot
435	2017-18	Directorate of Extn.	National	Dr. Lata R. Kulkarni	Farmers Conclave
436	2017-18	Directorate of Extn.	National	Dr. H.S. Mamatha	Food Based Approaches for Translational Nutrition, Manasagangotri Campus, Mysuru
437	2017-18	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Impact of Environmental Changes on Indian Ecosystems
438	2017-18	Directorate of Extn.	National	Mrs. G.R. Aruna	Integrated Farming System for Nutritional Security

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439	2017-18	Directorate of Extn.	National	Dr. Banu Deshpande	Millets for Dieticians / Chefs'
440	2017-18	Directorate of Extn.	National	Dr. B. Manjunath	Registration & Transfer of Already Developed Low Cost & No Cost Technologies to Reduce the Cost of Cultivation to Farmers
441	2017-18	Directorate of Extn.	National	Dr. B. Manjunath	Registration & Transfer of Already Developed Low Cost & No Cost Technologies to Reduce the Cost of Cultivation to Farmers
442	2017-18	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Seri-Biomics: Challenges, Innovations and Solutions, Department of Studies in Sericulture Science, Manasagangotri, Mysore University, Mysore
443	2017-18	Directorate of Extn.	National	Mrs. G.R. Aruna	Seri-Biomics: Challenges, Innovations and Solutions, Department of Studies in Sericulture Science, Manasagangotri, Mysore University, Mysore
444	2017-18	Directorate of Extn.	National	Mr. Chandrashekhar S. Kallimani	Seri-Biomics: Challenges, Innovations and Solutions, Department of Studies in Sericulture Science, Manasagangotri, Mysore University, Mysore
445	2017-18	Directorate of Extn.	National	Dr. H.S. Mamatha	Social security for Unorganised Labour, Bangalore University, Bangalore
446	2017-18	Directorate of Research	National	Dr. R.N. Lakshmi pathi	Enhancing Water and Nutrient Use Efficiency in Indian Farming System through Precision Agriculture
447	2017-18	Directorate of Research	National	Dr. Jagannath Olekar	Review the Progress of Farmap – 2.0
448	2017-18	Directorate of Research	National	Dr. P. Prakash	12th Annual Review Meeting of GKMS
449	2017-18	Directorate of Research	National	Dr. Gangadhar Eswar Rao	Enhancing Water and Nutrient Use Efficiency in Indian Farming System through Precision Agriculture
450	2017-18	Directorate of Research	National	Dr. G.S. Mahadevaiah	FARMAP-2.0 Training Programme
451	2017-18	Directorate of Research	National	Dr. B.C. Mallesha	Mushroom Production and Processing
452	2017-18	Directorate of Research	National	Dr. Syed Mazar Ali	Tractor Operation and Maintenance
453	2017-18	Directorate of Research	National	Dr. Syed Mazar Ali	Tractor Operation and Maintenance
454	2017-18	Directorate of Research	National	Dr. G.S. Mahadevaiah	25th Agricultural Economic Research Conference
455	2017-18	Directorate of Research	National	Dr. Jahir Basha	Bi Monthly Meeting with Line Departments
456	2017-18	Directorate of Research	National	Dr. Jahir Basha	Bi Monthly Workshop with Line Departments
457	2017-18	Directorate of Research	National	Dr. Umashankar	Frontiers in Life Sciences – 2017

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458	2017-18	Directorate of Research	National	Dr. Jahir Basha	Mango Pruning and Grafting for Mango Progressive Farmers
459	2017-18	Directorate of Research	National	Dr. Jagannath Olekar	National Workshop on CCS
460	2017-18	Directorate of Research	National	Dr. M.S. Nagaraj	South Zone IPS Symposium
461	2017-18	Directorate of Research	National	Dr. M.S. Nagaraj	South Zone IPS Symposium
462	2017-18	Directorate of Research	National	Dr. V.C. Suvarana	Trends in Molecular Biology
463	2018-19	CoA, GKVK	International	Dr. M. Shivamurthy	Special Assignment
464	2018-19	CoA, GKVK	International	Dr. M. Shivamurthy	Special Assignment
465	2018-19	CoA, GKVK	International	Dr. M.N. Venkataramana	Indo-Swiss Collaboration in Biotechnology (Ragi)
466	2018-19	CoA, GKVK	International	Dr. D. Vijayalakshmi	4 th Bimonthly Review of Indo German Collaborative Research Project
467	2018-19	CoA, GKVK	International	Dr. C.P. Gracy	4 th International Conference
468	2018-19	CoA, GKVK	International	Dr. S. Chandrashekar	6th Asia Pacific Congress of Sericulture and Insect Biotechnology, Mysore
469	2018-19	CoA, GKVK	International	Dr. R.N. Bhaskar	6th Asia Pacific Congress of Sericulture and Insect Biotechnology, Mysore
470	2018-19	CoA, GKVK	International	Dr. K.B. Umesh	Bimonthly Workshop
471	2018-19	CoA, GKVK	International	Dr. M.N. Venkataramana	Bimonthly Workshop
472	2018-19	CoA, GKVK	International	Dr. K.M. Harinikumar	Current Trends in Biosciences
473	2018-19	CoA, GKVK	International	Dr. K.M. Harinikumar	Current Trends in Biotechnology and Microbiology
474	2018-19	CoA, GKVK	International	Dr. K.M. Harinikumar	Current Trends in Biotechnology and Microbiology
475	2018-19	CoA, GKVK	International	Dr. D. Vijayalakshmi	DFG Evaluators of Indo-German Project
476	2018-19	CoA, GKVK	International	Dr. Y.N. Shivalingaiah	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
477	2018-19	CoA, GKVK	International	Dr. M. Manjunatha	Emerging Scenario in Agribusiness-ICESAB
478	2018-19	CoA, GKVK	International	Dr. B. Krishnamurthy	Food Science and Bioprocess Technology
479	2018-19	CoA, GKVK	International	Dr. M. Shivamurthy	Food Tech – 2018
480	2018-19	CoA, GKVK	International	Dr. C.T. Ramachandra	Recent advances in Food Processing Technologies-2018
481	2018-19	CoA, GKVK	International	Dr. P. Venkatesha Murthy	Research Intervention and Advancements in Life Science

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
482	2018-19	CoA, GKVK	International	Dr. C. Suneetha	Trends in Plant Sciences and Agrobiotechnology 2019
483	2018-19	CoA, GKVK	International	Dr. A.S.Devakumar	World Neem Organization
484	2018-19	CoA, GKVK	International	Dr. C. Nagarajaiah	World Neem Organization
485	2018-19	CoA, GKVK	International	Dr. Mahadev Murthy	World Neem Organization
486	2018-19	CoA, Hassan	International	Dr. A.S. Shashikiran	30 th International Conference of Agricultural Economics(ICAE), Vancouver, Canada
487	2018-19	CoA, Hassan	International	Dr. M.S.P. Kanavi	Next Gen Crops for Sustainable Agriculture, Chandhigarh
488	2018-19	CoS, Chintamani	International	Dr. Aarti Pannure	Asian Bees, National Centre for Biological Sciences (NCBS) GKVK, Bengaluru
489	2018-19	CoS, Chintamani	International	Dr. Aarti Pannure	Dr. L. C. Coleman Lecture, Department of Entomology, UAS, GKVK, Bangalore
490	2018-19	CoS, Chintamani	International	Dr. H.S. Latha	Recent Trends in Environmental Sustainability, Life Sciences, Mysore
491	2018-19	CoS, Chintamani	International	Dr. Ramakrishna Naika	Recent Trends in Zoology, Biodiversity, Genetics & Environmental Sciences, Department of Zoology, Bangalore University, Bangalore
492	2018-19	CoS, Chintamani	International	Mrs. V.P. Bharati	Wild Silk Moths, Guwahati Assam
493	2018-19	CoS, Chintamani	International	Dr. Ramakrishna Naika	Wild Silk Moths, Guwahati Assam
494	2018-19	Directorate of Extn.	International	Dr. V.L. Madhuprasad	Agriculture, Horticulture and Plant Sciences
495	2018-19	Directorate of Extn.	International	Dr. K. Venkataranga Naika	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
496	2018-19	Directorate of Extn.	International	Dr. K. Shivaramu	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
497	2018-19	Directorate of Extn.	International	Dr. V.L. Madhuprasad	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
498	2018-19	Directorate of Extn.	International	Dr. V.L. Madhuprasad	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
499	2018-19	Directorate of Extn.	International	Dr. H.K. Pankaja	Doubling the Income of Farmers of SAARC Countries : Extension Strategies and Approaches, Yellow Pagoda Hotel, Kantipath Katmandu, Nepal
500	2018-19	Directorate of Extn.	International	Dr. C. Ramachandra	Innovation in Agriculture for India, Galilee International Management Institute, Israel
501	2018-19	Directorate of Extn.	International	Mrs. A. Ashwini	Nano Materials and its Applications

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502	2018-19	Directorate of Extn.	International	Dr. D. Raghupathi	Transforming Agricultural Extension System Towards Achieving the Relevant Sustainable Development goals (SDGs) for Global Impact, Colombo, Srilanka
503	2018-19	CoA, GKVK	National	Dr. T.S. Manjunatha Swamy	12 th Annual Review Meeting of the schemes on Spices & Aromatic Plants -Mission for Integrated Development of Horticulture (MIDH) Under NHM-CSS
504	2018-19	CoA, GKVK	National	Dr. M. Vasundhara	12 th Annual Review Meeting of the schemes on Spices & Aromatic Plants -Mission for Integrated Development of Horticulture (MIDH) Under NHM-CSS
505	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Partner Progress Review Meeting
506	2018-19	CoA, GKVK	National	Dr. C.P. Gracy	Review Meeting of COC&MI Cells
507	2018-19	CoA, GKVK	National	Dr. C.P. Gracy	Review Meeting of COC&MI Cells
508	2018-19	CoA, GKVK	National	Dr. B.M. Shashidhara	Ameyakrishi e-data
509	2018-19	CoA, GKVK	National	Dr. K.N. Srinivasappa	Precision Farming in Horticulture Crops
510	2018-19	CoA, GKVK	National	Dr. K.N. Srinivasappa	Precision Farming Technology
511	2018-19	CoA, GKVK	National	Dr. G.K. Mukund	31 st Institute Research Council (IRC)
512	2018-19	CoA, GKVK	National	Dr. E. Gangappa	61 st Annual Maize Workshop
513	2018-19	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Advanced Research Methodologies in Social Sciences
514	2018-19	CoA, GKVK	National	Dr. Vasantha Kumari	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
515	2018-19	CoA, GKVK	National	Dr. G.K. Mukund	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
516	2018-19	CoA, GKVK	National	Dr. K.N. Srinivasappa	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
517	2018-19	CoA, GKVK	National	Dr. T.S. Manjunatha Swamy	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
518	2018-19	CoA, GKVK	National	Dr. P. Venkatesha Murthy	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
519	2018-19	CoA, GKVK	National	Dr. A. Vidya	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
520	2018-19	CoA, GKVK	National	Dr. B.G. Hanumantharaya	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
521	2018-19	CoA, GKVK	National	Dr. C. Seenappa	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
522	2018-19	CoA, GKVK	National	Dr. Kavita Kandpal	Aquaponics, Industrial Landscape, Sewage Water Treatment and its usage in Agri. / Horticulture
523	2018-19	CoA, GKVK	National	Dr. J. Saralakumari	Basics and Applications of Geo-informatics
524	2018-19	CoA, GKVK	National	Dr. A.Sathish	Basics and Applications of Geo-informatics
525	2018-19	CoA, GKVK	National	Dr. B. Mamatha	Basics and Applications of Geo-informatics
526	2018-19	CoA, GKVK	National	Dr. R. Krishna Murthy	Basics and Applications of Geo-informatics
527	2018-19	CoA, GKVK	National	Dr. V.C. Suvarna	Beneficial and Spoilage Microorganisms in Baked Foods
528	2018-19	CoA, GKVK	National	Dr. S. Shyamamma	Biodiversity Conservation and Sustainable Use
529	2018-19	CoA, GKVK	National	Dr. Anitha Peter	Bio-innovator's Conclave
530	2018-19	CoA, GKVK	National	Dr. Fatima Sadatulla	BSMA Workshop on Sericulture
531	2018-19	CoA, GKVK	National	Dr. Chikkalingaiah	BSMA Workshop on Sericulture
532	2018-19	CoA, GKVK	National	Dr. S. Chandrashekar	BSMA Workshop on Sericulture
533	2018-19	CoA, GKVK	National	Dr. Manjunath Gowda	BSMA Workshop on Sericulture
534	2018-19	CoA, GKVK	National	Dr. R.N. Bhaskar	BSMA Workshop on Sericulture
535	2018-19	CoA, GKVK	National	Dr. G.S. Mahadevaiah	CACP – Meeting on Kharif Crops 2018-19 Season
536	2018-19	CoA, GKVK	National	Dr. Neena Joshi	Collaborative Program of CST, IISc. and Dept. of Food Science and Nutrition, GKVK
537	2018-19	CoA, GKVK	National	Dr. B.A. Anand	Connected Farming Indian Agri Tech Space
538	2018-19	CoA, GKVK	National	Dr. G.C. Jayashree	Connected Farming Indian Agri Tech Space
539	2018-19	CoA, GKVK	National	Dr. R. Vasantha Kumari	Connected Farming Indian Agri Tech Space
540	2018-19	CoA, GKVK	National	Dr. M. Manjunatha	Connected Farming Indian Agri Tech Space
541	2018-19	CoA, GKVK	National	Dr. B.V. Shwetha	Connected Farming Indian Agri Tech Space
542	2018-19	CoA, GKVK	National	Dr. K.G. Vijayalaxmi	Connected Farming Indian Agri Tech Space

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543	2018-19	CoA, GKVK	National	Er. P.N. Krishnamma	Connected Farming Indian Agri Tech Space
544	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Department of Civil Engineering, Indian Institute of Science (IISc), Bengaluru
545	2018-19	CoA, GKVK	National	Dr. H.M. Atheekur Rehman	Digital Teaching Techniques, UAS Bangalore
546	2018-19	CoA, GKVK	National	Dr. B.A. Anand	Digital Teaching Techniques, UAS Bangalore
547	2018-19	CoA, GKVK	National	Dr. B.G. Hanumantharaya	Digital Teaching Techniques, UAS Bangalore
548	2018-19	CoA, GKVK	National	Dr. N. Nagesha	Digital Teaching Techniques, UAS Bangalore
549	2018-19	CoA, GKVK	National	Dr. G. Ranganath	Digital Teaching Techniques, UAS Bangalore
550	2018-19	CoA, GKVK	National	Mr. Mohan Chavan	Digital Teaching Techniques, UAS Bangalore
551	2018-19	CoA, GKVK	National	Dr. Dronachari Manvi	Digital Teaching Techniques, UAS Bangalore
552	2018-19	CoA, GKVK	National	Dr. S. Ganesamoorthi	Digital Teaching Techniques, UAS Bangalore
553	2018-19	CoA, GKVK	National	Dr. S. Shamshad Begum	Emerging Food Processing and Packaging Technologies : A Drive for Economic
554	2018-19	CoA, GKVK	National	Dr. M. Manjunatha	Emerging Trends in Food Technology & Advance Chemistry, JNANA CHILUME-2019
555	2018-19	CoA, GKVK	National	Dr. K.G. Vijayalaxmi	Ensuring Focused Intervention on Addressing under Nutrition During the First 1000 Days of the Child: Better Child Health - Celebration of Nutrition Month
556	2018-19	CoA, GKVK	National	Dr. Neena Joshi	Entrepreneurs on Value added Products from Dehydrated Fruits and Vegetables
557	2018-19	CoA, GKVK	National	Dr. M. Vasundhara	EOAI International Congress and Expo 2018
558	2018-19	CoA, GKVK	National	Dr. Rinku Verma	Federal Foreign Office DWIH & German Academic Exchange Program, DAAD
559	2018-19	CoA, GKVK	National	Dr. C.P. Gracy	Finalizing COC & MI Cells Work Plan
560	2018-19	CoA, GKVK	National	Dr. C.T. Ramachandra	Frugal Innovation Nurturing Programme
561	2018-19	CoA, GKVK	National	Dr. H.G. Ashoka	Frugal Innovation Nurturing Programme
562	2018-19	CoA, GKVK	National	Er. H.V. Ganesh	Futuristic Farmer-led Irrigation: Pressurized Pipe Network and Automation Technologies for Enhanced Water Use Efficiency
563	2018-19	CoA, GKVK	National	Dr. Naresh Annem	Gender and Media
564	2018-19	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Green Finance for Sustainable Development: Challenges and Opportunities
565	2018-19	CoA, GKVK	National	Dr. Siddayya	Group Dynamics of Small Holder Farmers

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
566	2018-19	CoA, GKVK	National	Dr. Dronachari Manvi	Hi-Tech Analytical Instrumentation for Agriculture and Food Product Quality Analysis
567	2018-19	CoA, GKVK	National	Dr. Kavita Kandpal	Horticulture in the Vanguard of Climate Change and Urban Environment
568	2018-19	CoA, GKVK	National	Dr. Rinku Verma	Importance of Honey bees
569	2018-19	CoA, GKVK	National	Dr. M. Vasundhara	Indian Technology Congress
570	2018-19	CoA, GKVK	National	Dr. N.R. Gangadharappa	Innovations for Agricultural Transformation
571	2018-19	CoA, GKVK	National	Dr. M. Shivamurthy	Innovations for Agricultural Transformation
572	2018-19	CoA, GKVK	National	Dr. B. Krishnamurthy	Innovations for Agricultural Transformation
573	2018-19	CoA, GKVK	National	Dr. K.N. Srinivasappa	Integrated Crop Management in Mango
574	2018-19	CoA, GKVK	National	Dr. Dronachari Manvi	JNANA CHILUME-2019
575	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Karnataka Watershed Development Project-II (Sujala-III)
576	2018-19	CoA, GKVK	National	Dr. S. Shamshad Begum	National Integration Camp
577	2018-19	CoA, GKVK	National	Dr. B. Mamatha	New Dimension in Management of Soil Health through Organic Production Systems in Horticulture Crops
578	2018-19	CoA, GKVK	National	Dr. Neena Joshi	Nutrition Security for Planetary Health, GKVK, Bangalore
579	2018-19	CoA, GKVK	National	Dr. G.C. Jayashree	Nutrition Security for Planetary Health, GKVK, Bangalore
580	2018-19	CoA, GKVK	National	Dr. C.T. Ramachandra	Organic & Millets for Health
581	2018-19	CoA, GKVK	National	Dr. C. Suneetha	Plant Sciences Current Challenges & Perspectives
582	2018-19	CoA, GKVK	National	Dr. N. Nagesha	Policies related to GMO/GM crops in India
583	2018-19	CoA, GKVK	National	Dr. R.L. Ravikumar	Policies related to GMO/GM crops in India
584	2018-19	CoA, GKVK	National	Dr. G.K. Mukund	Post Graduate Research in Farm Universities
585	2018-19	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Price Fixation Committee Meeting for different Cereals, Pulses and Oilseeds
586	2018-19	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Price Policy for Rabi Crops for 2018-19
587	2018-19	CoA, GKVK	National	Dr. S. Shamshad Begum	Processing and Value Addition of Ragi and Millets
588	2018-19	CoA, GKVK	National	Dr. Y.M. Somasekhara	Recent Challenges and Opportunities in Sustainable Plant Health Management
589	2018-19	CoA, GKVK	National	Dr. N. Earanna	Recent Trends in Microbial Technology
590	2018-19	CoA, GKVK	National	Dr. Naresh Annem	RIT, South India, Bengaluru

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591	2018-19	CoA, GKVK	National	Dr. Mahadev Murthy	Sandal Wood
592	2018-19	CoA, GKVK	National	Dr. Manjunath Gowda	Sixth Indian Technology Congress
593	2018-19	CoA, GKVK	National	Dr. M. Manjunatha	Smart-Water Tech Conference
594	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Sujala-III Project
595	2018-19	CoA, GKVK	National	Dr. Veena S Anil	The Nano Vision group
596	2018-19	CoA, GKVK	National	Dr. S. Shamshad Begum	Value Added Agriculture Workshop
597	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Watershed Development Department Sujala-III Project Bengaluru
598	2018-19	CoA, GKVK	National	Dr. T. Chikkaramappa	Watershed Development Department Sujala-III Project Bengaluru
599	2018-19	CoA, Hassan	National	Dr. S. Channakeshava	Basic and Advances in Organic farming
600	2018-19	CoA, Hassan	National	Dr. B.T. Krishnaprasad	Developing Winning Research Project Proposals, NAARM, Hyderabad
601	2018-19	CoA, Hassan	National	Dr. S. Channakeshava	Geospatial Analysis using QGIS & R, NAARM, Hyderabad
602	2018-19	CoA, Hassan	National	Dr. S. Raghavendra	Geospatial Analysis using QGIS & R, NAARM, Hyderabad
603	2018-19	CoA, Hassan	National	Dr. S. Channakeshava	Advanced Organic Agricultural Technology, University of Agricultural & Horticulture Science, Navile, Shimoga
604	2018-19	CoA, Hassan	National	Dr. N. Devakumar	Brain Storming Session on ICAR Model Act Revision, IAUS, Palampur, H.P.
605	2018-19	CoA, Hassan	National	Dr. N. Devakumar	Climate Resilient Technologies for Sustainable Agriculture, Annamalai University, Tamil Nadu
606	2018-19	CoA, Hassan	National	Dr. N. Devakumar	Climate Resilient Technologies for Sustainable Agriculture, Annamalai University, Tamil Nadu
607	2018-19	CoA, Hassan	National	Dr. Geetha Govind	Crop Improvement Research Data Analysis and Interpretation, Department of GPB, CoA, GKVK, Bengaluru
608	2018-19	CoA, Hassan	National	Dr. M.S.P. Kanavi	Crop Improvement Research Data Analysis and Interpretation, Department of GPB, CoA, GKVK, Bengaluru
609	2018-19	CoA, Hassan	National	Dr. A.A. Fazal	Determination of Heavy Metals and Pesticide Residues in Agri. Produce, Sher-e-Kashmir, University of Agricultural Science and Technology, Srinagar
610	2018-19	CoA, Hassan	National	Dr. H.C. Girisha	Digital Teaching Techniques, UAS Bangalore
611	2018-19	CoA, Hassan	National	Dr. A.S. Shashikiran	Digital Teaching Techniques, UAS Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
612	2018-19	CoA, Hassan	National	Mr. M.K. Aravinda Kumar	Digital Teaching Techniques, UAS Bangalore
613	2018-19	CoA, Hassan	National	Dr. S. Anitha	Digital Teaching Techniques, UAS Bangalore
614	2018-19	CoA, Hassan	National	Mrs. H.N. Ramya	Digital Teaching Techniques, UAS Bangalore
615	2018-19	CoA, Hassan	National	Dr. Gopika C. Muttagi	Digital Teaching Techniques, UAS Bangalore
616	2018-19	CoA, Hassan	National	Dr. S.N. Nagesha	Digital Teaching Techniques, UAS Bangalore
617	2018-19	CoA, Hassan	National	Mr. M.K. Aravinda Kumar	Establishment of Rural Entrepreneurship of Food Processing & Technology, Dept. of Food Science & Technology, Collage of Agriculture, Hassan
618	2018-19	CoA, Hassan	National	Dr. N. Devakumar	Kissan Javan Sammelan-2018, Gujarat Vidyapeeth, Ahmedabad, Gujarat
619	2018-19	CoA, Hassan	National	Dr. N. Umashankar Kumar	Modelling and ICT Applications in Forecasting Pest and Diseases: Current Status and Emerging Needs, GKVK Campus, Bengaluru
620	2018-19	CoA, Hassan	National	Dr. S. Raghavendra	Statistical Methods and R Programming for Biologists, Indian Institute of Statistics, Kolkata
621	2018-19	CoA, Mandya	National	Dr. G. Sugeetha	Digital Teaching Techniques, UAS Bangalore
622	2018-19	CoA, Mandya	National	Dr. B.S Somyalatha	Digital Teaching Techniques, UAS Bangalore
623	2018-19	CoA, Mandya	National	Dr. N.S. Pankaja	Modeling and ICT Applications in Forecasting Pest and Diseases: Current Status and Emerging Needs, GKVK Campus, Bengaluru
624	2018-19	CoA, Mandya	National	Dr. S.B. Yogananda	Pesticide Application Techniques and Safety Measures, NIPHM, Hyderabad
625	2018-19	CoA, Mandya	National	Dr. P.S. Fathima	Contribution to Agriculture Engineering
626	2018-19	CoA, Mandya	National	Dr. N. Kiran Kumar	Cutting Edge Approaches for Sustainable Plant Disease Management and Ensuring Farmers Profit
627	2018-19	CoA, Mandya	National	Dr. S.S. Prakash	Developments in Soil Science, 83rd Annual Convention of Indian Society of Soil Science
628	2018-19	CoA, Mandya	National	Dr. S.B. Yogananda	Doubling Farmers' Income through Agronomic Interventions Under Changing Scenario, Rajasthan College of Agriculture, MPUA&T, Udaipur, Rajasthan
629	2018-19	CoA, Mandya	National	Dr. B.S Somyalatha	Farmer's Friendly Soil and Water Conservation Technologies for Mitigating Climate Change Impact

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
630	2018-19	CoA, Mandya	National	Dr. H. R. Savitha	Farmer's Friendly Soil and Water Conservation Technologies for Mitigating Climate Change Impact
631	2018-19	CoA, Mandya	National	Dr. N. Kiran Kumar	Modeling and ICT Applications in Forecasting Pest and Diseases: Current Status and Emerging Needs, GKVK Campus, Bengaluru
632	2018-19	CoA, Mandya	National	Dr. S.S. Prakash	Technological Intervention to Enhance Nutrient Use Efficiency to Meet Food Security and Environmental Sustainability
633	2018-19	CoA, Mandya	National	Dr. J. Mahadeva	Trends in Microbiology
634	2018-19	CoS, Chintamani	National	Dr. Ramakrishna Naika	Expert Member of Screening Cum Selection of Scientists, SKUASTJ, Jammu and Kashmir.
635	2018-19	CoS, Chintamani	National	Dr. M. Pappi Reddy	Natural and Zero Budget Farming Programme in Krishidarshan From Doordarshan, Bangalore
636	2018-19	CoS, Chintamani	National	Mr. P.A. Gowda	Radio Talk on Mushroom Cultivation and Its Economics, AIR Bangalore on 05.09.2018
637	2018-19	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Capacity Building of Teachers/Scientists of Agriculture Research in Frontier Areas of Science on Competency Enhancement for Efficiency and Effectiveness at Work Place, UAHS, Shivamogga
638	2018-19	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Writing and Documentation Skills for Extension officers, ICAR - MANAGE, Hyderabad
639	2018-19	CoS, Chintamani	National	Mr. Mallappa J Madolli	Farmers' Friendly Soil and Water Conservation Technologies for Mitigating Climate Change Impact Ooty
640	2018-19	CoS, Chintamani	National	Dr. Ramakrishna Naika	Seri-Biomics: Challenges, Innovations and Solutions, Department of Studies in Sericulture Science, Manasagangotri, Mysore University, Mysore
641	2018-19	Directorate of Extn.	National	Mr. H.R. Umesh	Annual Rice Research Group Meeting (ARGM) of AICRIP, ICAR-IIRR Hyderabad
642	2018-19	Directorate of Extn.	National	Dr. H.K. Pankaja	Indo-German Conference on Rural-Urban Transitions held at UAS, Bangalore
643	2018-19	Directorate of Extn.	National	Dr. G.S. Yogesh	Land Resource Inventory
644	2018-19	Directorate of Extn.	National	Mr. Vishwanath	Bhoo Samrudhi Project
645	2018-19	Directorate of Extn.	National	Dr. H.K. Pankaja	Developing Winning Research Project Proposals, NAARM, Hyderabad
646	2018-19	Directorate of Extn.	National	Dr. M. Shalini	Developing Winning Research Project Proposals, NAARM, Hyderabad
647	2018-19	Directorate of Extn.	National	Dr. Atheefa Munawery	Developing Winning Research Project Proposals, NAARM, Hyderabad

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
648	2018-19	Directorate of Extn.	National	Dr. C.M. Sunil	Developing Winning Research Project Proposals, NAARM, Hyderabad
649	2018-19	Directorate of Extn.	National	Dr. M.S. Anitha	Developing Winning Research Project Proposals, NAARM, Hyderabad
650	2018-19	Directorate of Extn.	National	Dr. J. Venkate Gowda	Developing Winning Research Project Proposals, NAARM, Hyderabad
651	2018-19	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Developing Winning Research Project Proposals, NAARM, Hyderabad
652	2018-19	Directorate of Extn.	National	Dr. B. Gayathri	Developing Winning Research Project Proposals, NAARM, Hyderabad
653	2018-19	Directorate of Extn.	National	Dr. Rajegowda	II Phase-MDP for Newly Recruited Programme Coordinators of KVKs
654	2018-19	Directorate of Extn.	National	Dr. A.P. Mallikarjuna Gowda	II Phase-MDP for Newly Recruited Programme Coordinators of KVKs
655	2018-19	Directorate of Extn.	National	Dr. Rajegowda	III Phase-MDP for Newly Recruited Programme Coordinators of KVKs
656	2018-19	Directorate of Extn.	National	Dr. A.P. Mallikarjuna Gowda	III Phase-MDP for Newly Recruited Programme Coordinators of KVKs
657	2018-19	Directorate of Extn.	National	Mr. Vishwanath	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
658	2018-19	Directorate of Extn.	National	Dr. C.M. Sunil	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
659	2018-19	Directorate of Extn.	National	Dr. M.S. Dinesha	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
660	2018-19	Directorate of Extn.	National	Dr. P. Veeranagappa	INM with Special Reference to Horticultural Crops in Specific to Secondary Micro-nutrients
661	2018-19	Directorate of Extn.	National	Dr. B. Gayathri	INM with Specific Reference to Secondary and Micro Nutrients
662	2018-19	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Integrated Pest and Disease Management in Coconut, CPCRI, Kasargod
663	2018-19	Directorate of Extn.	National	Dr. R. Manjunatha	Management Development Programme (2nd phase)
664	2018-19	Directorate of Extn.	National	Dr. R. Manjunatha	Management Development Programme (3rd phase)
665	2018-19	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Mango Cultivation
666	2018-19	Directorate of Extn.	National	Dr. H.S. Mamatha	Marketing Research and Data Analytics in Digital India for Food and Agri Business Stakeholders, IIPM, Bangalore
667	2018-19	Directorate of Extn.	National	Dr. Rajegowda	MDP for Newly Recruited Programme Coordinators of KVKs

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668	2018-19	Directorate of Extn.	National	Dr. A.P. Mallikarjuna Gowda	MDP for Newly Recruited Programme Coordinators of KVKs
669	2018-19	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	MOFPI Incentives for the Promotion of Food Processing
670	2018-19	Directorate of Extn.	National	Dr. B. Manjunath	Quality Analysis and Quality Management of Microbial Biopesticides
671	2018-19	Directorate of Extn.	National	Dr. G.S. Yogesh	Soil and Water Conservation under Sujala - III Project
672	2018-19	Directorate of Extn.	National	Mr. B. Pampana Gouda	Soil and Water Conservation under Sujala - III Project
673	2018-19	Directorate of Extn.	National	Dr. G.S. Yogesh	Soil and Water Conservation under Sujala - III Project
674	2018-19	Directorate of Extn.	National	Dr. C.M. Sunil	SREP Preparation
675	2018-19	Directorate of Extn.	National	Dr. M.S. Dinesha	SREP Preparation
676	2018-19	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Strengthening FPOs Issues and Challenges
677	2018-19	Directorate of Extn.	National	Mrs. D.C. Preethu	Sustainable Agriculture
678	2018-19	Directorate of Extn.	National	Dr. R. Manjunatha	Training of Master Trainers under Agriculture Skill Council of India
679	2018-19	Directorate of Extn.	National	Dr. B. Gayathri	Training of Master Trainers under Agriculture Skill Council of India
680	2018-19	Directorate of Extn.	National	Dr. Lata R. Kulkarni	Training of Master Trainers under Agriculture Skill Council of India
681	2018-19	Directorate of Extn.	National	Dr. M.S. Dinesha	Training of Master Trainers under Agriculture Skill Council of India
682	2018-19	Directorate of Extn.	National	Dr. R. Manjunatha	Annual Review Meet of KVKs
683	2018-19	Directorate of Extn.	National	Dr. K. Shivaramu	Integrated Farming System for Enhancing Farmers' Income and Nutritional Security, West Bengal University of Animal & Fishery Sciences (WBUAFS), Kolkata
684	2018-19	Directorate of Extn.	National	Dr. C.V. Venkatesh Murthy	Integrated Farming System for Enhancing Farmers' Income and Nutritional Security, West Bengal University of Animal & Fishery Sciences (WBUAFS), Kolkata
685	2018-19	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Integrated Farming System for Enhancing Farmers' Income and Nutritional Security, West Bengal University of Animal & Fishery Sciences (WBUAFS), Kolkata
686	2018-19	Directorate of Extn.	National	Mrs. G.R. Aruna	Integrated Farming System for Sustainable Agriculture and Food Security
687	2018-19	Directorate of Extn.	National	Dr. Deveraja	National Conference on KVKs
688	2018-19	Directorate of Extn.	National	Dr. Vijayalaxmi Kamaraddi	National Women's Science Congress, Mysuru

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
689	2018-19	Directorate of Extn.	National	Dr. B. Manjunath	Review Workshop on ARYA project
690	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	21St Meeting of Sugarcane Research & Development Workers of Southern Karnataka
691	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	AICRP on Farm Implements and Machinery
692	2018-19	Directorate of Research	National	Dr. Jagannath Olekar	CACP – Meeting on Kharif Crops 2018-19 Season
693	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Enhancing of Water Productivity for Crops and Cropping Systems Under Cauvery Command Area
694	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Enhancing of Water Productivity for Crops and Cropping Systems Under Cauvery Command Area
695	2018-19	Directorate of Research	National	Dr. G.S. Mahadevaiah	Price Policy for Copra Crop 2020 Season
696	2018-19	Directorate of Research	National	Dr. G.S. Mahadevaiah	Price Policy of Rabi Crops for 2018-19
697	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	21St Meeting of Sugarcane Research & Development Workers of Southern Karnataka
698	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	32nd Biennial Workshop of AICRP on Sugarcane
699	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Enhancing of Water Productivity for Crops and Cropping Systems Under Cauvery Command Area
700	2018-19	Directorate of Research	National	Dr. Umashankar	Mushroom Cultivation for Windfall Benefits
701	2018-19	Directorate of Research	National	Dr. B.C. Mallesha	Mushroom Production and Processing
702	2018-19	Directorate of Research	National	Dr. B.V. Krishnamurthy	National Consultative Meeting on Nile Tilapia
703	2018-19	Directorate of Research	National	Dr. B.V. Krishnamurthy	Reservoir Fisheries Management for Employment Generation
704	2018-19	Directorate of Research	National	Dr. B.V. Krishnamurthy	Reservoir Fisheries Management for Employment Generation
705	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	32nd Biennial Workshop of AICRP on Sugarcane
706	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	AICRP on Farm Implements and Machinery
707	2018-19	Directorate of Research	National	Dr. Jahir Basha	Annual Workshop on Groundnut
708	2018-19	Directorate of Research	National	Dr. Jahir Basha	Annual Workshop on Groundnut
709	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Bimonthly Workshop
710	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Bimonthly Workshop
711	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Enhancing of Water Productivity for Crops and Cropping Systems Under Cauvery Command Area

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
712	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Integrated Crop Management in Sugarcane
713	2018-19	Directorate of Research	National	Dr. G.S. Mahadevaiah	Integrated Farming System for Enhancing Farmers' Income and Nutritional Security
714	2018-19	Directorate of Research	National	Dr. G.S. Mahadevaiah	National Workshop on CCS
715	2018-19	Directorate of Research	National	Dr. Jagannath Olekar	National Workshop on CCS
716	2018-19	Directorate of Research	National	Dr. N. Earanna	Role of Endophytes in Modulating Crop Growth and Productivity
717	2018-19	Directorate of Research	National	Dr. R.N. Lakshmi pathi	The Issues and Policies Related to GMO'S/GM Crops in India
718	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Water Management in Field Crops
719	2018-19	Directorate of Research	National	Dr. P. Thimmegowda	Water Management in Sugarcane
720	2018-19	Directorate of Research	National	Dr. Jahir Basha	Workshop on Special Package on Groundnut 2018-19
721	2018-19	Directorate of Research	National	Dr. Jahir Basha	Workshop on Special Package on Groundnut 2018-19
722	2018-19	Directorate of Research	National	Dr. Jahir Basha	Workshop on ZBNF
723	2018-19	Directorate of Research	National	Dr. Jahir Basha	Workshop on ZBNF
724	2019-20	CoA, GKVK	International	Dr. M.N. Venkataramana	Review / Evaluation meeting
725	2019-20	CoA, GKVK	International	Dr. K.B. Umesh	Review / Evaluation meeting
726	2019-20	CoA, GKVK	International	Dr. K.B. Umesh	GoF International Summer School
727	2019-20	CoA, GKVK	International	Dr. N. Nagaraju	Asia Solanaceous Round Table III
728	2019-20	CoA, GKVK	International	Er. Babu RM Ray	Current Research and Approaches in Food Technology-2020
729	2019-20	CoA, GKVK	International	Dr. K.N. Geetha	Groundwater Monitoring, Planning, Recharge and Sustainable Use: Village Level Participatory Approaches and Tools, UAS, GKVK, Bangalore
730	2019-20	CoA, GKVK	International	Dr. A.Sathish	Groundwater Monitoring, Planning, Recharge and Sustainable Use: Village Level Participatory Approaches and Tools, UAS, GKVK, Bangalore
731	2019-20	CoA, GKVK	International	Dr. G.C. Jayashree	Groundwater Monitoring, Planning, Recharge and Sustainable Use: Village Level Participatory Approaches and Tools, UAS, GKVK, Bangalore
732	2019-20	CoA, GKVK	International	Dr. P.S. Srikantha Murthy	IMRD Management Board Meeting
733	2019-20	CoA, GKVK	International	Dr. K.M. Harinikumar	In SYNC- with Next Generation Biosciences (INGB)-2019
734	2019-20	CoA, GKVK	International	Dr. P. Venkatesha Murthy	In SYNC- with Next Generation Biosciences (INGB)-2019

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
735	2019-20	CoA, GKVK	International	Dr. C. Seenappa	India's Biodiversity: Origin, Evolution and Conservation, Satish Dhawan auditorium, CSIC, Bangalore
736	2019-20	CoA, GKVK	International	Dr. Kavita Kandpal	India's Biodiversity: Origin, Evolution and Conservation, Satish Dhawan auditorium, CSIC, Bangalore
737	2019-20	CoA, GKVK	International	Dr. K. Murali Mohan	International Plant Protection Congress (IPPC 2019)
738	2019-20	CoA, GKVK	International	Er. Babu RM Ray	Recent Advances in Chemical Engineering-2020
739	2019-20	CoA, GKVK	International	Dr. C.T. Ramachandra	Recent Advances in Food Engineering
740	2019-20	CoA, GKVK	International	Dr. G.C. Jayashree	Role of Agricultural Engineering Towards Global Food Security
741	2019-20	CoA, GKVK	International	Er. P.N. Krishnamma	Role of Agricultural Engineering Towards Global Food Security
742	2019-20	CoA, GKVK	International	Dr. M. Manjunatha	Role of Agricultural Engineering Towards Global Food Security
743	2019-20	CoA, GKVK	International	Dr. K.S. Rajashekarappa	Role of Agricultural Engineering Towards Global Food Security
744	2019-20	CoA, GKVK	International	Dr. Murukannappa	Role of Agricultural Engineering Towards Global Food Security
745	2019-20	CoA, GKVK	International	Dr. Dronachari Manvi	Role of Agricultural Engineering Towards Global Food Security
746	2019-20	CoA, GKVK	International	Dr. V. Kumar Goud	Role of Agricultural Engineering Towards Global Food Security
747	2019-20	CoA, GKVK	International	Dr. B.A. Anand	Role of Agricultural Engineering Towards Global Food Security
748	2019-20	CoA, GKVK	International	Dr. B.C. Ravikumar	Role of Agricultural Engineering Towards Global Food Security
749	2019-20	CoA, GKVK	International	Dr. C.T. Ramachandra	Role of Agricultural Engineering Towards Global Food Security
750	2019-20	CoA, GKVK	International	Dr. S. Ramesh	Statistical Analysis of Genetic and Phenotypic Data for Breeders
751	2019-20	CoA, Hassan	International	Dr. B. Veena	107th Indian Science Congress, UAS, GKVK, Bangalore
752	2019-20	CoA, Hassan	International	Dr. B.T. Krishnaprasad	107th Indian Science Congress, UAS, GKVK, Bangalore
753	2019-20	CoA, Hassan	International	Dr. B. Rekha	107th Indian Science Congress, UAS, GKVK, Bangalore
754	2019-20	CoA, Hassan	International	Dr. S. Channakeshava	107th Indian Science Congress, UAS, GKVK, Bangalore
755	2019-20	CoA, Hassan	International	Dr. N. Devakumar	107th Indian Science Congress, UAS, GKVK, Bangalore
756	2019-20	CoA, Hassan	International	Dr. T. Narayana Swamy	107th Indian Science Congress, UAS, GKVK, Bangalore
757	2019-20	CoA, Hassan	International	Dr. Bharathi C.Mirajkar	107th Indian Science Congress, UAS, GKVK, Bangalore
758	2019-20	CoA, Hassan	International	Dr. M.S.P. Kanavi	107th Indian Science Congress, UAS, GKVK, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
759	2019-20	CoA, Hassan	International	Dr. Pooja Holeyannavar	107th Indian Science Congress, UAS, GKVK, Bangalore
760	2019-20	CoA, Hassan	International	Mr. M.K. Aravinda Kumar	107th Indian Science Congress, UAS, GKVK, Bangalore
761	2019-20	CoA, Hassan	International	Dr. Prakash Koler	107th Indian Science Congress, UAS, GKVK, Bangalore
762	2019-20	CoA, Hassan	International	Dr. S.T. Bhairappanavar	107th Indian Science Congress, UAS, GKVK, Bangalore
763	2019-20	CoA, Hassan	International	Dr. Y.P. Shilpashree	107th Indian Science Congress, UAS, GKVK, Bangalore
764	2019-20	CoA, Hassan	International	Mr. H.K. Ranganath	107th Indian Science Congress, UAS, GKVK, Bangalore
765	2019-20	CoA, Hassan	International	Mr. Shivabasappa	107th Indian Science Congress, UAS, GKVK, Bangalore
766	2019-20	CoA, Hassan	International	Dr. B.S. Basavaraju	107th Indian Science Congress, UAS, GKVK, Bangalore
767	2019-20	CoA, Hassan	International	Dr. R. Jayaramaiah	107th Indian Science Congress, UAS, GKVK, Bangalore
768	2019-20	CoA, Mandya	International	Dr. S.B. Yogananda	Water Resource and Environmental Engineering (ICWREE 2019), Singapore
769	2019-20	CoS, Chintamani	International	Dr. Aarti Pannure	Asian Bees, National Centre for Biological Sciences (NCBS) GKVK, Bengaluru
770	2019-20	CoS, Chintamani	International	Dr. Aarti Pannure	Celebrating Indian Insect Diversity, UAS, GKVK, Bangalore
771	2019-20	CoS, Chintamani	International	Dr. Aarti Pannure	Dr. L. C. Coleman Lecture, Department of Entomology, UAS, GKVK, Bangalore
772	2019-20	CoS, Chintamani	International	Dr. M.V. Srinivas Reddy	Global Initiatives in Agricultural and Applied Sciences for Eco Friendly Environment (GIASE-2019)
773	2019-20	CoS, Chintamani	International	Dr. Aarti Pannure	Global Research initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS-2019), ICAR-NAARM, Hyderabad, Telangana
774	2019-20	CoS, Chintamani	International	Dr. M. Mahesh	ICPPHI-2019, ICAR - IIHR, Bengaluru, Karnataka, India
775	2019-20	CoS, Chintamani	International	Mr. R. Rakesh	Issues and Challenges in Higher Education, Central College Campus, Bangalore
776	2019-20	CoS, Chintamani	International	Dr. M. Savitha	Plant Phenomics, Dept. of Crop Physiology GKVK, Bangalore
777	2019-20	CoS, Chintamani	International	Mr. P.A. Gowda	Plant Protection in Horticulture: Advances and Challenges (ICPPH-2019), IIHR, Bangalore
778	2019-20	CoS, Chintamani	International	Mr. Mallappa J Madolli	Rural-Urban Transitions, Vertical Gardening in Combination with Roof Water Harvesting in Bengaluru, India, Bangalore
779	2019-20	Directorate of Extn.	International	Mrs. A. Ashwini	Emerging Scenario in Agribusiness-ICESAB

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
780	2019-20	Directorate of Extn.	International	Dr. H.K. Pankaja	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
781	2019-20	Directorate of Extn.	International	Dr. N.T. Naresh	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
782	2019-20	Directorate of Extn.	International	Dr. Kamalabai Koodagi	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
783	2019-20	Directorate of Extn.	International	Dr. D.H. Roopashree	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
784	2019-20	Directorate of Extn.	International	Dr. Rajegowda	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
785	2019-20	Directorate of Extn.	International	Dr. M. Shivashankar	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
786	2019-20	Directorate of Extn.	International	Dr. Ashok Doddamani	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
787	2019-20	Directorate of Extn.	International	Dr. T. Nagaraja	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
788	2019-20	Directorate of Extn.	International	Dr. A.C. Girish	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
789	2019-20	Directorate of Extn.	International	Dr. M.S. Anitha	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
790	2019-20	Directorate of Extn.	International	Dr. S.M. Savitha	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
791	2019-20	Directorate of Extn.	International	Dr. Lata R. Kulkarni	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
792	2019-20	Directorate of Extn.	International	Dr. B.S. Rajendra Prasad	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
793	2019-20	Directorate of Extn.	International	Dr. M.S. Dinesha	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru
794	2019-20	Directorate of Extn.	International	Mrs. D.C. Preethu	Extension for Strengthening Agricultural Research and Development, ICAR - JSS KVK, Mysuru

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
795	2019-20	Directorate of Extn.	International	Dr. G. Ananda Manegar	Indo Dutch Dairy Business Meet
796	2019-20	Directorate of Extn.	International	Mrs. G.R. Aruna	Issues and Challenges in Higher Education, Central College Campus, Bangalore
797	2019-20	Directorate of Extn.	International	Dr. Banu Deshpande	Materials for Environment, Sustainable Society and Global Empowerment – 2019 (MESSAGE - 2019)
798	2019-20	Directorate of Research	International	Dr. B. Narayanaswamy	Global Initiatives for Sustainable Development Issues and Strategies
799	2019-20	Directorate of Research	International	Dr. N. Umashankar	In SYNC- with Next Generation Biosciences (INGB)-2019
800	2019-20	Directorate of Research	International	Dr. P. Thimmegowda	International Seed Exhibition
801	2019-20	Directorate of Research	International	Dr. P. Thimmegowda	International Seed Exhibition
802	2019-20	Directorate of Research	International	Dr. P. Thimmegowda	Water Resource and Environmental Engineering (ICWREE 2019), Singapore
803	2019-20	CoA, GKVK	National	Dr. B.C. Ravikumar	Approved Test Centers
804	2019-20	CoA, GKVK	National	Dr. H.K. Ramappa	Annual Pigeon Pea Group Meet
805	2019-20	CoA, GKVK	National	Dr. A.Sathish	Indo-German Collaborative Research Project, UAS, Bangalore
806	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	Review Meeting on National Academic Depository (NAD)
807	2019-20	CoA, GKVK	National	Dr. V. Kumar Goud	Agriculture and Smart Village for Sustainable Development
808	2019-20	CoA, GKVK	National	Dr. N. Umashankar	Foldscope Microscope: Hands on Training Workshop - 2019, Bangalore
809	2019-20	CoA, GKVK	National	Dr. A.Sathish	Indo-German Research Proposal Writing Workshop
810	2019-20	CoA, GKVK	National	Dr. Dronachari Manvi	Indo-German Research Proposal Writing Workshop
811	2019-20	CoA, GKVK	National	Dr. Kavita Kandpal	Trainers of Trainees on Plant Health Management
812	2019-20	CoA, GKVK	National	Dr. C. Narayanaswamy	Life Skills
813	2019-20	CoA, GKVK	National	Dr. Siddayya	27th AERA Conference on Changing Landscape of Rural India
814	2019-20	CoA, GKVK	National	Dr. B.C. Ravikumar	2nd Tech VC's Conclave-2020
815	2019-20	CoA, GKVK	National	Dr. K. Tamil Vendan	Academia Industry – Government Linkages for Quality Education, UAS, GKVK, Bangalore
816	2019-20	CoA, GKVK	National	Mr. G. Eswarappa	Advances in Biology Conservation, Rearing and Management of Apis & Non-Apis bees
817	2019-20	CoA, GKVK	National	Dr. C.P. Gracy	Agribusiness Faculty Development & Program Sustainability: Transitioning from Student to Faculty Member

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
818	2019-20	CoA, GKVK	National	Dr. B.M. Shashidhara	Agribusiness Faculty Development & Program Sustainability: Transitioning from Student to Faculty Member
819	2019-20	CoA, GKVK	National	Dr. G.C. Jayashree	Agriculture and Smart Village for Sustainable Development
820	2019-20	CoA, GKVK	National	Er. P.N. Krishnamma	Agriculture and Smart Village for Sustainable Development
821	2019-20	CoA, GKVK	National	Dr. M. Manjunatha	Agriculture and Smart Village for Sustainable Development
822	2019-20	CoA, GKVK	National	Dr. K.S. Rajashekarappa	Agriculture and Smart Village for Sustainable Development
823	2019-20	CoA, GKVK	National	Er. Babu RM Ray	Agriculture and Smart Village for Sustainable Development
824	2019-20	CoA, GKVK	National	Dr. Dronachari Manvi	Agriculture and Smart Village for Sustainable Development
825	2019-20	CoA, GKVK	National	Dr. A.R. Radhakrishna	Agriculture and Smart Village for Sustainable Development
826	2019-20	CoA, GKVK	National	Dr. B.A. Anand	Agriculture and Smart Village for Sustainable Development
827	2019-20	CoA, GKVK	National	Dr. B.C. Ravikumar	Agriculture and Smart Village for Sustainable Development
828	2019-20	CoA, GKVK	National	Dr. Murukannappa	Agriculture and Smart Village for Sustainable Development
829	2019-20	CoA, GKVK	National	Dr. C.T. Ramachandra	Agriculture and Smart Village for Sustainable Development
830	2019-20	CoA, GKVK	National	Mr. Prasanna Kumar	Agriculture and Smart Village for Sustainable Development
831	2019-20	CoA, GKVK	National	Dr. Naresh Annem	Agril. Knowledge Management tools in the Networked digital environment
832	2019-20	CoA, GKVK	National	Dr. B.V. Shwetha	Analysis and Quality Control of Honey
833	2019-20	CoA, GKVK	National	Dr. B.V. Shwetha	Beekeeping
834	2019-20	CoA, GKVK	National	Dr. G.C. Kuberappa	Beekeeping and Madhu Mahotsava
835	2019-20	CoA, GKVK	National	Mr. G. Eswarappa	Beekeeping and Madhu Mahotsava
836	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	Beekeeping and Madhu Mahotsava
837	2019-20	CoA, GKVK	National	Er. Babu RM Ray	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
838	2019-20	CoA, GKVK	National	Dr. Dronachari Manvi	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
839	2019-20	CoA, GKVK	National	Dr. G.C. Jayashree	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
840	2019-20	CoA, GKVK	National	Dr. M.R. Ananda	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
841	2019-20	CoA, GKVK	National	Dr. K.N. Geetha	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
842	2019-20	CoA, GKVK	National	Dr. Rinku Verma	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
843	2019-20	CoA, GKVK	National	Dr. Siddayya	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
844	2019-20	CoA, GKVK	National	Dr. C. Seenappa	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
845	2019-20	CoA, GKVK	National	Dr. H.G. Ranganath	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
846	2019-20	CoA, GKVK	National	Dr. B. Mamatha	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
847	2019-20	CoA, GKVK	National	Dr. B.A. Anand	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
848	2019-20	CoA, GKVK	National	Dr. A.Sathish	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
849	2019-20	CoA, GKVK	National	Dr. Usha Ravindra	Big data Analytics and Digital in Agriculture, UAS, GKVK, Bangalore
850	2019-20	CoA, GKVK	National	Dr. K.B. Murthy	Birth Centenary Celebration of Prof. C R Rao
851	2019-20	CoA, GKVK	National	Dr. K.N. Krishnamurthy	Birth Centenary Celebration of Prof. C R Rao
852	2019-20	CoA, GKVK	National	Dr. T.L. Mohankumar	Birth Centenary Celebration of Prof. C R Rao
853	2019-20	CoA, GKVK	National	Mr. K.J. Yogesh	Birth Centenary Celebration of Prof. C R Rao
854	2019-20	CoA, GKVK	National	Dr. S.N. Megeri	Birth Centenary Celebration of Prof. C R Rao
855	2019-20	CoA, GKVK	National	Mr. A. Rajesh	Birth Centenary Celebration of Prof. C R Rao
856	2019-20	CoA, GKVK	National	Mr. A.S. Kamble	Birth Centenary Celebration of Prof. C R Rao
857	2019-20	CoA, GKVK	National	Ms. K. Latha	Birth Centenary Celebration of Prof. C R Rao
858	2019-20	CoA, GKVK	National	Dr. G. Ranganath	Branding of Agricultural Commodities and Rural Marketing for Rural Transformation
859	2019-20	CoA, GKVK	National	Dr. C. Seenappa	Business Prospects in Processing of Fruits and Vegetables
860	2019-20	CoA, GKVK	National	Dr. Kavita Kandpal	Business Prospects in Processing of Fruits and Vegetables
861	2019-20	CoA, GKVK	National	Dr. Usha Ravindra	CABI on Department of Agriculture Extension
862	2019-20	CoA, GKVK	National	Dr. J. Saralakumari	CABI on Establishment of Plant Health Clinic
863	2019-20	CoA, GKVK	National	Dr. A.R. Radhakrishna	Climate Change and World Peace
864	2019-20	CoA, GKVK	National	Dr. Y.A. Nanjareddy	Climate Smart Agriculture for Sustaining Crop Productivity and Improving Livelihood Security
865	2019-20	CoA, GKVK	National	Dr. K. Murali Mohan	Coconut Rugose Whitefly
866	2019-20	CoA, GKVK	National	Dr. T. Chikkaramappa	Councillors and Standing Committee Meeting of ISSS, Hyderabad

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
867	2019-20	CoA, GKVK	National	Dr. M.R. Girish	Developing Methodology for Assessing the Contribution of Biodiversity to Agriculture, Food and Nutritional Security, and Diversification of Livelihoods
868	2019-20	CoA, GKVK	National	Dr. K.S. Rajashekarappa	Development in Soil Science
869	2019-20	CoA, GKVK	National	Dr. Fatima Sadatulla	Developmental Policies, Programmes and Domine Approaches for Sericulture Improvement, Department of Sericulture, College of Agriculture
870	2019-20	CoA, GKVK	National	Dr. Chikkalingaiah	Developmental Policies, Programmes and Domine Approaches for Sericulture Improvement, Department of Sericulture, College of Agriculture
871	2019-20	CoA, GKVK	National	Dr. R.N. Bhaskar	Developmental Policies, Programmes and Domine Approaches for Sericulture Improvement, Department of Sericulture, College of Agriculture
872	2019-20	CoA, GKVK	National	Mr. G. Eswarappa	Digital Field Book, ZARS, V.C. Farm, Mandya.
873	2019-20	CoA, GKVK	National	Dr. N. Nagaraju	Disease Resistant Hot Pepper Lines
874	2019-20	CoA, GKVK	National	Dr. G.C. Kuberappa	District Level Honey Mela Cum Workshop on Beekeeping / Exhibition
875	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	District Level Honey Mela Cum Workshop on Beekeeping / Exhibition
876	2019-20	CoA, GKVK	National	Dr. C.T. Ramachandra	E-Learning, Virtual Class Room and Academic Management Systems
877	2019-20	CoA, GKVK	National	Er. P.N. Krishnamma	Entrepreneurship Development Programme on Business Prospects in Processing of Fruits and Vegetables, IIHR, Bangalore
878	2019-20	CoA, GKVK	National	Dr. Neena Joshi	Faculty Level Package of Practice
879	2019-20	CoA, GKVK	National	Mr. Prasanna Kumar	Farm Equipment for Plant Health Management
880	2019-20	CoA, GKVK	National	Mrs. R. Poornima	Farm Women in Agriculture, Nutritious Food Competition and Marketing Contacts
881	2019-20	CoA, GKVK	National	Dr. Usha Ravindra	Food Safety and Security
882	2019-20	CoA, GKVK	National	Dr. Siddayya	Food Security in India Challenges and Opportunities
883	2019-20	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Formulation of Price Policy of Copra Crop 2020 Season
884	2019-20	CoA, GKVK	National	Dr. R.L. Ravikumar	Genomic Projects in Different Crops
885	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	GIZ Resist Detect Protect Project Final Workshop
886	2019-20	CoA, GKVK	National	Dr. C. Seenappa	Good Laboratory Practices and Environmental Safety
887	2019-20	CoA, GKVK	National	Dr. Kavita Kandpal	Good Laboratory Practices and Environmental Safety

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
888	2019-20	CoA, GKVK	National	Er. P.N. Krishnamma	Human Digitization, Future Intelligence Workshop on the : Future of Foods- Engineering Agriculture Technology
889	2019-20	CoA, GKVK	National	Dr. B.C. Ravikumar	Human Digitization, Future Intelligence Workshop on the : Future of Foods- Engineering Agriculture Technology
890	2019-20	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Improving the Quality and Relevance of Agricultural Education
891	2019-20	CoA, GKVK	National	Er. P.N. Krishnamma	Income Tax Awareness Programme
892	2019-20	CoA, GKVK	National	Dr. M.R. Ananda	Innovations on Educational Technology in Agriculture
893	2019-20	CoA, GKVK	National	Dr. T. Chikkaramappa	Integrated Nutrient Management and Nutrient Budgeting through Advanced Models to Improved Crop Productivity
894	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	IPM for Coconut Whitefly and Apiculture
895	2019-20	CoA, GKVK	National	Dr. C. Seenappa	Irrigated Agriculture in the Times of Climate Change
896	2019-20	CoA, GKVK	National	Dr. K.B. Umesh	ISCB Review Meeting
897	2019-20	CoA, GKVK	National	Dr. N. Earanna	Isolation and Characterization of Endophytes under ICAR-CAAST Programme
898	2019-20	CoA, GKVK	National	Er. Babu RM Ray	Krushiyalli Raitha Mahile, Poustica-Youktha Aahara Padaarthagala Mattu Maarukatte Samparka
899	2019-20	CoA, GKVK	National	Dr. Naresh Annem	Leadership Building and Communication Skills
900	2019-20	CoA, GKVK	National	Dr. H.M. Jayadeva	Nano Technology in Agriculture
901	2019-20	CoA, GKVK	National	Dr. C.P. Gracy	NATCON 2019
902	2019-20	CoA, GKVK	National	Dr. Siddayya	NATCON 2019
903	2019-20	CoA, GKVK	National	Dr. Mamatha Girish	NATCON 2019
904	2019-20	CoA, GKVK	National	Dr. B.M. Shashidhara	NATCON 2019
905	2019-20	CoA, GKVK	National	Dr. H.G. Ranganath	NATCON 2019
906	2019-20	CoA, GKVK	National	Dr. M.R. Girish	NATCON 2019
907	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	National Beekeepers Meet
908	2019-20	CoA, GKVK	National	Dr. N.S. Bhat	National Beekeepers Meet
909	2019-20	CoA, GKVK	National	Dr. K.S. Somashekar	New Approaches in Seed Science and Technology

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
910	2019-20	CoA, GKVK	National	Er. Babu RM Ray	Nutraceutical Ingredients in Food Processing, Dept. of Food Science and Nutrition, UAS, GKVK, Bangalore
911	2019-20	CoA, GKVK	National	Dr. S. Shamshad Begum	Nutritional Importance of Amla and Tulsi and its Value-added products.
912	2019-20	CoA, GKVK	National	Dr. J. Saralakumari	Organic Farming its Application and Advantages in Agriculture
913	2019-20	CoA, GKVK	National	Dr. K. Murali	Our Future on Earth
914	2019-20	CoA, GKVK	National	Dr. N. Nagaraju	Pathogenomics of Plant Viruses
915	2019-20	CoA, GKVK	National	Dr. N. Nataraja Karaba	Plant Physiology
916	2019-20	CoA, GKVK	National	Dr. Y.A. Nanjareddy	Plant Physiology
917	2019-20	CoA, GKVK	National	Dr. M.S. Sheshshayee	Plant Physiology
918	2019-20	CoA, GKVK	National	Dr. B. Mohan Raju	Plant Physiology
919	2019-20	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Price Fixing Committee KSC
920	2019-20	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Price Policy for Kharif Crops 2020-21
921	2019-20	CoA, GKVK	National	Dr. G.S. Mahadevaiah	Price Policy for Rabi Crops for 2018-19
922	2019-20	CoA, GKVK	National	Dr. P.J. Devaraju	Quality Seed for Farmers Prosperity
923	2019-20	CoA, GKVK	National	Dr. N. Earanna	Rapid Screening of Fungal Endophytes for Secondary Metabolite Production
924	2019-20	CoA, GKVK	National	Dr. S. Ramesh	Resilient Agriculture for sustainable Production and Nutritional Security
925	2019-20	CoA, GKVK	National	Dr. A.Sathish	Revision of Package of Practices
926	2019-20	CoA, GKVK	National	Dr. B.C. Ravikumar	Role of Agricultural Engineering Innovations in Doubling Farmers' Income
927	2019-20	CoA, GKVK	National	Dr. K.S. Rajashekarappa	Role of Agricultural Engineering Innovations in Doubling Farmers' Income
928	2019-20	CoA, GKVK	National	Mr. Prasanna Kumar	Role of Agricultural Engineering Innovations in Doubling Farmers' Income
929	2019-20	CoA, GKVK	National	Dr. A.Sathish	SAP Workshop to Develop the Content at UAS, Raichur
930	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	Skill Development Training Programme on Beekeeping
931	2019-20	CoA, GKVK	National	Mr. G. Eswarappa	Skill Development Training Programme on Beekeeping
932	2019-20	CoA, GKVK	National	Dr. K.S. Jagadish	Skill Development Training Programme on Beekeeping
933	2019-20	CoA, GKVK	National	Dr. A.Sathish	Soil Properties and Soil Health Management
934	2019-20	CoA, GKVK	National	Dr. A.Sathish	Soil Types and Their Management, Soil Sampling, Soil and Water Testing Advisory

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
935	2019-20	CoA, GKVK	National	Dr. T. Chikkaramappa	Standing Committee Meeting of ISSS at New Delhi
936	2019-20	CoA, GKVK	National	Dr. A.Sathish	SURVEYBE and STATA Software
937	2019-20	CoA, GKVK	National	Dr. Mamatha Girish	SURVEYBE and STATA Software
938	2019-20	CoA, GKVK	National	Dr. M.R. Girish	SURVEYBE and STATA Software
939	2019-20	CoA, GKVK	National	Dr. K.P. Raghuprasad	Sustainable Agriculture Challenges & Opportunities
940	2019-20	CoA, GKVK	National	Dr. B. Krishnamurthy	Sustainable Agriculture Challenges & Opportunities
941	2019-20	CoA, GKVK	National	Dr. N. Nagaraju	Transdisciplinary Approaches to Plant Pathology Research , Education and Extension in Response to Changing Climate : The Way Ahead
942	2019-20	CoA, GKVK	National	Dr. A.Sathish	Validation and Certificate of on Crop Health Management Conationtent (Diseases and Nutrient Deficiency)
943	2019-20	CoA, GKVK	National	Dr. J. Saralakumari	Wikipedia organized by India Bio-science at JNASRND
944	2019-20	CoA, GKVK	National	Dr. J. Saralakumari	Wikipedia organized by India Bio-science at JNASRND
945	2019-20	CoA, GKVK	National	Dr. A.Sathish	Water Conservation in Jal Shakthi Abhiyan
946	2019-20	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Water Resources Management – Advances in Technology & Governance
947	2019-20	CoA, GKVK	National	Dr. P.S. Srikantha Murthy	Water Users Rights and Responsibilities
948	2019-20	CoA, GKVK	National	Dr. T. Chikkaramappa	Web application developed under KWDP-II (Sujala-III)
949	2019-20	CoA, GKVK	National	Dr. M. Mahadevamurthy	Wild life Crime & Preservation
950	2019-20	CoA, GKVK	National	Er. P.N. Krishnamma	Women in Agriculture
951	2019-20	CoA, GKVK	National	Dr. G.C. Jayashree	Women in Agriculture
952	2019-20	CoA, GKVK	National	Dr. Rinku Verma	World Bank Sponsored National Higher Education Project Component 2A
953	2019-20	CoA, GKVK	National	Dr. H.C. Prakasha	World Soil Day 2019
954	2019-20	CoA, GKVK	National	Dr. K.M. Harinikumar	Youth as Torch Bears for Business Oriented Agriculture in South India
955	2019-20	CoA, GKVK	National	Dr. Neena Joshi	ZREP - Zone 5, GKVK, Bangalore
956	2019-20	CoA, GKVK	National	Dr. Neena Joshi	ZREP - Zone 6, ZARS, Mandya
957	2019-20	CoA, GKVK	National	Dr. G.S. Mahadevaiah	ZREP - Zone 6, ZARS, Mandya
958	2019-20	CoA, Hassan	National	Dr. H.C. Girisha	On Farm Production of Biopesticides and Biofertilizers, NIPHM, Hyderabad

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
959	2019-20	CoA, Hassan	National	Dr. S. Anitha	107th Indian Science Congress, UAS, GKVK, Bangalore
960	2019-20	CoA, Hassan	National	Dr. Geetha Govind	107th Indian Science Congress, UAS, GKVK, Bangalore
961	2019-20	CoA, Hassan	National	Dr. B. Tambat	107th Indian Science Congress, UAS, GKVK, Bangalore
962	2019-20	CoA, Hassan	National	Dr. K.S. Shashidhara	107th Indian Science Congress, UAS, GKVK, Bangalore
963	2019-20	CoA, Hassan	National	Dr. H. Manjunatha	Adoption of e-SAP in Karnataka, UAS, GKVK, Bangalore
964	2019-20	CoA, Hassan	National	Dr. K.S. Shashidhara	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
965	2019-20	CoA, Hassan	National	Dr. K.S. Shashidhara	Computer Aided Drug Discovery, Biotechnika Ltd., Bangalore
966	2019-20	CoA, Hassan	National	Dr. Pooja Holeyannavar	Context of Food Safety, FSSAI Act & Regulations and CODEX Alimentarius, CoA, Hassan
967	2019-20	CoA, Hassan	National	Dr. S. Anitha	Context of Food Safety, FSSAI Act & Regulations and CODEX Alimentarius, CoA, Hassan
968	2019-20	CoA, Hassan	National	Dr. M.S.P. Kanavi	Current Applications, Challenges and Perspective of Genomics-Assisted Breeding for Crop Improvement, Bihar Agricultural University, Sabour
969	2019-20	CoA, Hassan	National	Dr. Prakash Koler	Current Techniques and Advances in Plant Growth Promoting Rhizomicrobial Research, UAHS, Shivamogga
970	2019-20	CoA, Hassan	National	Dr. S. Anitha	Digital Teaching Techniques, UAS Bangalore
971	2019-20	CoA, Hassan	National	Dr. S.N. Nagesha	Digital Teaching Techniques, UAS Bangalore
972	2019-20	CoA, Hassan	National	Mrs. H.N. Ramya	Digital Teaching Techniques, UAS Bangalore
973	2019-20	CoA, Hassan	National	Dr. Geetha Govind	DNA Marker Data Analysis and its Interpretation in Crop Improvement, UAS Bangalore
974	2019-20	CoA, Hassan	National	Dr. M.S.P. Kanavi	DNA Marker Data Analysis and its Interpretation in Crop Improvement, UAS Bangalore
975	2019-20	CoA, Hassan	National	Mrs. H.N. Ramya	Entrepreneurship Development Programme on Business Prospects in Processing of Fruits and Vegetables, IIHR, Bangalore
976	2019-20	CoA, Hassan	National	Dr. B. Tambat	e-SAP Workshop, UAS, GKVK, Bangalore
977	2019-20	CoA, Hassan	National	Dr. K.S. Shashidhara	e-SAP Workshop, UAS, GKVK, Bangalore
978	2019-20	CoA, Hassan	National	Dr. S. Channakeshava	e-SAP Workshop, UAS, GKVK, Bangalore
979	2019-20	CoA, Hassan	National	Dr. B. Tambat	India's Biodiversity: Origin, Evolution and Conservation, Satish Dhawan auditorium, CSIC, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
980	2019-20	CoA, Hassan	National	Dr. B. Tambat	Kannada Science Congress, Davanagere University, Davanagere
981	2019-20	CoA, Hassan	National	Dr. S. Anitha	Nutraceutical Ingredients in Food Processing, Dept. of Food Science and Nutrition, UAS, GKVK, Bangalore
982	2019-20	CoA, Hassan	National	Mrs. H.N. Ramya	Nutrition Security for Planetary Health, GKVK, Bangalore
983	2019-20	CoA, Hassan	National	Dr. B. Veena	Rapid Detection Techniques for Food Quality Evaluation and Safety of Foods, CIAE, Bhopal
984	2019-20	CoA, Hassan	National	Dr. K.S. Shashidhara	Recent Advances in Conservation and Management of Genetic Resources in Plantation, Spices, Medicinal and Aromatic Crops, College of Horticulture, Mudigere
985	2019-20	CoA, Hassan	National	Mrs. H.N. Ramya	Role of Agricultural Engineering towards Global Food Security, IIE, Bangalore
986	2019-20	CoA, Hassan	National	Dr. S. Anitha	Tobacco Control, UAS, Bangalore
987	2019-20	CoA, Mandya	National	Dr. N.S. Pankaja	Avanes in Omics of Host – Rhizobacteria Pathogen Interaction and Sustainable Plant & Soil Health Management
988	2019-20	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Hands on Training - Molecular Biology and Scientific Writing
989	2019-20	CoA, Mandya	National	Dr. N. Kiran Kumar	Hands on Training - Molecular Biology and Scientific Writing
990	2019-20	CoA, Mandya	National	Dr. H. R. Savitha	107th Indian Science Congress, UAS, GKVK, Bangalore
991	2019-20	CoA, Mandya	National	Dr. S.B. Yogananda	107th Indian Science Congress, UAS, GKVK, Bangalore
992	2019-20	CoA, Mandya	National	Dr. T. Bhagyalakshmi	107th Indian Science Congress, UAS, GKVK, Bangalore
993	2019-20	CoA, Mandya	National	Dr. V.B. Sanath Kumar	107th Indian Science Congress, UAS, GKVK, Bangalore
994	2019-20	CoA, Mandya	National	Mr. M. Venkatesh	107th Indian Science Congress, UAS, GKVK, Bangalore
995	2019-20	CoA, Mandya	National	Dr. N. Kiran Kumar	107th Indian Science Congress, UAS, GKVK, Bangalore
996	2019-20	CoA, Mandya	National	Dr. S.S. Prakash	107th Indian Science Congress, UAS, GKVK, Bangalore
997	2019-20	CoA, Mandya	National	Mr. M. Venkatesh	107th Indian Science Congress, UAS, GKVK, Bangalore
998	2019-20	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Climate Change and Plant Diseases at Vishakhapatnam, Andhra Pradesh
999	2019-20	CoA, Mandya	National	Dr. K.V. Shivakumar	Digital Field Book, ZARS, V.C. Farm, Mandya
1000	2019-20	CoA, Mandya	National	Dr. S.B. Yogananda	Digital Field Book, ZARS, V.C. Farm, Mandya
1001	2019-20	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Digital Field Book, ZARS, V.C. Farm, Mandya
1002	2019-20	CoA, Mandya	National	Dr. N.S. Pankaja	Digital Field Book, ZARS, V.C. Farm, Mandya

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1003	2019-20	CoA, Mandya	National	Dr. J. Mahadeva	Digital Field Book, ZARS, V.C. Farm, Mandya
1004	2019-20	CoA, Mandya	National	Dr. N. Kiran Kumar	Digital Field Book, ZARS, V.C. Farm, Mandya
1005	2019-20	CoA, Mandya	National	Dr. B.S Somyalatha	Digital Field Book, ZARS, V.C. Farm, Mandya
1006	2019-20	CoA, Mandya	National	Dr. K.R. Ashoka	Soil Protection is Mankind Protection, Sirsi, Karnataka
1007	2019-20	CoA, Mandya	National	Dr. T. Bhagyalakshmi	Soil Protection is Mankind Protection, Sirsi, Karnataka
1008	2019-20	CoA, Mandya	National	Dr. S.S. Prakash	Soil Protection is Mankind Protection, Sirsi, Karnataka
1009	2019-20	CoA, Mandya	National	Mr. M. Venkatesh	State Level Natural Farming
1010	2019-20	CoS, Chintamani	National	Dr. Ramakrishna Naika	Chairman of Project Review Committee for Dept. of Scientific and Industrial Research, Ministry of Science and Technology, New Delhi
1011	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Evaluation of Poster Presentations of Environmental Science during Post Graduate Science Week-2019, UAS, GKVK, Bangalore
1012	2019-20	CoS, Chintamani	National	Dr. Ramakrishna Naika	Examiner for Setting for Question Paper for Andhra Pradesh Public Service Commission
1013	2019-20	CoS, Chintamani	National	Dr. H.S. Latha	Examiner for Setting for Question Paper for Andhra Pradesh Public Service Commission
1014	2019-20	CoS, Chintamani	National	Mrs. V.P. Bharati	Moderator of Question Paper for Andhra Pradesh Public Service Commission
1015	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Radio Talk on Agroforestry (Hasiru Honnu Programme), AIR Bangalore on 23-01-2019
1016	2019-20	CoS, Chintamani	National	Mr. P.A. Gowda	Radio Talk on Biofertilizers, AIR Bangalore on 03.03.2019
1017	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Radio Talk on international Biodiversity Day Celebration, AIR Bangalore on 22.-05-2019
1018	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Radio Talk on World Wildlife Day Celebration, AIR Bangalore on 03-03-2019
1019	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	Apiculture Technical Meet and Madhu mela, Department of Apiculture, UAS, GKVK, Bangalore
1020	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	Beekeeping, Skill Development Programme, ICAR - KVK, Chintamani
1021	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Capacity Building of Teachers/Scientists of Agriculture Research in Frontier Areas of Science on Competency Enhancement for Efficiency and Effectiveness at Work Place, UAHS, Shivamogga

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1022	2019-20	CoS, Chintamani	National	Mr. P.A. Gowda	Digital Teaching Techniques, UAS Bangalore
1023	2019-20	CoS, Chintamani	National	Mr. P.A. Gowda	Foldscope Microscope: Hands on Training Workshop - 2019, Bangalore
1024	2019-20	CoS, Chintamani	National	Mrs. T.G. Amrutha	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1025	2019-20	CoS, Chintamani	National	Dr. G. Narasa Reddy	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1026	2019-20	CoS, Chintamani	National	Dr. K.R. Netrayini	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1027	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1028	2019-20	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1029	2019-20	CoS, Chintamani	National	Mr. P.A. Gowda	Production Protocol for Bio-Fertilizers, Hyderabad
1030	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	Tractor Operator Training, ICAR - KVK, Chintamani
1031	2019-20	CoS, Chintamani	National	Dr. Manjunath Gowda	Value Addition of Fruits and Vegetables, Mango Post Harvest Handling Centre, Chintamani.
1032	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Writing and Documentation Skills for Extension officers, ICAR - MANAGE, Hyderabad
1033	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	107th Indian Science Congress, UAS, GKVK, Bangalore
1034	2019-20	CoS, Chintamani	National	Dr. Ramakrishna Naika	6th Asia Pacific Congress of Sericulture and Insect Biotechnology, Mysore
1035	2019-20	CoS, Chintamani	National	Dr. Ramakrishna Naika	Academia Industry – Government Linkages for Quality Education, UAS, GKVK, Bangalore
1036	2019-20	CoS, Chintamani	National	Mr. Mallappa J Madolli	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1037	2019-20	CoS, Chintamani	National	Mrs. V.P. Bharati	Challenges and innovative Approaches in Agriculture and Allied Sciences Research, Salem, Tamil Nadu, India
1038	2019-20	CoS, Chintamani	National	Dr. M.V. Srinivas Reddy	Challenges and innovative Approaches in Agriculture and Allied Sciences Research, Salem, Tamil Nadu, India
1039	2019-20	CoS, Chintamani	National	Dr. D.V. Naveen	Challenges and Innovative Approaches in Agriculture and Allied Sciences Research, Salem, Tamil Nadu, India

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1040	2019-20	CoS, Chintamani	National	Dr. Ramakrishna Naika	Challenges and Innovative Approaches in Agriculture and Allied Sciences Research, Salem, Tamil Nadu, India
1041	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	Challenges in Understanding Whitefly Diversity & the Mechanism of Transmission of Virus, UAS, GKVK, Bangalore
1042	2019-20	CoS, Chintamani	National	Mrs. V.P. Bharati	Developmental Policies, Programmes and Domine Approaches for Sericulture Improvement, Department of Sericulture, College of Agriculture
1043	2019-20	CoS, Chintamani	National	Dr. S.K. Priyadarshini	DNA Marker Data Analysis and its Interpretation in Crop Improvement, UAS Bangalore
1044	2019-20	CoS, Chintamani	National	Mrs. V.P. Bharati	Frontier Lectures on Seri Biotechnology
1045	2019-20	CoS, Chintamani	National	Dr. Aarti Pannure	Importance of Beekeeping in Sustainable & High Yielding Crops, Dept. of Apiculture, UAS, GKVK, Bangalore
1046	2019-20	CoS, Chintamani	National	Mrs. V.P. Bharati	Mulberry Fruit A Promising Nutraceutical Resource with Inherent Bioactive Compounds, SKUAST-Kashmir
1047	2019-20	CoS, Chintamani	National	Dr. H.S. Latha	New Vistas in Science and Technology for Common Good - 2019, NMKRV College for Women Jayanagar III Block, Bengaluru.
1048	2019-20	CoS, Chintamani	National	Mr. P.A. Gowda	On-Production of Bio-inputs for Sustainable Agriculture, Chintamani
1049	2019-20	CoS, Chintamani	National	Dr. T.M. Ningaraju	Research proposal Writing Workshop, KSTEPS and German Research Foundation
1050	2019-20	CoS, Chintamani	National	Mr. Mallappa J Madolli	Role of Agricultural Engineering towards Global Food Security, IIE, Bangalore
1051	2019-20	CoS, Chintamani	National	Dr. H.S. Latha	Soil Protection is Mankind Protection. Gou Swarage, Bhankali, Siddapura, Uttarakannada.
1052	2019-20	CoS, Chintamani	National	Dr. Manjunath Gowda	Technical in Honey Farming and Honey Fest, Dept. of Apiculture, UAS, GKVK, Bangalore
1053	2019-20	CoS, Chintamani	National	Dr. D.V. Naveen	Trends in Higher Education, Taxonomy, Agriculture, Biotechnology and Toxicology, Dr. B. Vasantharaj David Foundation, Chennai, Tamil Nadu, India
1054	2019-20	CoS, Chintamani	National	Dr. K.R. Netrayini	Value Addition of Fruits and Vegetables, Mango Post Harvest Handling Centre, Chintamani.
1055	2019-20	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Writing and Documentation Skills for Extension officers, ICAR - MANAGE, Hyderabad
1056	2019-20	Directorate of Extn.	National	Dr. B.N. Manjunatha	National Horticulture Fair-2020, IIHR, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1057	2019-20	Directorate of Extn.	National	Dr. K. Shivaramu	National Horticulture Fair-2020, IIHR, Bangalore
1058	2019-20	Directorate of Extn.	National	Dr. H.K. Pankaja	National Horticulture Fair-2020, IIHR, Bangalore
1059	2019-20	Directorate of Extn.	National	Dr. M. Shalini	National Horticulture Fair-2020, IIHR, Bangalore
1060	2019-20	Directorate of Extn.	National	Dr. R. Manjunatha	Annual Review on NICRA
1061	2019-20	Directorate of Extn.	National	Dr. G. Ananda Manegar	A Model Training Course on Integrated Nutrient Management Strategies for Small Holder Crop Livestock Production
1062	2019-20	Directorate of Extn.	National	Dr. Banu Deshpande	Basics and Recent Advance in Organic Agriculture for Achieving Sustainability and Profitability
1063	2019-20	Directorate of Extn.	National	Dr. M.S. Anitha	Basics and Recent Advance in Organic Agriculture for Achieving Sustainability and Profitability
1064	2019-20	Directorate of Extn.	National	Mrs. N. Saritha	Improving e-Governance in Agriculture
1065	2019-20	Directorate of Extn.	National	Mrs. G.V. Sukanya	Improving e-Governance in Agriculture
1066	2019-20	Directorate of Extn.	National	Dr. G.S. Yogesh	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1067	2019-20	Directorate of Extn.	National	Dr. M.S. Anitha	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1068	2019-20	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1069	2019-20	Directorate of Extn.	National	Dr. M.S. Dinesha	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1070	2019-20	Directorate of Extn.	National	Mrs. D.C. Preethu	Induction Training for Newly Recruited Assistant Professors, Staff Training Unit, Hebbal, Bangalore
1071	2019-20	Directorate of Extn.	National	Ms. A. Bhavana	Mushroom Cultivation, Processing & Marketing, CoS, Chintamani
1072	2019-20	Directorate of Extn.	National	Ms. K. Sindhu	Mushroom Cultivation, Processing & Marketing, CoS, Chintamani
1073	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Novel Techniques in Mass Culturing of Smart Microbial Biocontrol Agents for the Development of Bio-Pesticides
1074	2019-20	Directorate of Extn.	National	Dr. Lata R. Kulkarni	Nutraceutical Ingredients in Food Processing, Dept. of Food Science and Nutrition, UAS, GKVK, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1075	2019-20	Directorate of Extn.	National	Dr. A.P. Mallikarjuna Gowda	Plant Health Management in Protected Cultivation, Hyderabad
1076	2019-20	Directorate of Extn.	National	Mr. B. Pampana Gouda	Soil and Water Conservation under Sujala - III Project
1077	2019-20	Directorate of Extn.	National	Dr. G.S. Yogesh	Soil and Water Conservation under Sujala - III Project
1078	2019-20	Directorate of Extn.	National	Mrs. D.C. Preethu	TOT in Agriculture - Karnataka Focus
1079	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Training of Master Trainers under Agriculture Skill Council of India
1080	2019-20	Directorate of Extn.	National	Dr. M. Byregowda	107th Indian Science Congress, UAS, GKVK, Bangalore
1081	2019-20	Directorate of Extn.	National	Dr. B.N. Manjunatha	107th Indian Science Congress, UAS, GKVK, Bangalore
1082	2019-20	Directorate of Extn.	National	Dr. S.V. Suresha	107th Indian Science Congress, UAS, GKVK, Bangalore
1083	2019-20	Directorate of Extn.	National	Dr. G.M. Varadaraju	107th Indian Science Congress, UAS, GKVK, Bangalore
1084	2019-20	Directorate of Extn.	National	Dr. K. Shivaramu	107th Indian Science Congress, UAS, GKVK, Bangalore
1085	2019-20	Directorate of Extn.	National	Dr. V.L. Madhuprasad	107th Indian Science Congress, UAS, GKVK, Bangalore
1086	2019-20	Directorate of Extn.	National	Dr. Banu Deshpande	107th Indian Science Congress, UAS, GKVK, Bangalore
1087	2019-20	Directorate of Extn.	National	Dr. C. Ramachandra	107th Indian Science Congress, UAS, GKVK, Bangalore
1088	2019-20	Directorate of Extn.	National	Dr. C. Doreswamy	107th Indian Science Congress, UAS, GKVK, Bangalore
1089	2019-20	Directorate of Extn.	National	Dr. Vijayalaxmi Kamaraddi	107th Indian Science Congress, UAS, GKVK, Bangalore
1090	2019-20	Directorate of Extn.	National	Dr. G. Ananda Manegar	107th Indian Science Congress, UAS, GKVK, Bangalore
1091	2019-20	Directorate of Extn.	National	Dr. H.K. Pankaja	107th Indian Science Congress, UAS, GKVK, Bangalore
1092	2019-20	Directorate of Extn.	National	Dr. M. Shalini	107th Indian Science Congress, UAS, GKVK, Bangalore
1093	2019-20	Directorate of Extn.	National	Dr. H.S. Mamatha	107th Indian Science Congress, UAS, GKVK, Bangalore
1094	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	107th Indian Science Congress, UAS, GKVK, Bangalore
1095	2019-20	Directorate of Extn.	National	Mr. H.R. Umesh	107th Indian Science Congress, UAS, GKVK, Bangalore
1096	2019-20	Directorate of Extn.	National	Mr. C.V. Venkatesha Murthy	107th Indian Science Congress, UAS, GKVK, Bangalore
1097	2019-20	Directorate of Extn.	National	Dr. Narayanareddy	107th Indian Science Congress, UAS, GKVK, Bangalore

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1098	2019-20	Directorate of Extn.	National	Dr. G.S. Yogesh	107th Indian Science Congress, UAS, GKVK, Bangalore
1099	2019-20	Directorate of Extn.	National	Dr. N.T. Naresh	107th Indian Science Congress, UAS, GKVK, Bangalore
1100	2019-20	Directorate of Extn.	National	Dr. Kamalabai Koodagi	107th Indian Science Congress, UAS, GKVK, Bangalore
1101	2019-20	Directorate of Extn.	National	Dr. Atheefa Munawery	107th Indian Science Congress, UAS, GKVK, Bangalore
1102	2019-20	Directorate of Extn.	National	Dr. D.H. Roopashree	107th Indian Science Congress, UAS, GKVK, Bangalore
1103	2019-20	Directorate of Extn.	National	Dr. S. Pavithra	107th Indian Science Congress, UAS, GKVK, Bangalore
1104	2019-20	Directorate of Extn.	National	Mr. H.M. Mahesh	107th Indian Science Congress, UAS, GKVK, Bangalore
1105	2019-20	Directorate of Extn.	National	Dr. Rajegowda	107th Indian Science Congress, UAS, GKVK, Bangalore
1106	2019-20	Directorate of Extn.	National	Dr. M. Shivashankar	107th Indian Science Congress, UAS, GKVK, Bangalore
1107	2019-20	Directorate of Extn.	National	Dr. Ashok Doddamani	107th Indian Science Congress, UAS, GKVK, Bangalore
1108	2019-20	Directorate of Extn.	National	Dr. T. Nagaraja	107th Indian Science Congress, UAS, GKVK, Bangalore
1109	2019-20	Directorate of Extn.	National	Dr. A.C. Girish	107th Indian Science Congress, UAS, GKVK, Bangalore
1110	2019-20	Directorate of Extn.	National	Dr. O.R. Nataraju	107th Indian Science Congress, UAS, GKVK, Bangalore
1111	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	107th Indian Science Congress, UAS, GKVK, Bangalore
1112	2019-20	Directorate of Extn.	National	Dr. M.H. Shankara	107th Indian Science Congress, UAS, GKVK, Bangalore
1113	2019-20	Directorate of Extn.	National	Dr. Roopa B Patil	107th Indian Science Congress, UAS, GKVK, Bangalore
1114	2019-20	Directorate of Extn.	National	Dr. S.M. Savitha	107th Indian Science Congress, UAS, GKVK, Bangalore
1115	2019-20	Directorate of Extn.	National	Dr. Lata R. Kulkarni	107th Indian Science Congress, UAS, GKVK, Bangalore
1116	2019-20	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	107th Indian Science Congress, UAS, GKVK, Bangalore
1117	2019-20	Directorate of Extn.	National	Dr. M.S. Dinesha	107th Indian Science Congress, UAS, GKVK, Bangalore
1118	2019-20	Directorate of Extn.	National	Mrs. D.C. Preethu	107th Indian Science Congress, UAS, GKVK, Bangalore
1119	2019-20	Directorate of Extn.	National	Mr. H.R. Umesh	54th Annual Meeting of AICRIP and Rice Workshop , ICAR-NRRI Cuttack, Odisha.
1120	2019-20	Directorate of Extn.	National	Mrs. G.R. Aruna	Adoption of Advanced Technologies for Sustainable Sericulture
1121	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Agriculture, Environment and Sustainable Development
1122	2019-20	Directorate of Extn.	National	Dr. V.L. Madhuprasad	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1123	2019-20	Directorate of Extn.	National	Dr. Banu Deshpande	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1124	2019-20	Directorate of Extn.	National	Dr. G. Ananda Manegar	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1125	2019-20	Directorate of Extn.	National	Dr. H.K. Pankaja	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1126	2019-20	Directorate of Extn.	National	Dr. Atheefa Munawery	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1127	2019-20	Directorate of Extn.	National	Dr. D.H. Roopashree	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1128	2019-20	Directorate of Extn.	National	Dr. C.M. Sunil	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1129	2019-20	Directorate of Extn.	National	Mr. Chandrashekhar S. Kallimani	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1130	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1131	2019-20	Directorate of Extn.	National	Dr. G.S. Yogesh	Big Data Analysis and Digital in Agriculture, UAS, GKVK, Bangalore
1132	2019-20	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Community Participation in Ground Water Management: Success Stories and Future Activities
1133	2019-20	Directorate of Extn.	National	Mr. H.R. Umesh	Digital Field Book, ZARS, V.C. Farm, Mandya.
1134	2019-20	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	e-SAP Workshop, UAS, GKVK, Bangalore
1135	2019-20	Directorate of Extn.	National	Dr. M.S. Anitha	Farmers Friendly Soil & Water Conservation for Mitigating Climate Change Impact
1136	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	Green Economy Lamp; Sustainable Development: Challenges and Issues
1137	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	Health and Wellness through Nutrition and Nutraceuticals – 2020
1138	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	Healthy Eating and Safe Food
1139	2019-20	Directorate of Extn.	National	Dr. K. Venkataranga Naika	ISEE - 2019, Swami Keshwan and Rajasthan Agricultural University, Bikaner, Rajasthan
1140	2019-20	Directorate of Extn.	National	Dr. K. Shivaramu	ISEE - 2019, Swami Keshwan and Rajasthan Agricultural University, Bikaner, Rajasthan
1141	2019-20	Directorate of Extn.	National	Dr. C.V. Venkatesh Murthy	ISEE - 2019, Swami Keshwan and Rajasthan Agricultural University, Bikaner, Rajasthan
1142	2019-20	Directorate of Extn.	National	Dr. G.S. Yogesh	Land Resource Inventory
1143	2019-20	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Modeling and ICT Applications in Forecasting Pest and Diseases: Current Status and Emerging Needs, GKVK Campus, Bengaluru
1144	2019-20	Directorate of Extn.	National	Dr. R. Manjunatha	National Conference on KVKs

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1145	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	Phytochemicals and Microbial Bioactive Compounds- Role in Agriculture and Human Welfare
1146	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	Research Methodology and Statistical Analysis
1147	2019-20	Directorate of Extn.	National	Dr. G. Ananda Manegar	Role of Veterinarians in Augmenting the Farmers Income for Rural Prosperity
1148	2019-20	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	Sciences and Technology: Rural Development
1149	2019-20	Directorate of Extn.	National	Dr. M.S. Dinesha	Seed Day cum Workshop
1150	2019-20	Directorate of Extn.	National	Mrs. A. Ashwini	The UN Sustainable Development Goals, Ba-Bapu and Civic Society
1151	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	7th Annual Review Workshop of NICRA
1152	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	7th Annual Review Workshop of NICRA
1153	2019-20	Directorate of Research	National	Dr. Jagannath Olekar	PFMS Meeting
1154	2019-20	Directorate of Research	National	Dr. G.S. Mahadevaiah	Price Policy for Copra Crop 2020 Season
1155	2019-20	Directorate of Research	National	Dr. G.S. Mahadevaiah	Price Policy for Rabi Crops 2020-21
1156	2019-20	Directorate of Research	National	Dr. G.S. Mahadevaiah	Price Policy of Kharif Crops Meeting 2020 - 21
1157	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	107th Indian Science Congress, UAS, GKVK, Bangalore
1158	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Bimonthly Workshop
1159	2019-20	Directorate of Research	National	Dr. N. Umashankar	Foldscope Microscope: Hands on Training Workshop - 2019, Bangalore
1160	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Integrated Crop Management in Sugarcane
1161	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	International Seed Day
1162	2019-20	Directorate of Research	National	Dr. B.C. Mallesha	Mushroom Production and Processing
1163	2019-20	Directorate of Research	National	Dr. N. Earanna	Endophytes and their Application in Agriculture
1164	2019-20	Directorate of Research	National	Dr. B.V. Krishnamurthy	107th Indian Science Congress, UAS, GKVK, Bangalore
1165	2019-20	Directorate of Research	National	Dr. B.V. Krishnamurthy	107th Indian Science Congress, UAS, GKVK, Bangalore
1166	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	107th Indian Science Congress, UAS, GKVK, Bangalore
1167	2019-20	Directorate of Research	National	Dr. Jahir Basha	Annual Workshop on Groundnut
1168	2019-20	Directorate of Research	National	Dr. Jahir Basha	Annual Workshop on Groundnut
1169	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Bimonthly Workshop

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1170	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Flowering Management in Sugarcane
1171	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Integrated Farming System and Farm Implements & Machineries
1172	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Integrated Water and Soil Management
1173	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	International Seed Day
1174	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	Micro-Irrigation in Sugarcane and Fertigation
1175	2019-20	Directorate of Research	National	Dr. Jahir Basha	Possibilities of Management Activities in ZBNF Plots
1176	2019-20	Directorate of Research	National	Dr. Jahir Basha	Workshop on E Sap
1177	2019-20	Directorate of Research	National	Dr. Jahir Basha	Workshop on E Sap
1178	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	ZREP - Zone 6, ZARS, Mandya
1179	2019-20	Directorate of Research	National	Dr. P. Thimmegowda	ZREP - Zone 6, ZARS, Mandya
1180	2020-21	CoA, Mandya	International	Dr. M.S. Shashibhashkar	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1181	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Advances in Stored Grain Pest Management
1182	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Genome Editing to Enhance Multiple Resistance in crop Plants
1183	2020-21	CoA, Mandya	International	Dr. B.S Somyalatha	Impact of Water Stress on Crop Productivity: Its Mitigation and Adaptation Strategies
1184	2020-21	CoA, Mandya	International	Dr. S.B. Yogananda	Impact of Water Stress on Crop Productivity: Its Mitigation and Adaptation Strategies
1185	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1186	2020-21	CoA, Mandya	International	Dr. V.B. Sanath Kumar	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1187	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Plant Physiology Paradigms towards Agricultural Sustainability under Climate Change
1188	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Recent trends in Plant Biosecurity: International and National Perspective
1189	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals
1190	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals
1191	2020-21	CoA, Mandya	International	Dr. S.B. Yogananda	Climate Risk Assessment and its Management Through Agrometeorological Approaches

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1192	2020-21	CoA, Mandya	International	Dr. N. Kiran Kumar	Resource Management and Biodiversity Conservation to Achieve Sustainable Development Goals
1193	2020-21	CoS, Chintamani	International	Mr. R. Rakesh	Environmental and Sustainable Development: Issues and Challenges. Govt. First Grade College for Women, Holenarsipura, Hassan
1194	2020-21	CoS, Chintamani	International	Dr. G. Narasa Reddy	Importance of Honey Bee in Agriculture and their Pest Management, MIT College of Agriculture & Technology, Trichy
1195	2020-21	CoS, Chintamani	International	Dr. K.R. Netrayini	National Conference on KVKs
1196	2020-21	CoS, Chintamani	International	Dr. H.S. Latha	New Trends in Agriculture, Environmental & Biological Sciences for inclusive Development
1197	2020-21	CoS, Chintamani	International	Mrs. V.P. Bharati	Seri Start-ups for Sustainable Development, Sri Padmavathi Mahila Viswavidyalayam, Tirupati
1198	2020-21	Directorate of Extn.	International	Mrs. A. Ashwini	Age Well"... It's Never Too Late
1199	2020-21	Directorate of Extn.	International	Mrs. A. Ashwini	Dietary Cholesterol: Current State of Evidence
1200	2020-21	Directorate of Extn.	International	Mr. H.R. Umesh	Soil Biodiversity-An Emerging Technique for Rapid Soil Health Assessment, ICAR-IISS, Bhopal
1201	2020-21	Directorate of Extn.	International	Ms. A. Bhavana	Young Minds Matter: Towards the Mental Health and Well Being of Youth
1202	2020-21	Directorate of Extn.	International	Dr. B. Manjunath	Conference on Ensuring Food Safety, Security and Sustainability through Crop Protection
1203	2020-21	Directorate of Extn.	International	Dr. Banu Deshpande	Diabetes Education
1204	2020-21	Directorate of Extn.	International	Dr. G.S. Yogesh	Global Research Initiatives for Sustainable Agriculture and Allied Sciences
1205	2020-21	Directorate of Extn.	International	Dr. K.R. Shreenivasa	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1206	2020-21	Directorate of Extn.	International	Dr. M. Shalini	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1207	2020-21	Directorate of Extn.	International	Dr. B. Manjunath	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1208	2020-21	Directorate of Extn.	International	Dr. Banu Deshpande	Novel Nutrition Approach and Emerging Opportunities to Sustain in Pandemic Scenario
1209	2020-21	Directorate of Extn.	International	Ms. A. Bhavana	Perspective on Agricultural and Applied Sciences in COVID-19 Scenario

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1210	2020-21	Directorate of Extn.	International	Ms. A. Bhavana	Recent Advances in Science
1211	2020-21	Directorate of Extn.	International	Mr. P.S. Abhishek	Social Science Research Methodology: Concepts, Theories and Applications
1212	2020-21	Directorate of Research	International	Dr. N. Umashankar	Climate Resilient Technologies for Rainfed Agriculture
1213	2020-21	Directorate of Research	International	Dr. Jahir Basha	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1214	2020-21	Directorate of Research	International	Dr. Jahir Basha	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1215	2020-21	Directorate of Research	International	Dr. P. Thimmegowda	Impact of Water Stress on Crop Productivity: Its Mitigation and Adaptation Strategies
1216	2020-21	Directorate of Research	International	Dr. P. Thimmegowda	Impact of Water Stress on Crop Productivity: Its Mitigation and Adaptation Strategies
1217	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Accounting for Climate Risk in Crop Yield Modeling
1218	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Advance in Fodder Production, Utilization and Conservation for Improving Livestock Health, Productivity and Environmental Sustainability
1219	2020-21	CoA, Mandya	National	Dr. B.S Somyalatha	Advance in Fodder Production, Utilization and Conservation for Improving Livestock Health, Productivity and Environmental Sustainability
1220	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Analysis of Experimental Data using SAS
1221	2020-21	CoA, Mandya	National	Dr. P.S. Fathima	Analysis of Experimental Data using SAS
1222	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Coconut Cultivation
1223	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Crop Protection in Chilli and Post-harvest Technology
1224	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Effective management of inorganic fertilizers in crop production
1225	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Integrated Crop Management in Banana
1226	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Integrated Crop Management in Coconut
1227	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Integrated Nutrient Management.
1228	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Management of Coffee pest
1229	2020-21	CoA, Mandya	National	Dr. G. Sugeetha	Multidisciplinary Approaches for Plant Disease Management for Achieving Sustainability in Agriculture, UHS, Bagalkot
1230	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Nursery Management of Solanaceous Vegetable Crops
1231	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Pest and Disease management through Biological and Organic method

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1232	2020-21	CoA, Mandya	National	Dr. Sugeetha	Practical Experience Based IPR in Commercial Plant Breeding
1233	2020-21	CoA, Mandya	National	Dr. M.S. Shashibhashkar	Practical Experience Based IPR in Commercial Plant Breeding
1234	2020-21	CoA, Mandya	National	Dr. P.S. Fathima	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1235	2020-21	CoA, Mandya	National	Dr. B.S Somyalatha	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1236	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1237	2020-21	CoA, Mandya	National	Dr. H.R. Savitha	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1238	2020-21	CoA, Mandya	National	Dr. T. Bhagyalakshmi	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1239	2020-21	CoA, Mandya	National	Dr. K.R. Ashoka	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1240	2020-21	CoA, Mandya	National	Dr. Anilkumar Dandekar	Remote Sensing & GIS Technology and Applications” for University Teachers & Government Officials
1241	2020-21	CoA, Mandya	National	Dr. M.S. Shashibhashkar	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1242	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Selection of Varieties / Hybrids and HDP in Fruit Crops
1243	2020-21	CoA, Mandya	National	Dr. P.S. Fathima	Soil Health Management in Sustainable Agriculture
1244	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Sustainable Coconut Cultivation
1245	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Terrace Gardening
1246	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Be+ during COVID-19
1247	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Bio Intensive Management of Plant Parasitic Nematodes
1248	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Canopy Management in Horticulture Crops
1249	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Challenges and Opportunities before Youth in Agriculture
1250	2020-21	CoA, Mandya	National	Dr. M.S. Shashibhashkar	Contemplative Perspectives on Seed- Conservation, Quality Assurance & Supply Systems
1251	2020-21	CoA, Mandya	National	Dr. N. S. Pankaja	Desi Cow Based Self-Reliant Organic Agriculture

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1252	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Desi Cow Based Self-Reliant Organic Agriculture
1253	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Drone Remote Sensing in Agriculture
1254	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Drone Remote Sensing in Agriculture
1255	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Food Habits during COVID Period and Preparation of Disease Resistant Food at Home
1256	2020-21	CoA, Mandya	National	Dr. B.S Somyalatha	Geospatial Approaches for Agricultural Water Management
1257	2020-21	CoA, Mandya	National	Dr. M.S. Shashibhashkar	Innovative Approaches in Seed Quality Maintenance for Successful Entrepreneurship
1258	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Input Production and Management for Organic Farming
1259	2020-21	CoA, Mandya	National	Dr. K.R. Ashoka	Milk: The Complete Food
1260	2020-21	CoA, Mandya	National	Dr. R. Suma	Milk: The Complete Food
1261	2020-21	CoA, Mandya	National	Dr. T. Bhagyalakshmi	Milk: The Complete Food
1262	2020-21	CoA, Mandya	National	Dr. S.S. Prakash	Milk: The Complete Food
1263	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Nanotechnological Interventions in Agriculture
1264	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Online Teaching : Strategies for Becoming an Engaging Instructor
1265	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Pest Management-Classical concepts and Novel Approaches
1266	2020-21	CoA, Mandya	National	Dr. S.S. Prakash	Plant Protection in Organic Farming & Role of Panchagavya
1267	2020-21	CoA, Mandya	National	Dr. K.R. Ashoka	Plant Protection in Organic Farming & Role of Panchagavya
1268	2020-21	CoA, Mandya	National	Dr. R. Suma	Plant Protection in Organic Farming & Role of Panchagavya
1269	2020-21	CoA, Mandya	National	Dr. T. Bhagyalakshmi	Plant Protection in Organic Farming & Role of Panchagavya
1270	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Plant Protection in Organic Farming & Role of Panchagavya
1271	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Practical Experience Based IPR in Commercial Plant Breeding
1272	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Recent Molecular Approaches for Plant Disease Diagnosis
1273	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Role of Agricultural Mechanization in Doubling Farmer's Income
1274	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Role of Agricultural Mechanization in Doubling Farmer's Income
1275	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1276	2020-21	CoA, Mandya	National	Dr. J. Mahadeva	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1277	2020-21	CoA, Mandya	National	Dr. N. S. Pankaja	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology

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1278	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1279	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Sandal Wood Farming and Management its Health
1280	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Suitable Intercrops in Arecanut
1281	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Sustainable Fodder Production for Improving the Livelihoods of Small and Marginal Farmers
1282	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Cutting Edge Approaches for Sustainable Plant Disease Management and Ensuring Farmers Profit
1283	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Doubling Farmers' Income through Agronomic Interventions Under Changing Scenario, Rajasthan College of Agriculture, MPUA&T, Udaipur, Rajasthan
1284	2020-21	CoA, Mandya	National	Mr. M. Venkatesh	Joint workshop of NAHEP- Academic Management System (AMS)
1285	2020-21	CoA, Mandya	National	Dr. N. S. Pankaja	Plant Protection Group Deliberations
1286	2020-21	CoA, Mandya	National	Dr. V.B. Sanath Kumar	Plant Protection Group Deliberations
1287	2020-21	CoA, Mandya	National	Dr. N. Kiran Kumar	Plant Protection Group Deliberations
1288	2020-21	CoA, Mandya	National	Dr. K.R. Ashoka	Prime Minister Formalisation of Micro Food Processing Enterprises for Sustainable Livelihood
1289	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Rice Research and Development for Achieving Sustainable Development Goals
1290	2020-21	CoA, Mandya	National	Dr. S.B. Yogananda	Weeds and Society: Challenges and Opportunities
1291	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	DD Chandana Recording on Importance of Green Manure Crops on 30.01.2020
1292	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	DD Chandana Recording on Importance of Mushroom and Different Substrate for Mushroom Cultivation on 06.06.2020
1293	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Radio Talk Importance of Green Manure Crops, AIR Bangalore on 08.02.2020
1294	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Radio Talk on World Endangered Species Day, AIR Bangalore on 15.05.2020
1295	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Advanced Analytical Tools for Pest & Disease Prediction Models in R (Machine Learning Techniques), UAS, Bangalore
1296	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Climate Change: Impact Assessment and Adaptation through Climate Resilient Agro-Techniques in Agriculture and Allied Sectors, UAHS, Shivamogga

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1297	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	Climate Change: Impact Assessment and Adaptation through Climate Resilient Agro-Techniques in Agriculture and Allied Sectors, UAHS, Shivamogga
1298	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Climate Change: Impact Assessment and Adaptation through Climate Resilient Agro-Techniques in Agriculture and Allied Sectors, UAHS, Shivamogga
1299	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	Current Techniques and Recent Advances in Plant Growth Promoting Rhizomicrobial Research, UAHS, Shivamogga
1300	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Cutting Edge Technology for Weed Management, UAHS, Shivamogga
1301	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Cyclone Management, MANAGE, Hyderabad
1302	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Designing E-Learning Content, ICAR - NAARM, Hyderabad
1303	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	Designing E-Learning Content, ICAR - NAARM, Hyderabad
1304	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	Designing E-Learning Content, ICAR - NAARM, Hyderabad
1305	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Designing E-Learning Content, ICAR - NAARM, Hyderabad
1306	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Designing E-Learning Content, ICAR - NAARM, Hyderabad
1307	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	Empowerment and Entrepreneurial Development in Agriculture, UAS, GKVK, Bangalore
1308	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Forest Acts and Law, CoS, Chintamani
1309	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Fruit Fly: Surveillance & Management, NIPHM, Hyderabad
1310	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Fundamentals of Agricultural Extension, UAS, Raichur
1311	2020-21	CoS, Chintamani	National	Dr. C.N. Nalina	Geospatial Technologies in Agriculture ICAR - NAARM, Hyderabad
1312	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	Induction / Orientation Programme for Faculties in Universities / Colleges / institutes of Higher Education Teaching Learning Centre, Ramanujam College, University of Delhi
1313	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Integrated Pest Management, UAS, Raichur
1314	2020-21	CoS, Chintamani	National	Dr. T.M. Ningaraju	Integrated Pest Management, UAS, Raichur
1315	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Irrigation Systems and Advancements, NIPHM, Hyderabad
1316	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Market-led Extension, MANAGE, Hyderabad

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1317	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	Modern Methodologies in Statistical Data Analysis for Effective Agricultural Research, UAS, Raichur
1318	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Motivation, Positive Thinking & Communication Skills Among Students and Faculty
1319	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Mushroom Cultivation, Processing & Marketing, CoS, Chintamani
1320	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	On Farm Production of Biopesticides and Biofertilizers, NIPHM, Hyderabad
1321	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Post-Harvest Management & Storage Techniques, NIPHM, Hyderabad
1322	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1323	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1324	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Precision Farming, CoS, Chintamani
1325	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Psychology of Learning, ICAR - NAARM, Hyderabad
1326	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Quality Control of Microbial Biopesticides, NIPHM, Hyderabad
1327	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials, Indian Institute of Remote Sensing (IIRS), ISRO Dehradun.
1328	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials, Indian Institute of Remote Sensing (IIRS), ISRO Dehradun.
1329	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials, Indian Institute of Remote Sensing (IIRS), ISRO Dehradun.
1330	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Sustainability Engineering, AICTE Training and Learning (ATAL) Academy - 2020
1331	2020-21	CoS, Chintamani	National	Dr. Aarti Pannure	Biological Control and Mass Multiplication of Bio-Agents, ICAR - KVK, Chintamani
1332	2020-21	CoS, Chintamani	National	Mrs. V.P. Bharati	Mechanization in Sericulture, University of Mysore, Mysuru
1333	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Recent Advances in Dairy Processing Engineering, College of Food and Dairy Technology, Koduvalli
1334	2020-21	CoS, Chintamani	National	Dr. M. Savitha	107th Indian Science Congress, UAS, GKVK, Bangalore

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1335	2020-21	CoS, Chintamani	National	Dr. T.M. Ningaraju	107th Indian Science Congress, UAS, GKVK, Bangalore
1336	2020-21	CoS, Chintamani	National	Dr. D.V. Naveen	107th Indian Science Congress, UAS, GKVK, Bangalore
1337	2020-21	CoS, Chintamani	National	Dr. Aarti Pannure	107th Indian Science Congress, UAS, GKVK, Bangalore
1338	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	107th Indian Science Congress, UAS, GKVK, Bangalore
1339	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	107th Indian Science Congress, UAS, GKVK, Bangalore
1340	2020-21	CoS, Chintamani	National	Mr. P.A. Gowda	107th Indian Science Congress, UAS, GKVK, Bangalore
1341	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	107th Indian Science Congress, UAS, GKVK, Bangalore
1342	2020-21	CoS, Chintamani	National	Dr. T.M. Ningaraju	107th Indian Science Congress, UAS, GKVK, Bangalore
1343	2020-21	CoS, Chintamani	National	Dr. T.M. Ningaraju	107th Indian Science Congress, UAS, GKVK, Bangalore
1344	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	107th Indian Science Congress, UAS, GKVK, Bangalore
1345	2020-21	CoS, Chintamani	National	Dr. T.M. Ningaraju	Agriculture: The Back Bone of Indian Economy, Pacific University, Udaipur
1346	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Application of Biotechnology Tools in Crop Improvement, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya Gwalior, Madhya Pradesh
1347	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Biological Control and Mass Multiplication of Bio-Agents, ICAR - KVK, Chintamani
1348	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Climate Change: Impact Assessment and Adaptation through Climate Resilient Agro-Techniques in Agriculture and Allied Sectors, UAHS, Shivamogga
1349	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Current Techniques and Recent Advances in Plant Growth Promoting Rhizomicrobial Research, UAHS, Shivamogga
1350	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Digital Library for Academics & Research, Atharva College of Engineering, Mumbai University
1351	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Engineering Interventions for Plant Health Management – Water Management for Plant Health, NIPHM, Hyderabad
1352	2020-21	CoS, Chintamani	National	Mr. Mallappa J Madolli	Engineering Interventions for Plant Health Management – Water Management for Plant Health, NIPHM, Hyderabad
1353	2020-21	CoS, Chintamani	National	Dr. Ramakrishna Naika	Entrepreneurs Development in Sericulture & Livestock's, Government Arts College for Women, Namakkal, Tamil Nadu

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1354	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Impact of Climate Change on Biodiversity in India ECOR Foundation, Kochi.
1355	2020-21	CoS, Chintamani	National	Dr. K.R. Netrayini	Modern Methodologies in Statistical Data Analysis for Effective Agricultural Research, UAS, Raichur
1356	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Modern Methodologies in Statistical Data Analysis for Effective Agricultural Research, UAS, Raichur
1357	2020-21	CoS, Chintamani	National	Dr. G. Narasa Reddy	Plant Health Management – Sustainable Agriculture, ANGRAU, Bapatla
1358	2020-21	CoS, Chintamani	National	Mrs. T.G. Amrutha	Remote Sensing & GIS Technology and Applications for University Teachers & Government Officials, Indian Institute of Remote Sensing (IIRS), ISRO Dehradun.
1359	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Research Grant Opportunities, Arumugam Pillai Seethai Ammal College, Sivangangai, Tamilnadu
1360	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Science Leadership Workshop, Science Academics, Central University of Punjab, Bathinda
1361	2020-21	CoS, Chintamani	National	Dr. K.M. Rajanna	Scientific Cashew Cultivation - Science and Techniques, College of Horticulture, UHSB, Kolar
1362	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Strategies and Policy interventions for Agricultural Development in North –East India During Covid-19 Era, CAU, Imphal
1363	2020-21	CoS, Chintamani	National	Dr. S.K. Priyadarshini	Strengthening the Immune System Against Covid-19 through Agricultural Innovations, College of Agriculture, Sri Karan Narendra Agricultural University, Rajasthan
1364	2020-21	CoS, Chintamani	National	Dr. Aarti Pannure	Taxonomic Identification of Indian Bees, UAS, GKVK, Bangalore
1365	2020-21	CoS, Chintamani	National	Mr. Sanjeev Kyatappanavar	Tobacco Control, UAS, Bangalore
1366	2020-21	Directorate of Extn.	National	Dr. Chandrakala Hanagi	Annual Review Workshop of KVKs
1367	2020-21	Directorate of Extn.	National	Dr. Chandrakala Hanagi	KVK Action Plan Meet 2020
1368	2020-21	Directorate of Extn.	National	Dr. M.S. Anitha	Advances in Fodder Production, Utilization and Conservation for Improving Livestock Health, Productivity and Environmental Sustainability
1369	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Advances in Sustainable Agriculture
1370	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Advances in Sustainable Agriculture
1371	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Advances in Sustainable Agriculture

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1372	2020-21	Directorate of Extn.	National	Dr. C.M. Sunil	Advances in Sustainable Agriculture
1373	2020-21	Directorate of Extn.	National	Dr. H.K. Pankaja	Application of ICTs in Agriculture, MANAGE, Hyderabad
1374	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Application of ICTs in Agriculture, MANAGE, Hyderabad
1375	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Bakery and Confectionary Processing (Master Trainer for Food Micro and Small Enterprises)
1376	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Bakery and Confectionary Processing (Master Trainer for Food Micro and Small Enterprises)
1377	2020-21	Directorate of Extn.	National	Dr. R. Manjunatha	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1378	2020-21	Directorate of Extn.	National	Dr. B. Gayathri	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1379	2020-21	Directorate of Extn.	National	Mr. Vishwanath	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1380	2020-21	Directorate of Extn.	National	Dr. C.M. Sunil	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1381	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1382	2020-21	Directorate of Extn.	National	Mr. P.S. Abhishek	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1383	2020-21	Directorate of Extn.	National	Dr. K.R. Shreenivasa	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1384	2020-21	Directorate of Extn.	National	Dr. M.S. Anitha	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1385	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Digitally Empowered, Self Employed, Extension Force (DESEE Force) :Training Rural Youths for Providing Crop Health Services
1386	2020-21	Directorate of Extn.	National	Dr. K.R. Shreenivasa	e- Training on Pest Surveillance

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1387	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Emerging Trends in Seed Production Technologies and Quality Control Frame Work for Effective Seed Supply Chain of Horticulture Crops
1388	2020-21	Directorate of Extn.	National	Dr. Banu Deshpande	Faculty Development Programme on Revolution of Technology, Modern Fitness Trends, Nutrition Challenges in Physical Education and Sports
1389	2020-21	Directorate of Extn.	National	Mrs. N. Saritha	Full STAC web development
1390	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Gender in Agricultural Development, MANAGE, Hyderabad
1391	2020-21	Directorate of Extn.	National	Dr. H.K. Pankaja	Gender in Agricultural Development, MANAGE, Hyderabad
1392	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Gender in Agricultural Development, MANAGE, Hyderabad
1393	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Information Handling Skills for Teaching, Learning and Research, Professor Jayashankar Telangana State Agricultural University
1394	2020-21	Directorate of Extn.	National	Dr. H.K. Pankaja	Information Handling Skills for Teaching, Learning and Research, Professor Jayashankar Telangana State Agricultural University
1395	2020-21	Directorate of Extn.	National	Dr. Atheefa Munawery	Internet of Things (IoT) for the Faculty
1396	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Leadership Skills for Improving Performance in Agri and Allied Sectors
1397	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Market-led Extension, MANAGE, Hyderabad
1398	2020-21	Directorate of Extn.	National	Dr. H.K. Pankaja	Market-led Extension, MANAGE, Hyderabad
1399	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	On Farm Production of Biocontrol Agents and Microbial Biopesticides
1400	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Plant Health Management in Protected Cultivation, Hyderabad
1401	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Risk Mitigation in Agriculture, MANAGE, Hyderabad
1402	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Role of Seed Certification in Quality Seed Production
1403	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Advanced Agro Meteorological Techniques for Climate Smart Agriculture
1404	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Agri Business and Agri Start Ups Experiences and Opportunities in Agriculture, Innovation Systems for Development
1405	2020-21	Directorate of Extn.	National	Dr. T. Nagaraja	Apiculture
1406	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Asexual Methods of Propagation in Fruit Crops
1407	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Bioprospection: Synthesis of Novel Biomolecules and their Patents

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1408	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Climate Resilient Technologies for Rainfed Agriculture
1409	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Consumer Health & Wellness: Exploring Health Benefits of Micronutrients and Nutraceutical Products
1410	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Conventional and Molecular Approaches for Crop Improvement under Changing Climatic Scenario
1411	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	COVID-19 and Nutrition
1412	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	COVID-19 and Nutrition
1413	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	COVID-19 and Nutrition
1414	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	COVID-19 and Nutrition
1415	2020-21	Directorate of Extn.	National	Dr. Roopa B Patil	COVID-19 and Nutrition
1416	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Dairy Foods: A Treasure of Immune Boosters for Current Scenario
1417	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Diet and Lifestyle Disease Management During COVID-19 Pandemic, UAS, Bangalore
1418	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Diet and Nutrition for Lifestyle Disease Management during Covid-19 Pandemic
1419	2020-21	Directorate of Extn.	National	Dr. Chandrakala Hanagi	Diet and Nutrition for Lifestyle Disease Management during Covid-19 Pandemic
1420	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Diet Trends Versus Sustainable Diet
1421	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Edible Insects and Non-Conventional Foods as a Nutrient Pack and Livelihood Security
1422	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Emerging Trends in Seed Production Technologies and Quality Control Frame Work for Effective Seed Supply Chain of Horticulture Crops
1423	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Emerging Trends in Seed Production Technologies and Quality Control Frame Work for Effective Seed Supply Chain of Horticulture Crops
1424	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Enhanced Employability for Home Scientists in Current Scenario
1425	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Ensuring Food & Nutritional Security and Food Safety Measures for Rural People during COVID-19 Pandemic
1426	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Ensuring Optimal Health and Nutritional Care to Combat Malnutrition in Children - Poshanmaah
1427	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Entrepreneurship in Food Processing
1428	2020-21	Directorate of Extn.	National	Dr. Banu Deshpande	Entrepreneurship in Food Processing

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1429	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Exploration of Under-Utilized Fruit Crops for Health and Nutritional
1430	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Exploring the Era of Food Innovation: Trends in Food Processing Ecosystem:
1431	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Farmers Producer Organisations and Commodity Markets
1432	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Feminism: Literary Theory
1433	2020-21	Directorate of Extn.	National	Dr. Roopa B Patil	First Thousand Days of Life
1434	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Government New Initiatives in Agriculture
1435	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Grow, Nourish, Sustain: Together
1436	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Harnessing the Potential of Tropical Tuber Crops under Changing Climate
1437	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Horticultural Resources and their Role in Boosting Immunity against COVID-19
1438	2020-21	Directorate of Extn.	National	Dr. Chandrakala Hanagi	Horticultural Resources and their Role in Boosting Immunity against COVID-19
1439	2020-21	Directorate of Extn.	National	Dr. S.M. Savitha	IISF (online)
1440	2020-21	Directorate of Extn.	National	Dr. Lata R. Kulkarni	IISF (online)
1441	2020-21	Directorate of Extn.	National	Dr. B.S. Rajendra Prasad	IISF (online)
1442	2020-21	Directorate of Extn.	National	Dr. M.S. Dinesha	IISF (online)
1443	2020-21	Directorate of Extn.	National	Mrs. D.C. Preethu	IISF (online)
1444	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Immuno Nutrition, Wellness Management and Livelihood Change
1445	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Immuno- Nutrition, Wellness Management and Livelihood Change
1446	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Impact of COVID-19 on Cost Behaviour of Hospitals
1447	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Impact of Environmental Factors for Plant and Human Genetics
1448	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Insights on Geriatric Wellness during Pandemic
1449	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Leadership, Managerial Skills and Professional Ethics
1450	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Literature: Plight and Portrayal
1451	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Mechanization in Value Addition of Banana and Generation of Wealth from Banana Pseudo stem Waste
1452	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Mushroom Training for Young Entrepreneurs
1453	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	New Dimensional Approaches in Food Processing

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1454	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Novel Therapeutic Approaches for Anti-Microbial Resistance
1455	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Nutrition for All Age During COVID-19 Pandemic
1456	2020-21	Directorate of Extn.	National	Dr. Chandrakala Hanagi	Nutrition for All Age During COVID-19 Pandemic
1457	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Nutrition for Health & Disease: Exploring New Horizons for Sustenance
1458	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Personal Power Enhancement to Develop Entrepreneurship
1459	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Perspectives on Healthy Snacking: Opportunities and Future of Snacking
1460	2020-21	Directorate of Extn.	National	Dr. Roopa B Patil	Pharmacological and Non-Pharmacological Intervention Strategies for COVID-19
1461	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	Plant Health Management – Sustainable Agriculture, ANGRAU, Bapatla
1462	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Prime Minister Formalisation of Micro Food Processing Enterprises for Sustainable Livelihood
1463	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Processing Packaging and Marketing of Edible Forest Produce
1464	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Quality Production of Pomegranate in Arid Region during COVID-19
1465	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	RDA 2020 - The Way Forward to Tackle Malnutrition in India
1466	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Recent Advances in Dairy Processing Engineering, College of Food and Dairy Technology, Koduvalli
1467	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Recent Advances in Mango Production
1468	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Recent Trends in Non-Thermal Food Processing Technologies,
1469	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Research and Publication Ethics
1470	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Research Methodology and Statistical Analysis
1471	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Resilience, Resurgence and Review Measures for Unorganized Sectors : A Roadmap to Self-Reliant India
1472	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Role of Agricultural Mechanization in Doubling Farmers Income
1473	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Role of Quality Assurance in Higher Education
1474	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Scaling up Wheat Flour/Maida Fortification in the Food Processing Industry
1475	2020-21	Directorate of Extn.	National	Dr. M. Shalini	Security for Future Generation, UHS, Bagalkot
1476	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Seed Production Techniques in Agronomical and Horticulture Crops

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1477	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Solid Waste Management
1478	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Sustainable Eco-friendly Home Gardening and Green Décor
1479	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Technology Interventions Towards Transformation of Agriculture, Sericulture, Animal Husbandry and Allied Sectors in Sustainable Enterprises for Atmanirbhar Bharath
1480	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Technology Interventions Towards Transformation of Agriculture, Sericulture, Animal Husbandry and Allied Sectors in Sustainable Enterprises for Atmanirbhar Bharath
1481	2020-21	Directorate of Extn.	National	Mr. H.R. Umesh	Virtual Annual Meeting of All India Coordinated Rice Improvement Project (AICRIP), ICAR-IIRR Hyderabad.
1482	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Virtual National Conference on Food Microbiology - 2020
1483	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Wild Edible Fruits: Status, Conservation and Sustainable Utilization
1484	2020-21	Directorate of Extn.	National	Ms. A. Bhavana	Women Entrepreneurship and Skill Development Issues, Challenges and Opportunities
1485	2020-21	Directorate of Extn.	National	Dr. Banu Deshpande	World Breast Feeding Week – First Thousand Days
1486	2020-21	Directorate of Extn.	National	Dr. B. Manjunath	ARYA
1487	2020-21	Directorate of Extn.	National	Dr. M.H. Shankara	Biodynamic Calendar and Technological Intervention for Horticultural Sustainability and Health Security in Changing Climate
1488	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Capacity Building and Redesigning the Learning & Research Aptitudes
1489	2020-21	Directorate of Extn.	National	Dr. G.S. Yogesh	Community Participation in Ground Water Management: Success Stories and Future Activities
1490	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Dynamic Facets of Sports Nutrition: Meeting the Challenges
1491	2020-21	Directorate of Extn.	National	Dr. Lata R. Kulkarni	PMFME for Sustainable Livelihood
1492	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Processing, Storage and Value Addition of Millets
1493	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Recent Trends and Technologies in Biotechnology and Allied Sciences
1494	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Research Methodology: Concept and Applications
1495	2020-21	Directorate of Extn.	National	Dr. H.S. Mamatha	Skill Development Dynamics for Agro Entrepreneurship in Post Pandemic India
1496	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Social Science Research Methodology: Concepts, Theories and Applications
1497	2020-21	Directorate of Extn.	National	Dr. Atheefa Munawery	Society of Krishi Vigyan on Advances in Sustainable Agriculture

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1498	2020-21	Directorate of Extn.	National	Mrs. S.N. Arpitha	Society of Krishi Vigyan on Advances in Sustainable Agriculture
1499	2020-21	Directorate of Extn.	National	Mrs. A. Ashwini	Transformation of Food Processing from LAB to Industries
1500	2020-21	Directorate of Extn.	National	Dr. C.M. Sunil	Using ICT-Tools for Recording Online Lectures
1501	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Changing Paradigms on Food Security and Food Sufficiency
1502	2020-21	Directorate of Research	National	Dr. B.V. Krishnamurthy	Fisheries Technocrats
1503	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	How to Access T& F Journals
1504	2020-21	Directorate of Research	National	Dr. Gangadhar Eswar Rao	Leadership Skills for Improving Performance in Agri and Allied Sectors
1505	2020-21	Directorate of Research	National	Dr. Gangadhar Eswar Rao	Leadership Skills for Improving Performance in Agri and Allied Sectors
1506	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Online Teaching : Strategies for Becoming an Engaging Instructor
1507	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1508	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Precision Agriculture: A Technology for Income Augmentation & Entrepreneurship Development, CAU, Imphal
1509	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Production of Good Quality Seeds Through Scientific Intervention
1510	2020-21	Directorate of Research	National	Dr. B.V. Krishnamurthy	Recirculating Aquaculture System (Ras) For Farming of Rainbow Trout
1511	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Value Addition of Horticulture Crops
1512	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Accounting for Climate Risk in Crop Yield Modeling
1513	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Advance in Fodder Production, Utilization and Conservation for Improving Livestock Health, Productivity and Environmental Sustainability
1514	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Advanced Agril. Engg Technologies for Sustainable Agriculture
1515	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Advanced Agril. Engg Technologies for Sustainable Agriculture
1516	2020-21	Directorate of Research	National	Dr. B.V. Krishnamurthy	Challenges, Opportunities and The Future of Indian Fisheries Post Covid-19 Era
1517	2020-21	Directorate of Research	National	Dr. Jahir Basha	Changing Paradigms on Food Security and Food Sufficiency
1518	2020-21	Directorate of Research	National	Dr. Jahir Basha	Changing Paradigms on Food Security and Food Sufficiency
1519	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Climate Risk Assessment and Its Management Through Agrometeorological Approaches
1520	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Climate Risk Assessment and Its Management Through Agrometeorological Approaches

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1521	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Drudgery Reduction in Rice Cultivation Operations Through Farm Mechanization
1522	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Drudgery Reduction in Rice Cultivation Operations Through Farm Mechanization
1523	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	How to Access T& F Journals
1524	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Input Production and Management for Organic Farming
1525	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Input Production and Management for Organic Farming
1526	2020-21	Directorate of Research	National	Dr. Jahir Basha	IPDM in Groundnut
1527	2020-21	Directorate of Research	National	Dr. Jahir Basha	IPDM in Groundnut
1528	2020-21	Directorate of Research	National	Dr. Jahir Basha	Monitoring of AICRP Trail of Kharif 2020
1529	2020-21	Directorate of Research	National	Dr. Jahir Basha	Monitoring of AICRP Trail of Kharif 2020
1530	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Nanotechnological Interventions in Agriculture
1531	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Nanotechnological Interventions in Agriculture
1532	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Patent Filling and Commercialization of Technologies
1533	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Patent Filling and Commercialization of Technologies
1534	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1535	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Role of Nanotechnology in Food and Agriculture, Centre of Nanotechnology
1536	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Accounting for Climate Risk in Crop Yield Modeling
1537	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Advance in Fodder Production, Utilization and Conservation for Improving Livestock Health, Productivity and Environmental Sustainability
1538	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Annual Workshop of AICRP on Small Millets and Sorghum
1539	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Annual Workshop of AICRP on Small Millets and Sorghum
1540	2020-21	Directorate of Research	National	Dr. B.V. Krishnamurthy	Aquaculture in Action During Pandemic
1541	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Combating Post – Covid-19 Challenges in Sugarcane Sector through Appropriate Technologies and Approaches
1542	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Combating Post – Covid-19 Challenges in Sugarcane Sector through Appropriate Technologies and Approaches
1543	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Oilseed Processing and Value Addition

Sl. No.	Year	Teaching / Research / Extension	National / International	Participants	Event Details
1544	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	Oilseed Processing and Value Addition
1545	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Online Teaching : Strategies for Becoming an Engaging Instructor
1546	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Pre-Annual Workshop of AICRP on Small Millets & Sorghum
1547	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Pre-Annual Workshop of AICRP on Small Millets & Sorghum
1548	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Soil and Water Management in Dry Land Farming
1549	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	Soil and Water Management in Dry Land Farming
1550	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	ZREP - Zone 6, ZARS, Mandya
1551	2020-21	Directorate of Research	National	Dr. P. Thimmegowda	ZREP - Zone 6, ZARS, Mandya
1552	2020-21	Directorate of Research	National	Dr. Syed Mazar Ali	ZREP - Zone 6, ZARS, Mandya

PRT OBSERVATIONS OF 2004-05 & ACTION TAKEN REPORT ON THE SUGGESTIONS / RECOMMENDATIONS OF PRT TEAM OF ICAR FOR ACCREDITING UAS, BANGALORE

Compliance Report Submitted to PRT on 27.01.2016

1. The Scheme of the University to ruralize Agricultural education has created the problem of thinly distributing financial, physical and human resources. Therefore, the University may consider bringing those programs back to Agriculture College Bangalore and converting those Colleges into strong centers of research in identified areas where PG research work can be under taken.

- Ruralization of Agricultural education is the conscious decision of the State Government to promote State subject and profession. In the process, regional specializations of crops and processing industries have been duly recognized which has facilitated effective hands-on training /experiencing in learning and Rural Agricultural Experiences (RAWES) when colleges are located in areas where mandated crops are grown/ processed on a large scale. For instance, forestry, plantation crops, horticulture crops, sericulture, etc., are practiced in certain regions. At College of Agriculture, Mandya, master's degree programmes have been started considering the strength of the campus for research activities. The State Government has been providing budgetary support to strengthen these Colleges and for creating necessary infrastructure from time to time.
- In addition, the University has spent Rs.696.06 lakhs during IX plan, Rs.2089.48lakhs during X plan and Rs.3312.53 lakhs during XI Plan as part of ICAR development grants towards strengthening agricultural education.

2. The mission statement is too long and lacks focus; it is desirable to develop a brief and focused mission statement.

- Mission for the next five years has been crystallized, accordingly Mission statement modified. Both academic and Research programs have been drawn out for specific objectives to meet goals of the Mission. The revised mission statement is as follows:
- Generate quality human resource in the area of agriculture and allied disciplines, generate cutting - edge competitive technologies and evolve efficient disseminating mechanism so as to serve the farming community of the State and the country.

3. The University perspective plan as put up in vision 2020 document needs to be converted to yearly and five yearly strategic plans with definite time frame and budgetary support.

- As envisaged in VISION 2020 document, relevant points have been incorporated into the annual budget preparation wherever possible. Five year strategic plans are being framed to fit into the eleventh five-year program.
- New undergraduate programmes in B.Sc. (Agricultural Biotechnology) and B.Tech. in Food Science Technology have been started at Agriculture College, Hassan. Started, Agriculture Degree program at College of Sericulture, Chintamani
- Master's degree programmes started at College of Agriculture Mandya
- Also started two years Diploma course in Agriculture from the academic year 2011-12 at College of Agriculture, Mandya started one-year Diploma courses in five disciplines; Bakery Technology, Agriculture Extension Service for Input Dealers, Horticulture Nursery Management, Sericulture and PG Diploma in processing of Horticulture products.
- University has prepared VISION 2030 document keeping in view the changing scenario both at International and National level and its impact on farming sector.

4. It is suggested that separate Board of Studies may be established for each UG program similarly a separate Board of Studies may also be established for PG Studies.

As per the provision in the Karnataka Agricultural Sciences University Act 2010, separate Board of Studies for UG and PG programs are constituted and are in function for cause.

5. The University Act Provides for position of Pro-Chancellor which does not exist in ICAR Act may have to be abolished.

Agriculture being the State subject, it is the decision of the State Government to continue the position of Pro-Chancellor and it is applicable to all farm Universities in the State.

6. In conformity to ICAR Model Act, it is suggested that the existing post of Dean and Director of Instruction (PGS) may be combined into one and re-designated as Director of Resident Instruction to be on par with Director of Research and Director of Extension.

- All the changes made have been in accordance with the UAS Act 2010. Accordingly,
- Director of Instruction of Colleges and Director of Student Welfare have been designated as Deans of Colleges and Dean Student Welfare, respectively. Director of Instruction (PGS) is designated as Dean (PGS) and retained for implementation PG programmes.
- The post of Director of Education has been created under the Model Act which is above the post of Dean of Colleges, Director of Research and Director of Extension to oversee all the three activities of the University.

7. Another Peculiarity of University Act is creation of 13 Head of Divisions over and above the Head of the Departments. These positions have not served useful purpose may be abolished.

Head of the divisions are no longer exists: Karnataka Agricultural Sciences University Act 2010, provides scope for nomination of senior professor as Head of the Department (HOD) at college level for each discipline, for period of three years on rotation and senior most professor as University Heads of the Department (UHD) for each discipline at University level to coordinate academic, research and extension activities of discipline.

8. The Head of the Colleges are designated as Director of Instructions which may be changed to Dean to fall in line with model Act and other SAUs in the country.

As per Karnataka Agricultural Sciences University Act 2010, each college, Postgraduate studies and students' welfare is headed by Dean which are recruited as tenure posts for period of three years.

9. For eligibility criteria of admission for various UG programs University should follow ICAR guidelines.

University is following ICAR admission guidelines provided from time to time. Currently, UG admissions are made through Karnataka Examination Authority, Common Entrance Test ranking.

10. For Master's Programs the eligibility requirement states that Bachelor degree in the concerned subject from Agricultural Universities. Similarly, for Ph.D. Program the eligibility is master's degree in concerned/ related subject from agricultural Universities. This completely closes the door for basic sciences and basic engineering graduates. This should be avoided. The University may admit limited number of talented basic sciences and basic engineering graduates in its postgraduate programs giving remedial courses wherever necessary.

University in principle is keen to broaden the eligibility criterion for postgraduate admission to give admission to basic science degree holders in certain subjects wherever possible. The matter is being contemplated before concerned Board of studies and Academic Council and coordination committee of Karnataka State Farm Universities to arrive at appropriate common decision for the cause.

11. In examination schedules practical components gets less weightage in examination than the practical credit hours allotted to different courses which must be corrected immediately.

- University implemented Fourth Dean's committee recommendations, which emphasizes on experiential learning and critical evaluation of practical skills.
- Greater interaction and critical evaluation are being done in crop production courses with main emphasis on practical aspects.
- Elective courses provide scope for critical evaluation of practical skills.

- Practical examination for courses with theory and practical component is conducted for 15 marks with 10 marks for records / assignments. For courses with only practical component, more weightage (60 marks) is given to practical component and 10 marks for records / assignments.
- The Seventh semester is set apart for RAWEP \ Placement \ Practical training of all UG programs and Eighth semester for Hands on Training and Experience Learning

12. Earlier examination system had provision for Quizzes particularly unannounced quiz, which must be reintroduced.

Examinations are conducted as per the recommendations of Fourth Deans' Committee.

13. Curricula for Horticulture and Agricultural Engineering Degree programs give much more credit to Agricultural courses compared to the model curricula formulated by ICAR. This has been done at the cost of Horticultural and Agricultural Engineering courses. This needs to be corrected.

Necessary weightage has been provided and incorporated as per Fourth Dean's committee for

Degree	Total credits	Agri. Engg.	BS & H	Agri. & Social sciences
B.Tech. Agricultural Engineering	183	146	22	15
B.Sc. (Horticulture)	Degree programme now with University of Horticultural Sciences			

14. Contrary to ICAR model curricula the University curricula for Agriculture and Agricultural Engineering degree programs do not provide elective courses. The University should examine and correct this deficiency.

Fourth Dean's Committee Recommendation is being followed. The deficiency observed is eliminate. The list of Elective courses identified for developing hands on training in Agriculture is listed below.

B.Sc. (Agriculture) Elective Courses / Comprehensive Courses

Sl.No.	Main Stream	Elective Courses	Credits
1	Natural Resource Management	6 courses each with 5 credits	0+30
2	Crop Protection	6 courses each with 5 credits	0+30
3	Horticulture	6 courses each with 5 credits	0+30
4	Post-Harvest Technology and value addition	4 courses each with 5 credits	0+20
5	Agri-Business Management	7 courses each with 5 credits	0+35
6	Social Sciences	7 courses each with 5 credits	0+35
7	Basic Sciences	6 courses each with 5 credits	0+30
8	Commercial Agriculture	10 courses each with 5 credits	0+50
	Total	52 courses of 5 credits each	210

Students have the option to register selected combination of 20 credits of practical.

B.Tech. (Agricultural Engineering) Elective Courses / Comprehensive Courses

Sl.No.	Main Stream	Courses	Credits
1	Farm Power & Machinery	4 courses with 3 credits	8+4
2	Soil & Water Engineering	4 courses with 3 credits	8+4
3	Agricultural Processing and Food Engineering	5 courses with 3 credits	10+5
	Total	13 courses of 3 credits each	28+9

- 15. The tenure of officers of the University is for three years, which may be raised to five years as per ICAR guidelines. The Head of the Department and Head of the Divisions are nominated on seniority basis. If such positions cannot be filled through National open competition at least University should fill these positions based on application from internal candidates and interviews involving external experts.**

Tenure of officers is of 3 years' duration. Karnataka Agricultural Sciences University Act 2010 provides scope for nomination of senior professor as Head of the Department (HOD) at college level for each discipline, for period of three years on rotation and senior most professors as University Heads of the Department (UHD) for each discipline at University level to coordinate academic, research and extension activities of discipline.

- 16. Teaching Staff is inadequate for UG programs in Agricultural Engineering and Agricultural Marketing and Cooperation. In spite of this University is offering PG programs in these two disciplines. The M.Tech. (Agril. Engg.) in Soil and Water Conservation Engineering is being offered without a single qualified teacher/ scientist being available in the campus. University may suspend the PG program till the faculty position improves.**

The PG Programme M.Tech. (Agril. Engineering) in Soil and Water Conservation has been discontinued based on the PRT suggestion. The faculties with Doctoral degrees have been recruited / redeployed in both the departments for effective teaching process. The details are provided hereunder.

Existing Staff position in Agril. Marketing & Agril. Engineering

Programme	Professors			Associate Professors			Assistant Professors			PhD Holders
	S	F	V	S	F	V	S	F	V	
Agricultural Marketing, Cooperation & Business Management	2	0	2	3	1	2	6	5	1	9
Agricultural Engineering	1	1	0	4	0	0	9	8	1	6

S-Sanctioned, F-Filled, V-Vacant

- 17. Faculty positions needs to be improved in other Colleges Namely Agricultural Colleges at Mandya and Shimoga, Forestry College Ponnampet, Veterinary College Bangalore and Dairy Science College Bangalore**

Faculty short fall in Colleges located at Mandya, Chintamani and Hassan has been addressed by recruitment, by redeployment of faculty on need based manner from other campuses, on promotion, and also by allotting courses to scientists in research schemes and extension units. The scenario is improved greatly to meet the requirement and it is in the state of sufficiency with faculty.

College wise faculty position in University of Agricultural Sciences, Bangalore

Sl.No.	College	Professors			Associate Professors			Assistant Professors		
		S	F	V	S	F	V	S	F	V
1	Agril. College, GKVK	23	30	6	54	46	15	102	96	16
2	Agril. College Mandya	8	3	5	3	2	1	31	21	10
3	Sericulture College Chintamani	5	0	5	13	4	9	44	21	23
4	Agriculture College Hassan	4	2	2	5	2	3	39	26	13

S-Sanctioned, F-Filled, V-Vacant

- 18. Ph.D. Degree holders in faculty are less than 50 percent in 8 out of 12 Colleges/ Academic programs. In Colleges of Forestry, Horticulture and Agriculture (Shimoga) and Agricultural Engineering Program the PhD degree holders among the faculty are 35-39 percent only. The**

University should have a definite plan to improve the qualification of faculty members in these Colleges.

University has policy of encouraging faculty to pursue higher studies /Ph.D. both within the University and as well in other SAUs / ICAR institutions by providing leave/ part time facility/ deputation. As a result, number of faculty with PhD has increased during the last five years. At present the more than 90 percent of professor are with PhD, whereas in Associate professor more than 50 per cent with PhD and in Assistant Professor Cadre about 50 per cent faculty are with Ph D. The Position is expected to improve further as remaining faculty are pursuing Doctoral programme. And faculty improvement programmes is on uninterruptedly.

SL. No.	College	Total Faculty	Faculty with Ph. D.	Percentage
1	Agriculture College, GKVK	139	96	69
2	Agriculture College, Mandya	26	14	54
3	Agriculture College , Hassan	30	21	70
4	Agriculture College, Chintamani	25	12	48

19. There is high degree of academic as well as geographic inbreeding among faculty, which should overcome.

The University recruit faculty through open advertisement at National level. Domiciliary requirement has been relaxed in recent recruitment policy to attract talent throughout India. University is contemplating to recruit the faculty with specific expertise, whenever there is deficient in different Departments. Now ICAR JRF-SRF candidates invariably pursue their studies outside the parent university. Faculties are encouraged to pursue PhD degree with other Universities. Academic and geographic inbreeding is becoming narrow. Any deviation needs policy change at State Government.

20. The ratio of teaching (including scientific officers) to non-teaching staff (filled in position) works out to be 1:2.34 which is quite high in favor of non-teaching staff. The University should aim to bring down this ratio of non-teaching staff to around 1:1.5.

The ratio has been reduced gradually, as many have attained superannuation; University has abolished / redeployed some of the unit's \ cadres in non-teaching cadres based on the Dr. Thimmaiah committee report. Attempts are being made to narrow down the ratio and it is continuous process.

21. Geographically only about 5 percent UG and 10 percent PG students were from outside the State including foreign students. Efforts should be made to increase intake of students from outside the state.

The University admits ICAR allotted 15 per cent of students to UG courses and 25 per cent to PG courses. University has launched intensive program to admit NRIs sponsored candidates and foreign students to UG/PG programmes. Normally 15 percent of candidates are admitted over and above the annual intake.

Further, several measures have been taken to increase the admission of foreign students, such as evolving suitable remedial courses, improving hostel facilities. International student hostel has been constructed with international facilities. University appointed, foreign student advisor, and Associate advisor-cum -warden to facilitate admission process and to look after the welfare of foreign students under Dean Student welfare. Domiciliary requirement has been relaxed for PhD admission. In the recent years' foreign students' admission has substantially increased.

Year	ICAR nominated students on roll		Foreign students on roll
	Undergraduate	Postgraduate	Undergraduate / Postgraduate
2009-10	47	52	65
2010-11	47	42	52
2011-12	55	34	21
2012-13	37	35	71

2013-14	34	36	39
2014-15	42	44	50

22. The University does not have formal and effective placement service for graduating students. The University should establish a placement cell without further delay.

The University of Agricultural Sciences, Bangalore has established Placement & Counseling Cell at GKVK. The Cell is responsible for coordinating and arranging campus interviews to facilitate students' placement. The students desirous to avail the facility, are required to register by paying a membership fee of Rs.200/-.

University is also arranging campus interviews from reputed Multi Nationals \ Corporate houses \ Banks etc. Every year more than 30 firms are participating in the Campus selection process and in the last five years more than 500 students got selected through campus interviews and year wise details are furnished below.

Year	Number of students placed		
	Public Sector	Private Sector	Total
2009-10	61	10	71
2010-11	150	20	170
2011-12	29	34	63
2012-13	07	96	103
2013-14	05	28	79
2014-15	03	22	25
Total	255	256	511

Most of the graduates are placed in Nationalized Banks. 12 Assistant Directors of Agriculture during 2009, twenty-two graduates from this University have selected for IAS/IPS/IFS posts through UPSC and 40 graduates have been selected for KAS posts through KPSC.

23. The University may also conduct manpower need assessment and link the admission to the result of such assessment.

Agriculture graduates have wider employment opportunities. Majority of them are being employed in Government Departments like, Agriculture, Horticulture, Sericulture, Marketing and Cooperation Forestry, Watershed & Rural development. Besides, their absorption in IT sector has substantially increased.

The exact requirement for Agriculture sector needs to be estimated at National level, as demand for agricultural graduates from MNCs especially from retail chains are increasing cutting across the State borders. UAS Bangalore has been in touch and providing necessary support to NAARM to conduct manpower study.

24. The Library and other learning resources at Agriculture College, Mandya, Sericulture College, Chintamani and Forestry College, Ponnampet are inadequate and need immediate attention of the University.

Central Library at Main campus GKVK is partially digitized, provided online database and e-connectivity to all colleges and departments in the university. It has collection of 186339 books, 468 periodicals which includes 357 National Journals and 111 International Journals. Library also has 1606 Ph.D. theses and 7331 M.Sc. theses including 85 MBA theses.

UAS constituent colleges have been provided with separate grants for purchase of Textbooks and to subscribe important Journals. Separate Library Blocks were constructed for College of Agriculture Mandya, and Sericulture College, Chintamani.

Sericulture College Chintamani

A new building has been constructed with all required infrastructure for Library. More than 10,000 books on various subjects related to sericulture, agricultural Sciences, general knowledge and other

books for preparing to the competitive exams, 15 journals related to Agricultural Sciences, weekly and daily magazines and newspapers have been added.

The library has been fully computerized and made accessible with other libraries for easy communication of information. The library is equipped and connected with internet facility to access various online journals and communication. CD ROM facility has also been strengthened for the benefit of both faculty and students. Even, hostels have been provided with 24 hours' internet facilities for the benefit of students. Software facilities for the academics, examination and library have been provided as a part of computerization.



Library facilities at College of Sericulture, Chintamani

Agriculture College Mandya has a new library block. It has a collection of 17089 books from 8023 and is now subscribing 20 journals with access to e-journals also with internet facilities.

- 25. The CD-ROM and Internet facilities are not available in any out-station Colleges except Mangalore. This deficiency should overcome at the earliest.**

CD-ROM and Internet facilities are made available at all colleges. In addition, all the colleges have been provided with ERNET facilities. Now all campuses are well connected network and can access the resources available at GKVK Library/AKMU.

- 26. The Library budget of the University as well as of constituent Colleges is much below 6 percent of the total budget. Its upward revision is there of essential.**

This issue has been addressed by allocating higher amount to libraries of constituent colleges and also through providing e-connectivity.

Plan Year	Amount in Lakhs	Budget %
2009-10	61.45	0
2010-11	69.72	13.45

2011-12	74.95	21.97
2012-13	74.95	21.97
2013-14	31.02	-49.5
2014-15	41.9	-31.82

Allocation of Funds to different College Libraries (Rs. Lakhs)

SL. No.	College	2008-09	2009-10	2010-11	2011-12
1	Agriculture College, Bangalore	38	35.00	65.00	204.64
2	Agriculture College, Mandya	4	1.00	1.00	10.56
3	Agriculture College, Hassan	56	3.00	3.50	19.75
4	Sericulture College, Chintamani	4	1.00	1.10	19.6
5	UAS Library	24.00		30.00	4.20
6	Total Library Budget	137.75	41.75	102.35	324.55
7	Total University Budget	15637.58	17032.59	30454.02	17804.05
8	% over University Budget	0.59	0.25	0.37	1.82

The University has allocated to all the constituent colleges over the years reasonably. The share is increasing order.

- 27. The Laboratory space for practical classes is inadequate at College of Agriculture GKVK, College of Veterinary Science, Hebbal, College of Dairy Science, Hebbal, College of Fisheries, Mangalore and College of Sericulture, Chintamani. At Forestry College, Ponnampet the laboratory development is poor and needs immediate attention. The Agricultural engineering degree program offered at Agriculture College, Bangalore suffers from serious inadequacy of laboratories and workshop, which should be overcome without further delay.**

The university has initiated serious measures towards the development of infrastructure to meet the requirement on all the campuses. Accordingly, it has spent a sum of Rs.5901.56 lakhs towards creating infrastructure of Plinth area measuring 53463.74 sq. mt. The details of work over the year are provided hereunder.

Civil works undertaken to Strengthen the Infrastructure towards Hostel / Class rooms / Laboratories / Field Labs/ Indoor stadiums, Quarters etc.,

Sl. No.	Year	Plinth area (Sq. mt.)	Amount (Rs. in Lakhs)
1	2008-09	1623.1	292.00
2	2009-10	20199.87	2593.00
3	2010-11	26854.77	1380.00
4	2011-12	1710.00	1116.00
5	2012-13	373.00	144.00
6	2013-14	2703.00	376.56
	Total	53463.74	5901.56

a. Centres for Higher Studies

Under RKVY project newly constructed buildings are Advanced Centre for Plant Biotechnology and Institute of Agri-Business Management.



Advanced Centre for Plant Biotechnology



Institute for Agri-Business Management



Organic Research Centre



Biosafety Green House



Plant Tissue Culture Laboratory

There are two auditoriums and the space are adequate. However, the same has to be modernised to organise student's programmes and conduct of cultural activities.

SPECILAISED LABORATORIES/FACILITIES CREATED

The college has developed good laboratory and other specialized facilities for imparting teaching.

- National facilities for stable isotopes in biological sciences
- Tissue culture laboratories
- Molecular Biology Laboratories
- Pedanorium
- Rain-out-shelter facilities
- Cold room
- Mushroom production unit
- Bio fertilizer production unit
- Composting and Bio-digester unit
- Virology laboratory
- Grading Technology laboratory
- Plant health clinic
- Marker Assisted selection laboratory
- Biocontrol mass production unit

- Plant disease diagnostic laboratory
- Animal House/ Dairy/ piggery
- Silkworm rearing house for hand on training class and PG rearing
- Crop museum
- Mulberry Germplasm
- Aromatic and Medicinal plants garden
- Playhouse and growth chambers
- Horticultural Nursery/horticulture orchards of different crops
- Mango germplasm /clonal selection
- Arboretum
- Silviculture system/Agroforestry/IFS model field
- Post-harvest processing and value addition laboratory
- Seed processing unit with modern equipment's and machineries

For effective training of B.Tech.(Agril. Engg.) students, specialised workshops, laboratories and class rooms have been established and equipped.

Agricultural Engineering

- The different facilities available in College of Agriculture are as follows:
- Workshop
- Machine-shop
- Drawing Halls
- Post-harvest and Food Engineering laboratory
- Soil & Water Conservation laboratory
- Survey Stores
- Fluid Mechanics and Irrigation lab
- Non-Conventional Energy Lab
- Computer laboratory with CAD / CAM facilities
- Regional Biogas Development and Training Centre
- Farm Power and machinery Training centre in collaboration with Mahindra & Mahindra.



Workshop



New Post-Harvest and Food Engg. Lab



Heat and Mass Transfer Equipment



Sugarcane Cutter and Planter



Maize Sheller

Sericulture College, Chintamani

- The College offers two-degree programmes viz; B.Sc. (Agriculture) and B.Sc. (Sericulture). Accordingly, facilities are created to meet the requirement.
- The existing ground floor area of 1740 Sq.mt. has been added with additional floor area of 990 sq m to have four class rooms, four Laboratories with faculty rooms. In addition, the existing college building renovated to give face lift and to meet the state of art.
- A separate building is constructed for College Library, examination Hall, Computer laboratory,
- The Bio-craft Unit, Silkworm Rearing Unit, Chawki Rearing Unit, Silk Reeling Unit, weaving laboratory, Utilization of Sericulture Wastes and Seri clinic units have been developed and adequately equipped for training the sericulture students.
- Field facilities with irrigation, water management models and operating systems, compost preparation units, farm ponds, fish ponds, dairy unit, sheep unit, biogas unit, soil health testing unit, plant health clinic, poly house, shade net unit, nursery unit, silkworm rearing unit and other laboratory facilities have been strengthened for offering hands on training to Agricultural students.



Class Rooms - Chintamani



Examination Hall-Chintamani



Entomology Laboratory- Chintamani



Computer Lab- Chintamani



Bio-craft Unit- External view-Chintamani



Bio-craft Unit- Internal view-Chintamani



**Instructional farm with drip irrigation
Mandya**



Instructional farm - Poly house Mandya

28. The Hostel accommodation is highly inadequate in Agriculture College, Mandya. This needs immediate attention.

- New Hostel blocks have been constructed separately for boys and girls at college of Agriculture, Mandya. All students are accommodated in the hostel.
- The Boys Hostel at College of Agriculture, Mandya has been constructed which can accommodate 108 students. Presently, there are only 94 residents. A new hostel Block has been constructed for Girls students at College of agriculture, Mandya, which can accommodate 175 students. Accommodation is sufficient.

Sericulture College, Chintamani



Boys Hostel- Chintamani



Girls Hostel- Chintamani



Dining Hall- Chintamani



Internet Facility in Hostels- Chintamani

Hostels at Agriculture College Mandya



Girls Hostel at Mandya



Dining Hall Boys Hostel Mandya

29. The Girls hostel at Bangalore is too crowded and additional space needs to be created early. Agriculture College GKVK

- University has built separate hostel blocks for UG girls and PG girls at GKVK and equipped with required facilities including internet /Wi-Fi facility/CCTV with adequate security.
- It can accommodate now 454 students. The campus has also built international students' hostel which is co-living.



Girls Hostel Dining Hall at GKVK



UG Ladies Hostel at Gkvk



International Students Hostel at GKVK

30. Creation of a separate PG hostel at Veterinary College, Bangalore may be considered.

Veterinary College, Hebbal now comes under Karnataka Veterinary, Animal and Fishery Sciences University, Bidar.

31. All Hostels need improvement for indoor games including modern gymnasium

- The university has made serious attempt in addressing to build and equip indoor games facility and gymnasium at main campus and all other constituent college hostels of both boys and girls.
- Funds provided under ICAR developmental grants are being fully utilized for creating facilities to the students. Facilities created are; Indoor stadium with Modern gymnasium equipment at GKVK, Chintamani, Mandya and Hassan
- To promote students for participation and exhibition of their hidden talents they are being encouraged with training through the experts in various cultural events besides providing the material, instruments and other facilities needed.



Indoor Games Hall- GKVK, Bangalore

Sericulture College- Chintamani



Gymnasium-Chintamani



Basket ball ground- Chintamani



Volley ball court-Shimoga



Ball badminton court- Ball badminton court



Gymnasium Shimoga



Gymnasium Shimoga

- 32. The Budget allotment to various Colleges has gone down compared to base year 1995-96. Except for Colleges located at Bangalore. Colleges need to be proportionate with increasing cost of education per student and increasing enrollment. Budget allocation for all.**

The University has consciously considered the allotment of Budget to constituent colleges basing education cost and student strength. The details allotment made over the year is provided in the below table. The allotment appears to be fair enough.

- 33. The proportion of expenditure on salary component with reference to operating and maintenance expenditure is high. At least 30 percent of salary cost should be provided for operating and maintenance.**

Sl. No.	Year	Budget Allocated (In lakhs)	Budget towards Salary (In lakhs)	Budget towards operating and maintenance cost (in lakhs)	Ratio of salary costs to operating and maintenance cost
1.	2009-10	25020.00	10781.00	14239.00	43.09 : 56.91
2.	2010-11	37673.00	19210.00	18463.00	50.99 : 49.01
3.	2011-12	39121.00	18095.00	21026.00.	46.25 : 53.75
4.	2012-13	33813.00	19594.00	14219.00	57.95 : 42.05
5.	2013-14	35971.00	21170.00	14801.00	58.85 : 41.15
6.	2014-15	35653.00	22394.00	13259.00	62.81 : 37.20

Sl. No.	Year	Budgeted Expenditure (in lakhs)	Expenditure on Salary (in lakhs)	Expenditure on operating and maintenance (in lakhs)	Ratio of budget expenditure on salary and other heads
1.	2009-10	17033.00	8552.00	8481.00	50.21 : 49.19
2.	2010-11	27030.00	17493.00	9537.00	64.72 : 35.28
3.	2011-12	26983.00	16094.00	10889.00	59.64 : 40.36
4.	2012-13	26752.00	17438.00	9314.00	65.18 : 34.82
5.	2013-14	27353.00	18660.00	8673.00	68.27 : 31.73
6.	2014-15	28541.00	19815.00	8726.00	69.43 : 30.57

The budget has been allotted in the ratio of 68:32 and expenditure incurred is in the ratio of 69:31.

34. Internal Revenue generation capability is not fully exploited and it should get priority.

Steps are being taken to improve internal resources through various activities like undertaking water, soil, pesticide \ insecticide analysis, product evaluation, varieties evaluation, outside students' projects, ground hire charges, auditorium rent charges, etc. University has also enhanced its seed production programme in all the research stations as well as through seed village concept to generate internal resources. As a result, the internal resource generation has substantially increased.

Sl. No.	Year	Total	State Government				ICAR	% Share of Budget	GOI	% Share of Budget	Internal	% Share of Budget	Others	% Share of Budget
			Non-Plan	% Share of Budget	Plan	% Share of Budget								
1	2009-10	154.34	44.50	28.83	33.75	21.87	33.44	21.67	15.04	9.74	14.2	9.20	13.42	8.69
2	2010-11	274.72	83.15	30.27	25.15	9.15	102.41	37.28	26.14	9.52	16.51	6.00	21.36	7.78
3	2011-12	258.71	82.35	31.83	40.16	15.52	37.57	14.52	30.97	11.97	17.85	6.91	49.81	19.25
4	2012-13	261.38	105.00	40.17	31.00	11.86	49.64	18.99	32.82	12.56	18.96	7.25	23.97	9.17
5	2013-14	307.27	146.73	47.75	29.00	9.44	36.46	11.87	22.09	7.19	20.35	6.62	52.64	17.13
6	2014-15	302.49	156.86	51.86	49.56	16.38	32.77	10.83	11.25	3.72	25.47	8.43	26.57	8.78

35. The activities with financial support through revolving funds may be explored from scientific point of view income generation and providing opportunity for students to earn while learning.

The University has initiated "Revolving fund programme" to provide fund to faculty undertake production activities to generate income wherever possible.

University implemented Experiential Learning /Hands on Training program with the assistance of ICAR to provide opportunity for students to earn while learning as per fourth Deans committee recommendations. At present, revenue is being generated through raising field crop by students as part of their curriculum.

36. Though the University has done commendable work in developing new varieties and technologies the area of concern is poor University-Industry linkage. Adequate efforts should be made in patenting the new inventions and technologies.

UAS, Bangalore has prepared guidelines for IPR issues and commercialization of technologies based on the guidelines prepared by ICAR. To address the IPR issues and commercialization of technologies, University has formed Technical Evaluation and Commercialization committee (TECC) and Technology Commercialization Committee (TCC) to document all the technologies as per PPV & FR Act. Steps are being taken to register the varieties released by the University during

last fifteen years. UAS Bangalore has also signed Memorandum of Understanding with National Research Development Corporation (NRDC) for commercializing the technologies.

37. Biotechnology research, which is still in infancy, needs much concerted efforts to make the University a leading center in crop and animal biotechnology research.

UAS, Bangalore has laid greater emphasis on bringing modern tools like Biotechnology in agricultural research and teaching. University is deputing its faculty to various National and International Institutes to acquire training in modern tools of biotechnology. Most of the faculty has already been trained in these tools by attending training programmes, refresher or orientation courses and higher studies under faculty development activities. Over the last few years, University has done significant progress in the area of Biotechnology.

- Functional genomics: cloning and characterization of stress response gene.
- Developing transgenic addressing specific biotic and abiotic constraints.
- Molecular breeding-identifies QTL for specific plant traits to improve biotic and abiotic stress tolerance.
- Tissue culture- development of tissue culture protocols for horticulture and medicinal plants.
- Development of plant vaccines.
- Several transgenic in the important local crops like Groundnut, Dolichos, Pigeon pea and Cotton are being developed to improve biotic and abiotic tolerance and insect resistance. Several crops expressing *Bt* Cry proteins are at different stages of evaluation.
- Aerobic rice varieties were developed using molecular marker and released for cultivation. Tomato with high shelf life up-to 40days under room temperature were developed using molecular markers and the project was funded by DBT, New Delhi. Now the hybrids are under multi-location trials under PPP mode.
- Biocontrol agents, medicinal mushrooms, edible vaccines, and high protein rice varieties have been developed under DBT-HUB builder program (4.5Crores) supported by DBT-New Delhi.
- Transgenic Groundnut developed at the university has been approved by the RCGM for event identification and now submitted the application for confined field trails.
- Developed GAD-65 (Glutamic Acid Decarboxylase) expressing in Coleus plants which is used to control Type-1 Diabetics and same is being recommended for patenting.
- Transgenic plants containing rabies vaccine gene for production of rabies glycoprotein in muskmelon has been patented.
- The glucanase chitinase gene for the production of fungal resistant plants of groundnut, chilli and African violets were developed.
- Transgenic tomato, tobacco with *citrate synthetase* gene has been developed for improving "P" use efficiency.
- Sunflower mutants have been developed against *Alternaria* disease. Tetraploid watermelon was developed by using colchicine. Attempts are being made for production of seedless watermelon using novel technique.
- Centre for Agricultural Biotechnology is being established under RKVY program at GKVK campus.
- The UAS Bangalore has taken up Plant Biotechnology research while the Animal Biotechnology research is conducted by Veterinary University, IAHVB and IVRI, Bangalore.



ADVANCED CENTRE FOR PLANT BIOTECHNOLOGY

- 38. The University has been transferring technology to the concerned State Department officers and to limited number of farmers and also commercial units free of cost. University may consider steps to introduce and encourage paid consultancy services for commercial units and may be for well to do farmers wherever feasible.**

University has formulated guidelines for Scientists to undertake consultancy. Presently University is operating Consultancy program for Community based Tank Management and watershed development program funded by the World Bank and implemented by Government of Karnataka.

- 39. The University brings out large number of publications but the scale of economy does not exist. It is desirable that University analyzes the financial aspects of the publications and improves the income to expenditure ratio, which is highly negative at present.**

University is taking steps to streamline its publications and some publications are outsourced. Pricing of the publications is being done based on the actual cost incurred.

**Action Taken Report on: Observations / recommendations of ICAR- PRT in accreditation of
University of Agricultural Sciences Bangalore
(Compliance as on January 2017)**

- 1. It has been observed that some recommendations of the earlier PRT have not been fully implemented. The PRT reiterates earlier recommendations and strongly recommends to initiate immediate actions for the effective implementation on priority on the following issues:**

In respect of the observations of earlier PRT, the University has already submitted compliance report during 2010, 2012 and 2016 (as on January, 2016) and also presented and apprised the same to PRT during the PRT visit to UAS Bangalore on 27th - 30th January 2016. The University has made sincere effort in complying on the observations wherever possible within the limits of the University. However, some of the observations of previous PRT as indicated below are being updated as hereunder.

- 2. In examination schedules practical components gets less weightage in examination than the practical credit hours allotted to different courses which must be corrected immediately.**

The University did implement IV Deans' Committee recommendations. Now, also implemented V Deans Committee recommendations wherein good enough weightage is given to practical examination.

- 3. Curricula for Horticulture and Agricultural Engineering Degree programs give much more credit to Agricultural courses compared to the model curricula formulated by ICAR. This has been done at the cost of Horticultural and Agricultural Engineering courses. This needs to be corrected.**

The University has adopted V Dean's committee recommendations for all the Degree programmes on All India pattern, as per ICAR norms.

- 4. Faculty positions needs to be improved in other Colleges Namely Agricultural Colleges at Mandya and Shivamogga, Forestry College Ponnampet, Veterinary College Bangalore and Dairy Science College Bangalore**

The present strength of the faculties at four constituent colleges, Directorate of Research and Directorate of Extension are presented hereunder. Regular recruitment is being planned wherever the vacancies are available subject to the approval of the Government of Karnataka.

Updated Faculty strength as on January 2016 at UAS Bangalore

Sl. No.	Name of the Constituent College /Faculty	No. of Total Sanctioned	In Position (No. of Faculty based on Designation)				Total
			Prof.	Assoc. Prof.	Asst. Prof.	RA / Instructor	
1	College of Agriculture, GKVK, Bengaluru	179	93	20	21		134
2	College of Agriculture, Mandya	42	9	2	19		30
3	College of Agriculture, Hassan	57	6	6	32		44
4	College of Sericulture, Chintamani	62	6	4	28		38
5	Research	178	54	20	30		104
6	Extension	92	11	07	45		63

7	Upgraded posts of RA/Extension Guide/Instructors	60	34	13	11	2	60
Total		670	213*	72*	186	2	473

***Includes the faculty promoted under MUS/CA**

However, College of Agriculture, Shimoga and Forestry College, Ponnampet are now with UAHS, Shimoga and Veterinary College, Bangalore and Dairy Science College, Bangalore are now with KVAFSU.

Observations of ICAR- Peer Review Team 2016 visited UASB on 27-30, Jan. 2016

Compliance follows the observations in sequence

❖ **The Constitution of separate Board of Studies for each UG programme**

As per the provision in the UASB Act 2009, the UASB has,

1. Board of studies for undergraduate degree programme
2. Board of studies for Postgraduate degree programme

Further, the University has constituted separate Board of studies for each degree programme through a notification with due approval of Academic Council. Accordingly, the following are the six Boards of Studies for Undergraduate programme *Viz.*,

- Board of Studies for Agriculture
- Board of Studies for Agricultural Biotechnology
- Board of Studies for Agriculture Marketing and Cooperation
- Board of Studies for Sericulture
- Board of Studies for Agricultural Engineering
- Board of Studies for Food Science and Technology

The first meeting was convened and deliberated on the adoption of V Deans committee recommendation on 13-01-2017

❖ **Steps to enhance internal revenue generation and commercialization of technologies generated by the University**

The following steps have been taken to enhance the internal revenue generation:

- Intensive seed production programme
- Providing revolving fund for seed production and animal component.
- Plan to produce about 22,000 quintals of quality seeds of different crops to generate revenue worth of 3.00 crores.
- Conducting trials / testing of soil / water/ chemicals- insecticide / fungicides- enhancement of fees.
- Commercialization of crop varieties and technologies.
- Creating micro-irrigation facilities to enhance crop productivity and income.
- Strengthening of horticultural and agro-forestry nurseries for production of saplings/ planting materials on large scale by tie-up with the Government programmes
- Providing laboratory facility to other university / College students of the subject area for project work on payment of prescribed fee.

5. **Regarding financial resources, the internal revenue generation is only about 7-9% in last few years. There is an urgent need for contemplating new ways of internal revenue generation to reduce the dependency on State agencies.**

❖ **The facilities, varieties developed and resources of the University should be optimally exploited for generation of internal resources**

- The University has been renting sports/ games facility / auditorium created/established judiciously to government/ public sector organizations of mutual interest both at Main campus and as well as college campuses.
- At college of Sericulture, Chintamani, the Chawki rearing centre established with license/registration certificate obtained from Central Silk Board undertake rearing young silkworm and supply to commercial silkworm rearing farmers.
- The “Seri-hand craft Centre” established prepares variety of Seri- byproduct based items like; cocoon garland, greeting cards etc. and sell to generate income. This serve as skill imparting Centre too, for both students and general public specially women.
- The Silk Weaving Centre also produce silk fabric like; saree, plain cloth etc. with quality assurance “Silk mark” has been obtained from Silk Mark Organization of India.
- Commercialization of hybrid paddy (KRH-4) has generated an income of Rs. 5 crores.
- Testing fee generated amounts Rs 1.49 crore.
- Revolving fund on seed and animal component generated an amount of Rs 50 lakhs

❖ **Incubation of Agri. Business Development center may be established for commercialization existing technologies.**

- The University has been commercializing the technologies developed viz., variety / s. The responsibility of commercialization of technology has been vested with Directorate of Research. In this direction, the Directorate has two tier committees i.e.
- Technology Evaluation and Commercialization committee &
- Technology Commercialization Committee Through which the Technology developed by the University is evaluated and commercialized. With the help of NRDC, Hybrid paddy (KRH-4) commercialization is under progress.
- The University has “**Agri-clinic and Agri-business Centre (ACABC)**” and offer module courses / programme to Farm graduates on project formulation and Agri-business development and programmes are being offered in association with NAARM, Hyderabad.
- The University at undergraduate level itself has incorporated the syllabi/ course/s which necessarily impart the knowledge of agribusiness and project formulations

❖ **Effective linkages with the industries to be forged for transfer of technologies**

- The University has the jurisdiction of 10 districts of southern Karnataka. It has the mandate of transfer of technology to the needy community and industry too for promotion of farming sector and enhances productivity for livelihood.
- The University has well established extension network with all the line departments/ banks/ NGOS/ Agri-input producers & suppliers of districts concerned, and has university units in the form of College/ Agricultural Research Stations/ Farmers Training Institute/ Extension Education Units and Krishi Vignana Kendras (KVKs) which are involved in:
- Providing technical guidance and skills in value addition, post-harvest technology, branding and marketing.
- Conducting vocational training programmes on mushroom production, plant propagation (Horticulture nurseries), honey processing, vermicompost production, bio- agents, micro

nutrients (Vegetable and Banana special) etc. and strengthening to establish the links with concerned industries.

- Formation of Commodity Based Associations (CBAs) on Jack fruit, maize, millets, banana, turmeric & other fruits & vegetables, linking to markets such as Safal, Reliance, More etc.
- Capacity building among rural youth as para technicians for operations like coconut climbing, Horticultural Nursery production and Gardening etc.
- Web based content development in agriculture and allied technologies for effective transfer of technologies through electronic media (UASB Agritech. portal).
- ICT based [UAS, Bangalore Agritech. Portal] Transfer of technology through Milk Producers Cooperative Societies during milk procurement time by involving multi agencies (UAS(B), BSNL, NIC and KMF).

❖ **Students need to be encouraged to establish Start-up Units.**

- The university has been organizing awareness programmes in the colleges to encourage students to venture for start-up in agriculture and related subjects. The UAS Bengaluru is involved in organizing National Conference on “Agri-Startup -Fest” along with UAS, Dharwad during March 2017. Efforts are being made to identify the innovative areas and plans are afoot to allot to the students to undertake such startup programmes.
- The Government of Karnataka is also encouraging the “**startup**” programmes in Agri sector with “**Karnataka Start up policy 2015-20**”. The University has already made proposals to Government for funding in 2017-18 budget for Agri start-up. On receipt of funds, some more activities will be initiated on the lines.

6. The nomenclature of Colleges may be amended suitably to reflect the academic programmes being offered by the respective colleges

The suggestion has been well received by the university.

Currently,

- (i) College of Sericulture, Chintamani, was established to offer BSc (Sericulture) degree, However, subsequently, considering the regional importance and effective utilization of infrastructure and manpower, BSc (Agriculture) degree is also offered.
- (ii) College of Agriculture, Karekere, Hassan established to offer BSc (Agriculture) degree, However, subsequently, considering the regional importance and effective utilization of infrastructure and manpower, BSc (Agri Biotech) and B Tech (Food Science & Technology) degrees are also being offered.
- (iii) College of Agriculture, GKVK was established to offer B.Sc. (Agri) since inception in the year 1964. However subsequently, based on the need and to utilize the resources, B.Sc. (Ag. Ma.Co.) was started followed by B.Tech (Ag. Engg.) degree programmes.

Further, Based on the suggestion by PRT, the Dept. of Ag. Engg. under College of GKVK, is proposed to be upgrade as a College of Agricultural Engineering.

- (iv) College of Agriculture, Mandya was established to offer B Sc (Agri) and is being continued.

Based on the suggestions of PRT, to have a college status for each degree programme, it requires Administrative approval with finance by the state Government, as it requires reasonably huge financial allocations.

7. The nomenclature of UG programmes should be changed as per the recommendations of Deans' Committee of ICAR. B Sc. (Agriculture) may be reamed as B Sc (Hons) Agriculture and B Tech (Food Science & Technology) may be changed as B Tech. (Food Science and Technology).

- The University, as per the procedure, moved the matter in Board of Studies (UG) and it has to pass through Academic council, Board of Management and Government consent, keeping in-view the existing C &R for recruitment. The process is on.
- 8. The following cells / units need to be established with dedicated manpower for effective delivery of the required functions.**
- ❖ **Placement cell**
 - The University has well established placement cell at University main campus and also at each college level with manpower – i.e. Re-deployment of faculty as coordinator / Assistant coordinator as the case may be with necessary office facilities. All these centers are performing the function/s defined for the cell.
 - ❖ **Nodal Agricultural Education Cell**
 - The University has established Nodal Agricultural Education Cell in the VCs office with a Nodal Officer to liaise with the ICAR Education Division.
 - ❖ **Intellectual Property Rights & Commercialization Unit**
 - The Directorate of Research of the University has established IPR cell in the head quarter and also functions as commercialization of technology unit.
 - In addition, in all the constituent colleges IPR cell I Directorate of Research with coordinator to coordinate with HQ and related office for the cause.
 - ❖ **Grievance Redressal Cells for students and Staff**
 - The University has high power Grievance Committee consisting of Members of Board of management and Administrative officer as the Member- Convener at the University level.
 - At each College level also, redressal cells are functioning to redress the issues pertaining to students and staff in coordination with HQ.
 - ❖ **Separate cell to address the issues of Students from other States**
 - The University has been admitting 15 per cent of the student strength for UG programmes and 25 per cent for PG programmes allotted by ICAR.
 - The University has Directorate of Student’s welfare. The Dean Student Welfare who is heading, is vested with all powers and manpower to redress the issues associated with students of other states. Further, at college level, Assistant Director Student welfare functions under the Dean of the college, in coordination with DSW to sort out issues, if any. All colleges have separate cell to redress issues.
 - ❖ **Foreign Students Advisory Cell**
 - The University also admits foreign students for both UG and PG Programmes. The University has redeployment / assigning additional assignment to faculty as Foreign Student Advisor and Assist Foreign Student Advisor under Dean Student Welfare to facilitate their admission, stay on the campus and their welfare.
- 9. In view of the increased importance of mechanization of farming activities, Agro-processing and Soil & Water conservation aspects, a separate College of Agricultural Engineering with adequate manpower and the required facilities may be established in GKVK campus to strengthen research and to offer more specialized academic programmes at Masters’ and Doctoral levels.**
- The University has moved the matter of Up-gradation of Department Agricultural Engineering to Status of “College of Agricultural Engineering” in the Board of Studies (UG). The Subject is to pass in Academic Council, Board of Management and then State Government for consent for up-gradation along with manpower and budget. The process is on. At present M. Tech.

(Agri. Engg.) in Post-Harvest and Food Processing Engineering and M Tech (Agri. Engg.) in Soil and Water Engineering are being offered.

10. The evaluation of course Teachers' by students through a questionnaire based feedback mechanism should be developed and corrective measures need to be taken accordingly.

The university has considered the suggestion pro-actively; accordingly, preparation of appropriate questionnaire for the purpose is under progress at all colleges under the leadership of the respective Deans involving experienced faculty. The Compiled and finalized questionnaire at university level will be used for the purpose at the earliest.

11. Provision of Finishing school should be available for improving personality development, communication skills and project formulations etc. for students.

The finishing schools in general involve soft skill learning & practicing, and acquiring technical skills to coup with industrial needs as pre-employment exposure.

- The concept of Finishing school in farm graduate education needs specialized attention on priority.
- The All-India pattern of syllabus, credit hours, Student READY programmes prescribed by ICAR for each degree programme through V Deans committee recommendations has made remarkable dent in addressing the concept and principle of finishing school at large. The component of student READY programme appears to be part of the concept.
- In addition, the university in all the colleges, organizes personality development programmes, counselling, NSS activities, exposure visits to agro-based industries/ input production unit's / processing units – cereals / pulses /oil seeds etc., Regulated markets of different commodities, banking sectors etc. This appears to be good enough at the graduate level. However, based on the needs of the industry or the public sectors specialized technical skills orienting programmes can be organized before employment. The soft skills required are already taught in different courses & can be reinforced through specialized short duration module courses. On these lines, the university has been organizing need based programmes.

12. Students are accommodated in the hostels more than the carrying capacity of the hostels. Immediate steps are required to address the problem.

The University has separate hostels for boys & girls for UG & PG programmes in all the campuses. Besides, International hostels also available for foreign students at GKVK campus. The table below provides the status of the accommodation strength of the students and deficit of accommodation.

Actual strength and capacity of hostels at different campuses as on 2015-16

Campuses	Hostel Name	Student Strength (no.)	Actual Capacity (no.)	Addl. Required (no.)
GKVK Bengaluru	UG Boys Hostel	565	402	163
GKVK Bangalore	UG Girls Hostel	442	309	133
GKVK Bangalore	PG Boys Hostel	351	342	09
GKVK Bangalore	PG Girls Hostel	262	208	54
Mandya	UG Boys + Diploma Boys Hostel	236	108	128
Mandya	UG Girls + Diploma Girl Hostel	176	126	50
Hassan	UG Boys Hostel	259	141	118
	UG Girls Hostel	361	234	127
Chintamani	UG Boys Hostel	227	132	95
	UG Girls Hostel	136	123	13
	TOTAL	3015	2125	890

Keeping the deficit in mind and also future needs efforts have been made by the University to allocate funds to an extent of Rs.6.15 crores for the construction / expansion of hostels during 2015-16. Besides, the Social Welfare Department, Government of Karnataka provided Rs.11.75 crores under SCSC/TSP grants during 2015-16. Now, the new construction of Hostels / expansion of existing hostels on all the campuses are under progress. With the completion of all the undertaken civil works the deficit will be reasonably met. Creating infrastructure is a continuous process to match the planned programmes and intake of students accordingly.

❖ **Ongoing progress of civil works**

College of Agriculture, GKVK

- Construction of PG boys Hostel 2nd Floor over the existing hostel to accommodate 60 students has been initiated during 2016-17 and work is about to complete in few months.
- Construction of girl's hostel 2nd & 3rd Floor over the existing girls Hostel to accommodate 68 students has been initiated during 2016-17 and work is about to complete in few months.
- Construction of girls' hostel / working women's hostel to accommodate 100 students has been initiated during 2016-17.

College of Agriculture, Mandya

- Construction of Boys Hostel I floor to accommodate 81 students
- Construction of Girl's Hostel 2nd Floor to accommodate 24 students.

College of Agriculture, Hassan

- Construction of Boys' Hostel to accommodate 100 students.
- Construction of 2nd Floor over the existing Girl's hostel to accommodate 75 students.

College of Sericulture, Chintamani

- Construction of Boys Hostel 2nd Floor over the existing 1st Floor to accommodate 48 students
- Construction of Girls Hostel 2nd Floor over existing I floor to accommodate 48 students.

In all, the University is able to mobilize the resources to construct Hostel facilities as stated above, to accommodate 600 students, against the demand of 890 students. The proposals for funding for construction of hostels are included in the ICAR budget of 2017-20.

13. The following facilities need to be created at the constituent colleges

❖ **Internet access in both hostels and colleges**

College of Agriculture, GKVK

- Internet access is provided in both wired and Wi-Fi mode in Colleges as well as hostels for students and faculty.

College of Agriculture, Mandya

- Both hostels have internet facility, Hostels and colleges are provided with high speed internet facility.

College of Agriculture, Hassan

- The Wi Fi facility has been created in the Hostels (Boys and Girls). The LAN internet facility has been created in the College premises. Recently, the video conference facility has been created in the campus.

College of Sericulture, Chintamani

- Within the campus, a 12 mbps optical fiber gateway is catering the need of web connectivity. Proxy server authenticate every user accessing the college LAN and all web

resources through the college gateway. Wi-Fi connectivity is provided in the college premises. Mobile connectivity is provided through the Wi-Fi hot-spots.

❖ **Study centers, recreation and Indoor sports facilities and specialized facilities for differentially abled students in the hostels.**

- All the college campuses have both indoor and outdoor facilities for sports and games adequately. Since the education is residential all the boarders can avail the facility. However, in the hostels, indoor games facilities like Chess, Carom, Table tennis, etc. have been created.
- Hitherto, sports and games facility for differentially-abled though not created specially, the existing is being used to the extent possible wherever required. However, considering the strength of such students, facilities will be created as a need based ones.

❖ **Pilot plant for food processing (College of Hassan)**

- The Pilot plant for Food Processing has been initiated and the procurement of equipments is underway (tenders have been floated). Funds provided by Govt. of Karnataka to the extent of Rs. 75.00 lakhs in this regard. The Pilot plant conceived to house these equipments to undertake the Food Processing is being included under Civil works proposed to ICAR budget for the Year 2017- 20.

❖ **Engineering Drawing Laboratory (College Hassan)**

- Required numbers of Drawing Boards have been procured and classes are conducted in the ad-hoc laboratory for time-being. Construction of separate laboratory for the purpose is being included under Civil works proposed to ICAR budget for the year 2017-2020.

PRT observations of 2015-16 & Action Taken Report on: Observations / recommendations of ICAR- PRT in accreditation of University of Agricultural Sciences Bangalore (Compliance as on January 2018)

1. It has been observed that some recommendations of the earlier PRT have not been fully implemented. The PRT reiterates earlier recommendations and strongly recommends to initiate immediate actions for the effective implementation on priority on the following issues:

The ATR on this point of observation has been complied in the earlier report as on 31.01.2017. However, for clarity and ready reference it is reproduced hereunder.

In respect of the observations of earlier PRT, the University has already submitted compliance report during 2010, 2012, 2016 and 2017 (as on January, 2017) and also presented and apprised the same to PRT during the PRT visit to UAS Bangalore on 27th - 30th January 2016. The University has made sincere effort in complying on the observations wherever possible within the limits of the University.

However, some of the observations of previous PRT as indicated below are being updated as hereunder.

2. **In examination schedules practical components gets less weightage in examination than the practical credit hours allotted to different courses which must be corrected immediately.**

The University did implement IV Deans' Committee recommendations. Now, also, implemented V Deans Committee recommendations wherein good enough weightage is given to practical examination.

3. **Curricula for Horticulture and Agricultural Engineering Degree programs give much more credit to Agricultural courses compared to the model curricula formulated by ICAR. This has been done at the cost of Horticultural and Agricultural Engineering courses. This needs to be corrected.**

The University has adopted V Dean's committee recommendations for all the Degree programmes on All India pattern, as per ICAR norms

4. **Faculty positions needs to be improved in other Colleges Namely Agricultural Colleges at Mandya and Shimoga, Forestry College Ponnampet, Veterinary College Bangalore and Dairy Science College Bangalore**

The present strength of the faculties at four constituent colleges, Directorate of Research and Directorate of Extension are presented hereunder. Regular recruitment is being planned wherever the vacancies are available subject to the approval of the Government of Karnataka.

Updated Faculty strength as on January 2017 at UAS Bangalore

Sl. No.	Name of the Constituent College / Faculty	No. of Total Sanctioned	In Position (No. of Faculty based on Designation)				Total
			Prof.	Assoc. Prof.	Asst. Prof.	RA / Instructor	
1	College of Agriculture, GKVK, Bengaluru	179	93	20	21		134
2	College of Agriculture, Mandya	42	9	2	19		30
3	College of Agriculture, Hassan	57	6	6	32		44
4	College of Sericulture, Chintamani	62	6	4	28		38
5	Research	178	54	20	30		104
6	Extension	92	11	07	45		63
7	Upgraded posts of RA/Extension Guide/Instructors	60	34	13	11	2	60
	Total	670	213*	72*	186	2	473

* Includes the faculty promoted under MUS/CAS

However, College of Agriculture, Shivamogga and Forestry College, Ponnampet are now with UAHS, Shivamogga and Veterinary College, Bangalore and Dairy Science College, Bangalore are now with KVAFSU.

Updated Faculty Strength in the University/ College/ Faculty as on January 2018

Sl. No.	Name of the University/ College/ Faculty	No. of Total Sanctioned				In Position			
		Prof.	Assoc. Prof.	Asst. Prof.	Total	Prof.	Assoc. Prof.	Asst. Prof.	Total
1	College of Agriculture, GKVK	23	54	102	179	17	36	75	128
2	College of Agriculture, Mandya	08	03	31	42	09	05	19	33
3	College of Sericulture, Chintamani	05	13	44	62	05	04	27	36
4	College of Agriculture, Hassan	5	7	46	58	6	7	31	44
Total		41	77	223	341	37*	52**	152***	241

* Includes 33 instructors upgraded ; ** includes 12 instructors upgraded; *** includes 11 instructors upgraded

The faculty strength was 473 as on 2017. However, the number is reduced to 399 consequents to the Superannuation of the faculty. Efforts are being made to recruit faculties – the process of recruitment is in different stages. Hopefully about 100 faculty will be inducted during 2018.

Observations of ICAR- Peer Review Team 2016 visited UASB on 27-30, Jan. 2016 updated as on January 31, 2018

Compliance follows the observations in sequence

❖ **The Constitution of separate Board of Studies for each UG programme**

As per the provision in the UASB Act 2009, the UASB has,

- Board of Studies for Undergraduate Degree Programme
- Board of Studies for Postgraduate Degree Programme

Further, the University has constituted separate Board of Studies for each degree programme through a notification with due approval of Academic Council. Accordingly, the following are the six Boards of Studies for Undergraduate programme Viz.,

- Board of Studies for Agriculture
- Board of Studies for Agricultural Biotechnology
- Board of Studies for Agriculture Marketing and Cooperation
- Board of Studies for Sericulture
- Board of Studies for Agricultural Engineering
- Board of Studies for Food Science and Technology

The first meeting was convened and deliberated on the adoption of 5th Deans committee recommendation on 13-01-2017. The UASB with the above Board of studies has been conducting the meetings accordingly and discussing the issues pertaining to the respective faculty and functioning smoothly.

❖ **Steps to enhance internal revenue generation and commercialization of technologies generated by the University**

The following steps have been taken to enhance the internal revenue generation at each college specifically and University as a whole:

- Enhancement of students' education fee by 10% annually.
- Dr. Babu Rajendra Prasad International Convention Center" is being permitted for the use of Government programmes on rental basis.
- The Bakery Training Unit (BTU) and Staff Training Unit (STU) organizes training programmes sponsored by Government of Karnataka / Government of India /Public & private sector organizations.
- As a measure of revenue generation the following activities are taken up in the constituent College campuses:

A. College of Agriculture, Hassan

- Installation of two RO water purifying systems in the Girls' & Boys' Hostel and supply purified water to boarders and other staff members residing in quarters on payment basis.
- A small scale Dairy of 8 to 10 cows is maintained in the Farm section which also generates income.
- Intensive seed production programme: Large Scale production of Maize, Pigeon pea, Ragi and Soyabean is taken up at the farm section.
- Maize and Potato produced in the farm are sold in APMC of the area.

B. College of Sericulture, Chintamani

- a. Silk weaving unit, Chawki Rearing Centre, Silk rearing & mulberry garden, Bio-craft unit and Horticulture nursery have been established to generate income and realized a sum of Rs.1,27,832-00.



Silk weaving unit



Silk Shirts



Silk Saree





Bio-craft unit



Nursery Unit

C. College of Agriculture, Mandya

a. By admitting candidates under NRI quota to Under graduate degree Programme, additional revenue is generated to the extent of Rs. 87.35 lakh.

- Providing revolving fund for seed production and animal component.
- Conducting trials / testing of soil / water/ chemicals- insecticide / fungicides- enhancement of fees.
- Commercialization of crop varieties and technologies.
- Creating micro-irrigation facilities to enhance crop productivity and income.
- Strengthening of horticultural and agro-forestry nurseries for production of saplings/ planting materials on large scale by tie-up with the Government programmes
- Providing laboratory facility to other university / College students of the subject area for project work on payment of prescribed fee.

- ❖ **Regarding financial resources, the internal revenue generation is only about 7-9% in last few years. There is an urgent need for contemplating new ways of internal revenue generation to reduce the dependency on State agencies.**
- ❖ **The facilities, varieties developed and resources of the University should be optimally exploited for generation of internal resources.**
 - During the year 2016-17, University has developed eight New crop varieties and 33 new Technologies, produced a total of 502 quintals of breeder seeds and 21,472 quintals of quality seeds to meet the demands of farming community in cereals, pulses and oil seeds.
 - Revenue generation through testing fee: During the year the University has tested 298 new varieties / lines/ chemicals/molecules for control of pests /diseases / weeds / soil analysis and agricultural equipment and generated a revenue of Rs.182 lakhs.
 - Revenue generation through Breeder seeds & quality seeds: University has the responsibility of supplying Breeder Seeds to the indenting agencies. Seed Production activity in the University has been strengthened on massive scale through RKVY sponsored participatory seed production programme, National Seed Project and the Mega Seed Project.
 - The University has close linkage with Karnataka State Seed Corporation / National Seed Corporation, Karnataka Oil Seed Growers Federation and other private seed industries, Bengaluru for supplying basic seeds and quality seeds for popularization of university varieties. In addition, commercialization of varieties / technologies is implemented through NRDC (GOI undertaking) to the private industries. However, University has also spared parental lines of Sunflower to M/s East African Seeds (U) Ltd, UGANDA for commercial seed production.
 - The UAS has consultancy service guidelines on the line of ICAR norms. Accordingly, paid consultancy services are being offered to the needy agencies / big and progressive farmers.
 - The Directorate of Research has already implemented income generation through Revolving Fund and operating totally 49 Revolving funds with a total outlay of Rs. 3.07 crores as seed money and earned Rs.3.93 crores as net income and remitted 1.61 crores seed money to the university.
 - The laboratory facilities are extended to undertake project work by research students of other Institutes / colleges on payment of prescribed fee at College of Agriculture, GKVK / Mandya.
 - Large Scale production of Maize, Pigeon pea, Potato, Ragi, Soyabean are under taken and also a Dairy unit is established at College of Agriculture, Hassan.
- ❖ **The University has been renting sports/ games facility / auditorium created/established judiciously to government/ public sector organizations of mutual interest both at Main campus and as well as college campuses.**
 - At College of Sericulture, Chintamani, the Chawki rearing centre established with license/registration certificate obtained from Central Silk Board undertake rearing young silkworm and supply to commercial silkworm rearing farmers.
 - The “Seri-hand craft center” established prepares variety of Seri- byproduct based items like; cocoon garland, greeting cards etc. and sell to generate income. This serve as skill imparting center too, for both students and general public specially women.
 - The Silk weaving centre also produce silk fabric like; saree, plain cloth etc with quality assurance “silk mark” has been obtained from Silk Mark Organization of India.
 - Commercialization of hybrid paddy (KRH-4) has generated an income of Rs. 5 crores.

❖ **Incubation of Agri. Business Development center may be established for commercialization existing technologies.**

The University in collaboration with C-CAMP NCBS-TIFR, Bengaluru has launched the UASB-C-CAMP AGRI INNOVATION CENTRE housed in the Department of Plant Biotechnology, UAS, GKVK Bengaluru. This platform identifies specific Agri-health issues and bring innovators together to develop solutions for Agri-related challenges. The Centre aims to promote entrepreneurship in the Agri-sector, leading to innovation, economic development and job creation.

➤ **INCUBATION MODEL OF THE CENTRE**

- ✓ **In-House Incubatees:** Under this Model, the Incubatees will be provided space and will physically incubate their start-up at the UASB - C-CAMP Agri Innovation Centre, Bangalore.
- ✓ **Academic Entrepreneurs:** Academicians from other Institutes/Universities and UAS-B faculty
- ✓ **Young/Early start-ups:** Fresh graduates and students who have access to funding
- ✓ **Companies: Start-ups/established companies with commercializable ideas**
- ✓ **Service Providers:**
 - Type-1: Companies that provide various services in biotechnology, agriculture and allied areas.
 - Type-2: Incubatees of in-services in skill development related to agriculture.
- ✓ The University has been commercializing the technologies developed viz; variety/s. The responsibility of commercialization of technology has been vested with Directorate of Research. In this direction, the Directorate has two tier committees i.e.,
- ✓ Technology Evaluation and Commercialization committee &
- ✓ Technology Commercialization Committee: Through which the Technology developed by the University is evaluated and commercialized. With the help of NRDC, Hybrid paddy (KRH-4) commercialization is under progress.
- ✓ The University has “**Agri-clinic and Agri-business Centre (ACABC)**” and offer module courses / programme to Farm graduates on project formulation and Agri-business development and programmes are being offered in association with NAARM, Hyderabad.
- ✓ The University at undergraduate level itself has incorporated the syllabi/ course/s which necessarily impart the knowledge of agribusiness and project formulations

➤ **Effective linkages with the industries to be forged for transfer of technologies**

- i. A total of 15 MoUs / MoAs / MTA have been signed with different institutions for conducting collaborative research of mutual interest.
- ii. The University entered into MoU with M/S Infosys, M/S Wipro, M/S Chamundeshwari Sugars Co. Ltd.
- iii. KRH-4 Variety of Paddy released by the University has been commercialized.
- iv. Mobile apps –
 - a. Agri Expert System
 - b. e-krishi IPM app on 20 major agriculture and horticulture crops.
 - c. Farm Calculator have been developed for the transfer of technology to the farmers.

- v. Technical know-how developed by UAS, Bengaluru on “Jackfruit based value added products” - Jack fruit as Vegetable, Ready to serve Jack Fruit Juice, Jack Fruit Peda, Jack Fruit Ice-cream, Jack Fruit Jam, has been licensed for commercialization to M/s Mitraniketan, Thiruvananthapuram, Kerala.
- vi. The University has the jurisdiction of 10 districts of southern Karnataka. It has the mandate of transfer of technology to the needy community and industry too for promotion of farming sector and enhances productivity for livelihood.
- vii. The University has well established extension network with all the line departments/ banks/ NGOS/ Agri-input producers & suppliers of districts concerned, and has university units in the form of College/ Agricultural Research Stations/ Farmers Training Institute/ Extension Education Units and Krishi Vigyan Kendras (KVKs) which are involved in:
- viii. Providing technical guidance and skills in value addition, post-harvest technology, branding and marketing.
- ix. Conducting vocational training programmes on mushroom production, plant propagation (Horticulture nurseries), honey processing, vermicompost production, bio-agents, micro nutrients (Vegetable and Banana special) etc and strengthening to establish the links with concerned industries.
- x. Formation of Commodity Based Associations (CBAs) on Jack fruit, maize, millets, banana, turmeric & other fruits & vegetables, linking to markets such as Safal, Reliance, More etc.
- xi. Capacity building among rural youth as para technicians for operations like coconut climbing, Horticultural Nursery production and Gardening etc.
- xii. Web based content development in agriculture and allied technologies for effective transfer of technologies through electronic media (UASB Agri. tech. portal).
- xiii. ICT based [UAS, Bangalore Agri. tech. Portal] Transfer of technology through Milk Producers Cooperative Societies during milk procurement time by involving multi agencies (UAS(B), BSNL, NIC and KMF).

❖ **Students need to be encouraged to establish Start-up Units.**

- a. The university has been encouraging Young/Early start-ups of Fresh graduates and students who have access to funding by establishing UASB-C-CAMP AGRICULTURE INNOVATION CENTRE at Department of Plant Biotechnology, UAS, GKVK Bengaluru.
- b. Mr. Vijaykumar, Graduate of B Tech (Food Science & Technology) has established Sneha Food Products Pvt. Ltd. in Kolar district of Karnataka with technical assistance from DFRL (Defence Food Research Laboratory, DRDO, Ministry of Defence, GOI,) Mysore. He manufactures health supplements from out of fruits and vegetables. He is not only an entrepreneur but also has become a job creator by employing several skilled and unskilled persons.



Launching of M/S Sneha Food Products, Kolar, Karnataka

- c. Mr. Prajwal, B.Sc. (Agri.) graduate of College of Agriculture, Hassan has started his own enterprise of biofertilizer production and Mushroom production near Tumkur, Karnataka with the knowledge and skills acquired during the course of degree and experiential learning and has been a successful entrepreneur.



Products developed by Agri student turned Entrepreneur.

- d. **Through Experiential Learning / Hands on training courses the students have been constantly trained and encouraged to be self-employed.**

- The university has been organizing awareness programmes in the colleges to encourage students to venture for start-up in agriculture and related subjects. The UAS Bengaluru is involved in organizing National Conference on “Agri. Startup -Fest” along with UAS, Dharwad during March 2017. Efforts are being made to identify the innovative areas and plans are afoot to allot to the students to undertake such startup programmes.
- The Government of Karnataka is also encouraging the “**Startup**” programmes in Agri sector with “**Karnataka Start up policy 2015-20**”. The University has already made proposals to Government for funding in 2017-18 budget for Agri start-up. On receipt of funds, some more activities will be initiated on the lines.

❖ **The nomenclature of Colleges may be amended suitably to reflect the academic programmes being offered by the respective colleges.**

The suggestion has been well received by the university.

1. Considering the observations made by the PRT, the University placed the item in the Board of Studies (UG), Academic Council, upon recommendation place in the Board of Management for approval.
2. The University Board of Management in its 374th meeting dated 20th May, 2017 decided to submit a request letter to the Government to elevate the Department of Agricultural Engineering to college level. The Government of Karnataka has been approached i.e., Secretary, Department of Agriculture, GoK vide No. R-PS/Est. Col. Agri. Engg./2017-18/15 dated 29.11.2017 indicating requirement for man power and additional facility. The University awaiting the consent from the Government to elevate the Department to College of Agricultural Engineering.

However, currently,

- College of Sericulture, Chintamani, was established to offer B.Sc. (Sericulture) degree. Subsequently, considering the regional importance and effective utilization of infrastructure and manpower, B.Sc. (Agriculture) degree is also offered.

- College of Agriculture, Karakere, Hassan established to offer B.Sc. (Agriculture) degree, However, subsequently, considering the regional importance and effective utilization of infrastructure
- e and manpower, B.Sc. (Agri Biotech) and B.Tech. (Food Science & Technology) degrees are also being offered.
- College of Agriculture, GKVK was established to offer B.Sc.(Agri.) since inception in the year 1964. However subsequently, based on the need and to utilize the resources, B.Sc. (Ag. MaCo.) was started followed by B.Tech. (Ag. Engg.) degree programmes.
- College of Agriculture, Mandya was established to offer B.Sc. (Agri) and is being continued.

Based on the suggestions of PRT, to have a college status for each degree programme, it requires Administrative approval with finance by the state Government, as it requires reasonably a huge financial allocation.

- ❖ **The nomenclature of UG programmes should be changed as per the recommendations of Deans' Committee of ICAR. B.Sc. (Agriculture) may be reamed as B.Sc. (Hons) Agriculture and B.Tech (Food Science & Technology) may be changed as B.Tech. (Food Science and Technology).**

The University, as per the procedure, moved the matter in Board of Studies (UG) and it has to pass through Academic council, Board of Management and Government consent, keeping in-view the existing C & R for recruitment. The process is on.

- ❖ **The Nomenclature of Bachelors' Degree programmes offered by the University have been changed as per the recommendations of Fifth Deans'**

Committee of ICAR, New Delhi vide Notification No. R/A-I/AC-183/2017-18 dated 12.5.2017 and is detailed as below:

Sl. No.	Previous Nomenclature	Changed Nomenclature
1	B.Sc.(Agri.)	B.Sc. (Hons.) Agriculture
2	B Sc. (Seri)	B.Sc. (Hons.) Sericulture
3	B Sc. (Agri. Biotechnology)	B.Tech. (Biotechnology)
4	B.Sc. (Ag. Maco.)	B.Sc. (Hons.) Ag. Maco.
5	B. Tech. (Ag. Engg.)	B.Tech. (Agricultural Engineering)
6	B. Tech (Food Science & Tech)	B.Tech. (Food Technology)

- ❖ **The following cells / units need to be established with dedicated manpower for effective delivery of the required functions.**

- **Placement cell**

- The Placement cells are under Dean of student Welfare, and have been functioning since 2010, with the main objective of providing career guidance and job opportunities to the graduates of the University. The cell organizes placement drives where the companies visit the campus to conduct interviews for recruitment. Besides, the placement cell also arranges to send the graduates directly to the companies as and when the request for suitable candidates is received by the University. During the year 54 graduates were absorbed in private companies. Most of these candidates are placed in leading public sector and private organization / companies, like Nationalized banks, seed companies, fertilizer companies, R&D institutions, etc.

- The University has well established placement cell at University main campus and also at each college level with manpower – i.e. Re-deployment of faculty as coordinator / Assistant coordinator as the case may be with necessary office facilities. All these centers are performing the function/s defined for the cell.
- **Nodal Agricultural Education Cell (NODAEC)**
 - The University established and operationalized the “Nodal Agricultural Education Cell (NODAEC)” vide order No. AO/Gen-II/NODAEC/4244/2016-17 dated 04.01.2017, in the office of the Vice Chancellor, UAS, GKVK, Bengaluru by nominating Prof. K. P. Chinnaswamy, Coordinator, PPMC as Nodal Officer of Nodal Officer-Agricultural Education to ICAR, (vide letter No. AO/Est-Res./Coordinator-KPC/Nodal Officer/2016-17 dated 19.09.2016) with effect from 28.07.2016. The Nodal Officer will act as a Key person to coordinate all the activities of education division including grants and accreditation issues. The Nodal Cell will function as Single window system (SWS) for liaising with Agricultural Education Division, ICAR, New Delhi.
 - The University has established Nodal Agricultural Education Cell in the VCs office with a Nodal Officer to liaise with the ICAR Education Division.
- **Intellectual Property Rights & Commercialization Unit**
 - The Directorate of Research of the University has established IPR cell in the head quarter and also functions as commercialization of technology unit.
- **IPR cell with dedicated manpower is taking care of IPR issues and commercialization of technologies / varieties. Under this cell, following programmes have been conducted for the benefit of scientific and farming community.**
 - i. Awareness programme on PPV & FR Act 2001 was organized at main campus to create awareness about the Act and registration of crop varieties developed by the University.
 - ii. Through KVKs the training programmes on PPV & FR Act were organized for the benefit of farmers and officers of development departments.
 - iii. University has registered four rice varieties, two finger millet varieties, three maize varieties, one pigeon pea variety and four sunflower varieties. Besides, Applications for registration of varieties in respect of two Finger Millet and one Pigeon pea variety have been submitted to PPV & FR Authority, New Delhi.
 - iv. Scientists are being motivated to apply for patents for the technologies developed.
 - v. Facilitated the process of commercialization of KRH-4 paddy variety.
 - vi. Traditional rice varieties are characterized and facilitated to register them as farmers’ varieties.
 - vii. In addition, in all the constituent colleges IPR cell under Directorate of Research with coordinator to coordinate with HQ and related office for the cause.
- **Grievance Redressal Cells for students and Staff**
 - The University has high power Grievance Committee consisting of Members of Board of management and Administrative officer as the Member- Convener at the University level.
 - At each College level also, redressal cells are functioning to redress the issues pertaining to students and staff in coordination with HQ.
- **Separate cell to address the issues of Students from other States**
 - The University has been admitting 15 per cent of the student strength for UG programmes and 25 per cent for PG programmes allotted by ICAR.
 - The University has Directorate of Student’s welfare. The Dean Student Welfare who is heading, is vested with all powers and manpower to redress the issues associated with

students of other states. Further, at college level, Assistant Director Student welfare functions under the Dean of the college, in coordination with DSW to sort out issues, if any. All colleges have separate cell to redress issues.

▪ **Foreign Students Advisory Cell**

- The University also admits foreign students for both UG and PG Programmes. The University has redeployment / assigning additional assignment to faculty as Foreign Student Advisor and Assist Foreign Student Advisor under Dean Student Welfare to facilitate their admission, stay on the campus and their welfare with nominated faculty to perform the defined activities of the cell.

i. **In view of the increased importance of mechanization of farming activities, Agro-processing and Soil & Water conservation aspects, a separate College of Agricultural Engineering with adequate manpower and the required facilities may be established in GKVK campus to strengthen research and to offer more specialized academic programmes at Masters' and Doctoral levels.**

- Considering the observations made by the PRT, the University placed the item in the Board of Management.
- The University Board of Management in its 374th meeting dated 20th May, 2017 decided to submit a request letter to the Government to elevate the Department of Agricultural Engineering to college level. The Government of Karnataka has been approached i.e., Secretary, Department of Agriculture, GoK vide No. R-PS/Estd. Col. Agri. Engg./2017-18/15 dated 29.11.2017 indicating requirement for man power and additional facility.
- The University has moved the matter of Up-gradation of Department Agricultural Engineering to Status of “College of Agricultural Engineering” in the Board of Studies (UG). The Subject is to pass in Academic Council, Board of Management and then State Government for consent for up-gradation along with manpower and budget. The process is on. At present M. Tech. (Agri. Engg.) in Post Harvest and Food Processing Engineering and M Tech (Agri Engg) in Soil and Water Engineering are being offered.



Implement Shed, Department of Agril. Engineering



Class Room, Department of Agril. Engineering



Soil and Water Engineering Section



Processing & Food Engineering Section



Farm Power & Machinery Section



Farm Machinery Testing Centre



Centre of Excellence for Millets



Regional Bio Gas Development Centre (MNRE, GOI)

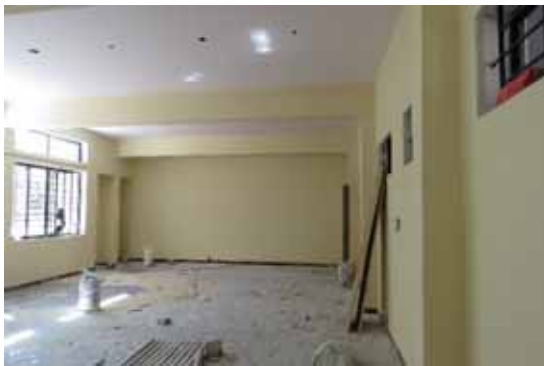
Strengthening the Post graduate and Doctoral Degree programme at GKVK



Extended East Wing, South Block (Agronomy, Seed Science & Technology and Soil Science & Agricultural Chemistry)



Extended East Wing, South Block (Agricultural Entomology, Genetics & Plant Breeding and Plant Pathology)



Agril. Entomology



Agril. Entomology Passage

ii. The evaluation of course Teachers' by students through a questionnaire based feedback mechanism should be developed and corrective measures need to be taken accordingly.

- The evaluation of course teachers by students through questionnaire based feedback mechanism is being done in prescribed format given by the university. Also based on the feedback, corrective measures are being taken up.
- The modalities, implementation, feasibility and technicalities have been approved in PG Board of Studies. The evaluation process implemented from the Academic year 2017-18
- The university has considered the suggestion pro-actively; accordingly, preparation of appropriate questionnaire for the purpose is under progress at all colleges under the leadership of the respective Deans involving experienced faculty. The Compiled and finalized questionnaire at university level will be used for the purpose.

❖ Provision of Finishing school should be available for improving personality development, communication skills and project formulations etc for students.

The finishing schools in general involve soft skill learning & practicing, and acquiring technical skills to coup with industrial needs as pre-employment exposure.

- The concept of Finishing school in farm graduate education needs specialized attention on priority.
- The All India pattern of syllabus, credit hours, Student READY programmes prescribed by ICAR for each degree programme through V Deans committee recommendations has made remarkable dent in addressing the concept and principle of finishing school at large. The component of student READY programme appears to be part of the concept.

In addition, the university in all the colleges, organizes personality development programmes, counselling, NSS activities, exposure visits to agro-based industries/ input production unit's / processing units – cereals / pulses /oil seeds etc., Regulated markets of different commodities, banking sectors etc. This appears to be good enough at the graduate level. However, based on the needs of the industry or the public sectors specialized technical skills orienting programmes can be organized before employment. The soft skills required are already taught in different courses & can be reinforced through specialized short duration module courses. On these lines, the university has been organizing need based programmes.

❖ All the colleges are conducting personality development programmes utilizing the experts from specialized Institutes to improve student personalities. The programs arranged by inviting external experts included -

- Training for competitive examinations
- Human resource training by NITI Aayog experts

- Comparative case studies of Western Development Vs. Indian and lessons to be learnt
- Economic policies for agriculture development
- Awareness and use of GMO and regulations
- Preparing students for contemporary job requirements
- ***College of Agriculture, V.C. Farm Mandya in its campus***

Organized and conducted 65 hours of UPSC coaching classes for B.Sc. (Agri.) / M.Sc. (Agri.) students from 1st to 25th December 2017 organized & conducted 3 days personality development classes for First B.Sc. (Agri.) from 17th to 19th December 2017
- ***College of Sericulture, Chintamani in its campus organized***
 - JRF coaching classes
 - Civil entrance coaching
 - Communication skills & Personality development

❖ **Students are accommodated in the hostels more than the carrying capacity of the hostels. Immediate steps are required to address the problem.**

The University has made sincere effort in mobilizing the resources from different sources to build hostels to accommodate students. The effort has really yielded to reduce the overcrowding in the hostels considerably. The works initiated at different college campuses, the progress and completed ones are presented hereunder for clarity.

A) College of Agriculture, GKVK

- Additional hostel building for accommodating students is under construction at GKVK, Bengaluru.



PG Girls Hostel additional block under construction



Construction of PG Girls Hostel 2nd & 3rd Floor Completed & Construction of PG Girls Hostel 4th Floor Is under Progress at GKVK

Construction of working women's hostel / Girls hostel under Progress at GKVK





UG Girls Hostel additional block under construction



Construction of PG boys hostel 1st floor is completed & construction of PG boys hostel 2nd floor is under progress

B)

C) College of Agriculture, Mandya

- o The accommodation is improved in the boy's hostel with the addition of 34 new rooms along with additional cooking and dining facility during 2017-18. Also during same year hostel facilities to boys was improved by renovating existing old building along with rooms and toilets. In girls hostel an additional 10 rooms have been constructed during 2017-18, which has helped to accommodate 42 students. Further, the rooms are fully furnished with wardrobes, tables, chairs, cots and beds. The boarders of these rooms are provided with separate common toilet facilities.



Newly constructed rooms in girls hostels at CoA, Mandya



Construction of girls hostel 2nd floor (balance area) at College of Agriculture ,V.C.Farm, Mandya is completed



New boys hostel building being constructed containing 44 rooms at CoA, Mandya



Construction of boys hostel 1st floor for diploma college at College of Agriculture,V.C. Farm, Mandya is under progress

D) College of Sericulture, Chintamani,

- Construction of II floor at boys and girls hostels has been completed and this has helped to accommodate students.



Girls hostel at CoS Chintamani



Boys hostel at CoS Chintamani



Existing college building at CoS Chintamani



Construction of first floor to the existing college building the laboratory facility & Central Instrumentation laboratory at CoS Chintamani

E) College of Agriculture, Hassan:

- One new boys' hostel is under construction and will be ready to occupy during 2018-19.
- In the new Girls hostel, 2nd floor is constructed and students are housed.



Construction of Boys Hostel under progress at College of Agriculture, Hassan



Construction of 2nd floor of girls Hostel completed at College of Agriculture, Hassan

The University has separate hostels for boys & girls for UG & PG programmes in all the campuses. Besides, International hostels also available for foreign students at GKVK campus. The table below provides the status of the accommodation strength of the students and deficit of accommodation.

Actual strength and capacity of hostels at different campuses as on January 2017 and progress as on January 2018

Campuses	Hostel Name	Student Strength (no.)	Actual capacity (no.)	Additional Required (no.)	Rooms added as on Jan 2018
GKVK Bengaluru	UG Boys Hostel	565	402	163	-
GKVK Bangalore	UG Girls Hostel	442	309	133	UG Girls Hostel additional block under construction
GKVK Bangalore	PG Boys Hostel	351	342	09	Construction of PG boys hostel 1 st floor is completed & construction of PG boys hostel 2 nd floor is under progress at GKVK
GKVK Bangalore	PG Girls Hostel	262	208	54	Construction of PG Girls Hostel 2nd & 3rd Floor Completed & Construction of PG Girls Hostel 4th Floor Is under Progress at GKVK
Mandya	UG Boys + Diploma Boys Hostel	236	108	128	New boys hostel building being constructed containing 44 rooms at CoA, Mandya
Mandya	UG Girls + Diploma Girl Hostel	176	126	50	Newly constructed rooms in girls hostels Construction of girls hostel 2 nd floor
Chintamani	UG Boys Hostel	227	132	95	Construction of II floor has been completed
	UG Girls Hostel	136	123	13	construction of II floor has been completed
Hassan	UG Boys Hostel	259	141	118	Construction of Boys Hostel under progress at College of Agriculture, Hassan
	UG Girls Hostel	361	234	127	Construction of 2 nd floor of girls Hostel completed at College of Agriculture, Hassan
	Total	3015	2125	890	

- Keeping the deficit in mind and also future needs efforts have been made by the University to allocate funds to an extent of Rs.6.15 crores for the construction / expansion of hostels during 2015-16. Besides, the Social Welfare Department, Government of Karnataka provided Rs.11.75 crores under SCSC/TSP grants during 2015-16. Now, the new Hostels construction / expansion of existing hostels on all the campuses are completed. With the

completion of all the undertaken civil works the deficit is met. Creating infrastructure is a continuous process to match the planned programmes and intake of students accordingly.

- In all, the University is able to mobilize the resources to construct Hostel facilities as stated above, to accommodate 700 students, against the demand of 890 students. The proposals for funding for construction of hostels are included in the ICAR budget of 2017-20.

❖ **The following facilities need to be created at the constituent colleges**

• **Internet access in both hostels and colleges**

College of Agriculture, GKVK

- Internet access is provided in both wired and wifi mode in Departments of College, Library as well as both boys & UG & PG and Girls UG&PG and faculty. The entire internet facility is being facilitated, monitored and maintained by AKMU.

College of Agriculture, Mandya

- High speed internet facility has been provided to all the departments of the college, all the rooms of the girls and boys hostel and study centers in each of the hostels.
- CD rom and internet facility is available at college library.
- At boy's hostel, internet facility and study tables are provided. At girls hostel one more study center with dimension 10x20 m. being constructed during 2017-18.
- The Wi Fi facility has been created in the Hostels (Boys and Girls). The LAN internet facility has been created in the College premises. The video conference facility has been created in the campus.
- Within the campus, a 12 mbps optical fibre gateway is catering the need of web connectivity. Proxy server authenticate every user accessing the college LAN and all web resources through the college gateway. Wi-Fi connectivity is provided in the college premises. Mobile connectivity is provided through the Wi-Fi hot-spots



e-resources information center at CoA, Mandya



1st floor is under construction with additional reading hall, information resources books stack hall and Separate journals section at CoA, Mandya



College of Sericulture, Chintamani

- Internet access is provided in both Boys' & Girls' hostels & computer lab



Computer lab at Girls hostel



Computer with CD-ROM facility at library



College of Agriculture , Hassan

- BSNL Broad Band internet services is provided to all the teaching staff and CD ROMs are available at the Library which can be accessed by both students and staff. Internet access to students is provided at library, computer lab & Bioinformatics lab. Providing internet access at hostels is under way.

• Study centers, recreation and Indoor sports facilities and specialized facilities for differentially abled students in the hostels.

The facilities created /established/ equipped in different college campuses are updated hereunder:

College of Agriculture, GKVK

- Table Tennis, Carrom Board and Chess facilities are provided at UG(Boys) and UG (Girls) Hostels.
- Gymnasium at UG(Boys) Hostel is equipped.
- Specialized facilities for differentially abled students-
- Indoor sports facilities are made available in the hostels.
- Western Commodes are fixed in the hostels.



Gymnasium at UG (Boys) Hostel - GKVK

College of Agriculture, Mandya

- Indoors sports facility has been created in the hostels.
- During the year 2016-17 1st floor with an area of 14.77 x 16.43 meter has been constructed to extend the library facility to the students. During 2017-18, two study centres have been established, one each in boys and girls hostel.
- Specialized facilities for differentially abled students:
 - The accommodation for differentially able students is provided in the ground floor.

Indoor games cum gym hall construction at CoA, Mandya



Study center at girls hostel



Study center at Boys hostel at CoA, Mandya



New dressing room and toilets for boy and girls constructed at the stadium, at CoA, Mandya



Indoor games cum gym hall construction at CoA, Mandya

College of Sericulture, Chintamani

- Study centres for students is constructed both in the college as well as Boys and Girls hostels.
- Basketball court, 400 mts athletic track & Volley ball court are Up-graded.



Study Center at Girls hostel



Study Center at Boys hostel



Volley ball court



400mt Athletic Track



Basketball court

College of Agriculture, Hassan

- Study Centre is created and is open 24x7.
- New indoor stadium is constructed with sports facilities like Table tennis, Shuttle cock and multi-gym.

❖ Specialized facilities for differentially abled students-

- Creation of specialized facilities for differentially able students is under progress.

❖ Pilot plant for food processing -College of Agriculture, Hassan

Establishment of pilot plant for food processing is under progress.

- The Pilot plant for Food Processing has been initiated and the procurement of equipments is underway (tenders have been floated). Funds provided by Govt. of Karnataka to the extent of Rs. 75.00 lakhs in this regard. The Pilot plant conceived to house this equipment to undertake the Food Processing is being included under Civil works proposed to ICAR budget for the Year 2017- 20.

❖ Engineering Drawing Laboratory- College of Agriculture, Hassan Establishment of Engineering Drawing Laboratory is under progress.

- Required numbers of Drawing Boards have been procured and classes are conducted in the ad-hoc laboratory for time-being. Construction of separate laboratory for the purpose is being included under Civil works proposed to ICAR budget for the year 2017-2020.
- All the college campuses have both indoor and outdoor facilities for sports and games adequately. Since the education is residential all the boarders can avail the facility. However, in the hostels indoor games facilities like Chess, Carom, Table tennis, etc have been created.
- Hither to, sports and games facility for differentially-abled though not created specially, the existing is being used to the extent possible wherever required. However, considering the strength of such students, facilities will be created as a need based ones.

PRT observations of 2015-16 & Action Taken Report on: Observations / recommendations of ICAR- PRT in accreditation of University of Agricultural Sciences Bangalore (Compliance as on January 2019)

1. It has been observed that some recommendations of the earlier PRT have not been fully implemented. The PRT reiterates earlier recommendations and strongly recommends to initiate immediate actions for the effective implementation on priority on the following issues:

The ATR on this point of observation has been complied in the earlier report as on 31.01.2018. However, for clarity and ready reference it is reproduced hereunder:

In respect of the observations of earlier PRT, the University has already submitted compliance report during 2010, 2012, 2016, and also presented and apprised the same to PRT during the PRT visit to UAS Bangalore on 27th - 30th January 2016.

The updated information on the points of observations as on January 2017 and as on January 2018 was already submitted and **further updated information for 2018 (as on January, 2019) is presented below.**

The University has been attempting in complying on the observations wherever possible within the limits of the University.

❖ **The Constitution of separate Board of Studies for each UG programme**

The observations made by PRT has been compiled during 2018 and is reproduced below for ready reference with updated information:

The University has constituted separate Board of Studies for each degree programme through a notification with due approval of Academic Council. Accordingly, the following are the six Boards of Studies for Undergraduate programme Viz.,

- Board of Studies for Agriculture
- Board of Studies for Agricultural Biotechnology
- Board of Studies for Agriculture Marketing and Cooperation
- Board of Studies for Sericulture
- Board of Studies for Agricultural Engineering
- Board of Studies for Food Science and Technology

The first meeting was convened and deliberated on the adoption of V Deans committee recommendation on 13-01-2017.

❖ **Steps to enhance internal revenue generation and commercialization of technologies generated by the University.**

The following steps have been taken to enhance the internal revenue generation at each college specifically and University as a whole:

- Enhancement of students' education fee by 10% annually.
- "Dr. Babu Rajendra Prasad International Convention Center" is being permitted for the use of Government programmes on rental basis.
- The Bakery Training Unit (BTU) and Staff Training Unit (STU) organizes training programmes sponsored by Government of Karnataka / Government of India / Public & private sector organizations
- Student Fee collections
- Facilitating the Internship of students from other colleges / Universities
- Campus visit charges to Public / School children

- A course on “Diploma for Input dealers” has been started during 2018-19 for two batches per year consisting of 40 students per batch.
- Extended Lab facility in different departments of the College to many research students of traditional Colleges.
- Increased intake of candidates to the college under NRI quota.

As a measure of revenue generation the following activities are taken up in the constituent College campuses:

A. College of Agriculture, GKVK, Bengaluru

The College has generated additional income to the extent of **Rs.219.01** lakhs.

Sl. No.	Means of Income generation	Amount (in Rs. lakhs)
1	Fee collected	213.00
2	Internship	5.20
3	Campus visits	0.81
	Total	219.01

B. College of Agriculture, Mandya

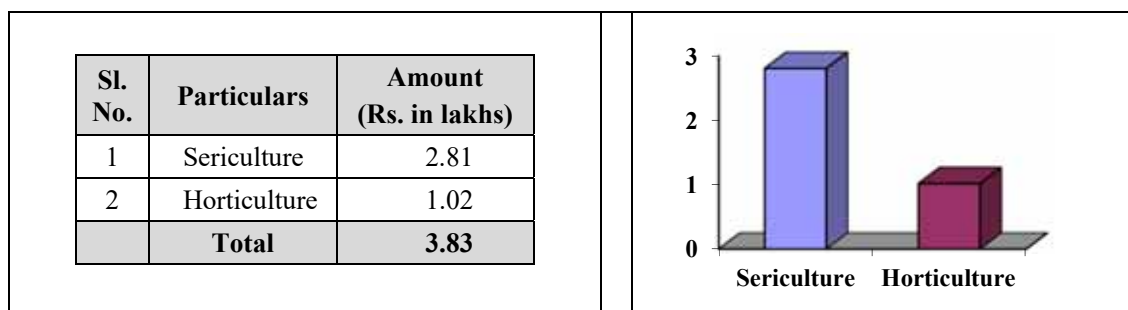
A revenue to the extent of Rs. 92.42 lakh is generated by admitting 18 candidates under NRI quota to Undergraduate degree Programme.

C. College of Agriculture Hassan

The Farm section of College of Agriculture Hassan, generated an income from farm produce and realized a sum of Rs.12.45 lakhs during 2018-19.

D. College of Sericulture Chintamani

Internal resources were generated from the below shown activities on revolving fund mode during 2018 -19. The seed money and 50% of the net profit has been remitted to the university regularly:





Silk weaving unit



Silk Shirts



Silk Saree



Bio-craft unit – Prepared garlands and flower bouquets from waste cocoons

Nursery Unit



Placing of cuttings for rooting



Mound layering in Guava



Bagging of palm seedlings



Preparing cuttings



Taking out successful grafts from bed



Saleable Jamun grafts

E. Directorate of Research:

During the year 2018-19, the remarkable achievements of Directorate of Research is as follows:

- **Four new crop varieties** developed are released along with **16 new technologies**.
- Produced a total of **477 quintals of breeder seeds** and **23,308 quintals of quality seeds** in cereals, pulses and oil seeds.
- The University has close linkage with Karnataka State Seed Corporation / National Seed Corporation, Karnataka Oil Seed Growers Federation and other private seed industries, Bengaluru for supplying basic seeds and quality seeds for popularization of varieties released by the University.

- In addition, commercialization of varieties / technologies as well as obtaining patent is implemented through NRDC (GOI undertaking) to the private industries.
- University has also spared parental lines of Sunflower to M/s East African Seeds (U) Ltd, UGANDA for commercial seed production.
- tested 300 new varieties / lines / Chemicals / Molecules for control of pests / diseases / weeds / soil analysis and agricultural equipment and **generated a revenue of Rs. 392 lakhs.**
- **Twenty-five new projects** have been sanctioned by different externally funding agencies with a total budget outlay of **Rs. 606 lakhs.**
- **One fifty externally funded projects** are **continued** from previous years and **Rs. 1200 lakhs** worth of amount has been released during the year 2018-19.

F. Directorate of Extension

- The functional units of Directorate of Extension has generated an internal revenue of Rs.167.50 lakhs through conducting Diploma and Certificate courses, sale of various farm inputs and value added products, publications, and bakery products. The details of the activities are as below:

Internal revenue generation of the KVKs/Units for the year 2018 as on Jan 2019

Sl. No.	Name of the Units / KVKs	Resource generated (Rs. in Lakhs)	Remarks
1.	Krishi Vigyan Kendra's and Extension Education Units	40.00	Through production & sale of seeds, bio-products (<i>Trichoderma</i> , <i>Pseudomonos</i> , etc.) micro nutrients (vegetable special., mango special., banana Special., ginger special., etc), animal components, horticultural nursery plants etc.
2.	Agricultural Technology Information Centre (ATIC)	75.00	By selling seeds, publications, planting materials, value added products, implements, bio-fertilizers and CDs
3.	Bakery Training Unit	32.00	By selling value added bakery products and various bakery course fees.
4.	Distance Education Unit	8.00	Generated through diploma and certificate courses fees
6.	Staff Training Unit	10.00	Halting charges from guests during their stay and training hall charges, etc
7.	Farmers Training Institute	2.50	
Total		167.50	

- ❖ **Regarding financial resources, the internal revenue generation is only about 7-9% in last few years. There is an urgent need for contemplating new ways of internal revenue generation to reduce the dependency on State agencies.**

The university has generated an internal revenue of **Rs. 2062.34 Lakhs** (8.21% of the budget) for the year 2018-19 (up to Jan 2019) from the following means:

SL. No.	Means of Income	Amount (Rs. In Lakhs)
---------	-----------------	-----------------------

1	Income from fees	1496.74
2	Income from university property.	297.53
3	Income from university farms	74.7
4	Income from farms ARS	58.04
5	Income from other units	17.01
6	Other miscellaneous receipt	28.30
7	Receipt from ICAR –AICRP schemes	1.63
8	Other miscellaneous income	88.39
	Total	2062.34

Comparative income generation over the years

Year	Budget	Revenue	Percentage
2015-16	31257.2	1825.33	5.84
2016-17	31097.8	2268.14	7.29
2017-18	31822	2410.17	7.57
2018-19	25131.9	2062.34	8.21

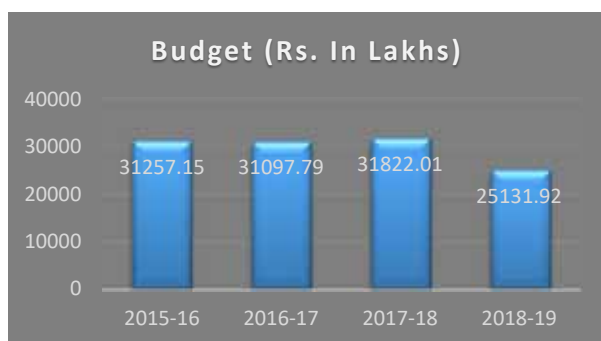


Fig.1a. Comparative Budget over the years

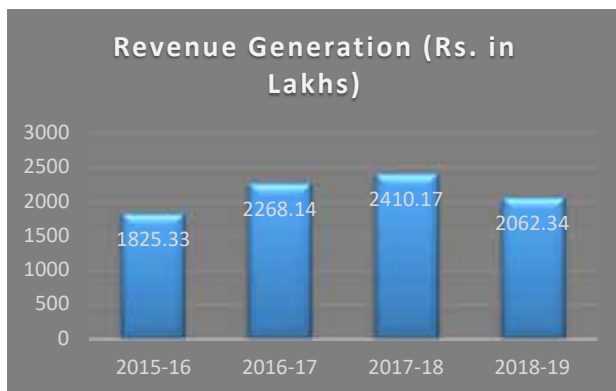


Fig.1b. Comparative Revenue generation over the years

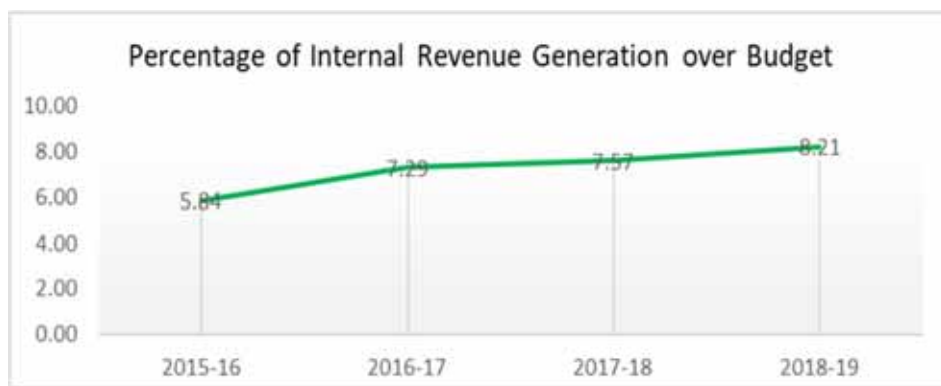


Fig.1c. Comparative Revenue generation over the years

iii. The nomenclature of Colleges may be amended suitably to reflect the academic programmes being offered by the respective colleges.

Board of Studies for each of the UG Degree programme has been created as per the suggestions of the ICAR Peer Review Committee (vide Notification No. R/PS/AC-182/ 20/2016-17 dated 17th October 2016) as indicated below:

- 1 Board of Studies (UG), Faculty of Agriculture
- 2 Board of Studies (UG), Faculty of Agril. Marketing & Cooperation
- 3 Board of Studies (UG), Faculty of Agril. Engineering
- 4 Board of Studies (UG), Faculty of Agril. Biotechnology
- 5 Board of Studies (UG), Faculty of Food Science & Technology
- 6 Board of Studies (UG), Faculty of Sericulture

Further, in order to facilitate offering of various courses prescribed for the respective Degree programmes, separate Sections were created as indicated below:

I. Faculty of Agri. Marketing & Cooperation

- Section I – Agribusiness Management
- Section II – Agricultural Marketing & Trade
- Section III – Agricultural Finance and Accounting
- Section IV – Cooperation

II. Faculty of Agricultural Biotechnology, College of Agriculture, Hassan

1. Section of Plant Biotechnology
2. Section of Microbial & Environmental Biotechnology
3. Section of Biochemistry
4. Section of Bioinformatics

III. Faculty of Food Science & Technology

1. Section of Basic Engineering
2. Section of Food Science & Nutrition
3. Section of Food Processing Technology
4. Section of Food Safety and Quality

5. Section of Food Process Engineering
6. Section of Food Business Management

iv. The nomenclature of UG programmes should be changed as per the recommendations of Deans' Committee of ICAR. B.Sc. (Agriculture) may be reamed as B.Sc. (Hons) Agriculture and B.Tech. (Food Science & Technology) may be changed as B.Tech. (Food Science and Technology).

The University has adopted the nomenclature in Principle and reported during 2017-18, however, reproduced once again.

SL. No.	Nomenclature of the Colleges under UASB	Degree programmes offered at present
1.	College of Agriculture, GKVK, Bengaluru	i) B.Sc. (Hons.) Agriculture ii) B.Sc. (Hons.) Ag. Maco.
2.	College of Agriculture, Mandya	B.Sc. (Hons.) Agriculture
3.	College of Agriculture, Hassan	i) B.Sc. (Hons.) Agriculture ii) B.Tech. Biotechnology iii) B.Tech. (Food Technology)
4.	College of Sericulture, Chintamani	i) B.Sc.(Hons.) Sericulture ii) B.Sc.(Hons.) Agriculture
5.	College of Agriculture, Chamarajanagara*	B.Sc. (Hons.) Agriculture
6.	College of Agricultural Engineering, GKVK, Bangalore #	B.Tech. (Agricultural Engineering)

Note: * College of Agriculture, Chamarajanagara, started during the year 2018-19

College of Agricultural Engineering, GKVK, Bangalore, started during the year 2018-19

v. The following cells / units need to be established with dedicated manpower for effective delivery of the required functions:

The University has already established the following cells to address the issues appropriately during 2017-18 itself and same was reported, however for clarity it is reproduced once again. The cells are performing their mandated activities and functions, being monitored by the Deans at respective colleges and at the University level, by the competent authority as defined.

▪ **Placement cell:**

- The Placement cells are under Dean of Student Welfare, and have been functioning since 2010, with the main objective of providing career guidance and job opportunities to the graduates of the University. The cell organizes placement drives where the companies visit the campus to conduct interviews for recruitment. Besides, the placement cell also arranges to send the graduates directly to the companies as and when the request for suitable candidates is received by the University. During the year 54 graduates were absorbed in private companies. Most of these candidates are placed in leading public sector and private organization / companies, like Nationalized banks, seed companies, fertilizer companies, R&D institutions, etc.
- The University has well established placement cell at University main campus and also at each college level with manpower – i.e. Re-deployment of faculty as coordinator / Assistant coordinator as the case may be with necessary office facilities. All these centers are performing the function/s defined for the cell.

▪ **Nodal Agricultural Education Cell (NODAEC):**

- The University established and operationalized the “Nodal Agricultural Education Cell (NODAEC)” vide order No. AO/Gen-II/NODAEC/4244/2016-17 dated 04.01.2017, in the office of the Vice Chancellor, UAS, GKVK, Bengaluru by nominating Prof. K. P. Chinnaswamy, Coordinator, PPMC as Nodal Officer of Nodal Officer-Agricultural Education to ICAR, (vide letter No. AO/Est-Res./Coordinator-KPC/Nodal Officer/2016-17 dated 19.09.2016) with effect from 28.07.2016. The Nodal Officer will act as a Key person to coordinate all the activities of education division including grants and accreditation issues. The Nodal Cell will function as Single window system (SWS) for liaising with Agricultural Education Division, ICAR, New Delhi.
- The University has established Nodal Agricultural Education Cell in the VCs office with a Nodal Officer to liaise with the ICAR Education Division.
- The item was placed in the 187th Academic Council meeting held on 2nd Nov. 2018 and ratified the decision taken by approving the establishment of Nodal Agricultural Education Cell – ICAR.

▪ **Intellectual Property Rights & Commercialization Unit:**

- The Directorate of Research of the University has established IPR cell in the head quarter and also functions as commercialization of technology unit. IPR cell with dedicated manpower is taking care of IPR issues and commercialization of technologies / varieties. Under this cell, following programmes have been conducted for the benefit of scientific and farming community.
- Awareness programme on PPV & FR Act 2001 was organized at main campus to create awareness about the Act and registration of crop varieties developed by the University.
- Through KVKs the training programmes on PPV & FR Act were organized for the benefit of farmers and officers of development departments.
- University has registered four rice varieties, two finger millet varieties, three maize varieties, one pigeon pea variety and four sunflower varieties. Besides, Applications for registration of varieties in respect of two Finger Millet and one Pigeon pea variety have been submitted to PPV & FR Authority, New Delhi.
- Scientists are being motivated to apply for patents for the technologies developed.
- Facilitated the process of commercialization of KRH-4 paddy variety.
- Traditional rice varieties are characterized and facilitated to register them as farmer’s varieties.
- In addition, in all the constituent colleges, IPR cell under Directorate of Research with coordinator to coordinate with HQ and related office for the cause.

▪ **Grievance Redressal Cells for students and Staff:**

- The University has high power Grievance Committee consisting of Members of Board of Management and Administrative Officer as the Member- Convener at the University level.
- At each College level also, redressal cells are functioning to redress the issues pertaining to students and staff in coordination with HQ.

▪ **Separate cell to address the issues of students from other States:**

- The University has been admitting 15 per cent of the student strength for UG programmes and 25 per cent for PG programmes allotted by ICAR.
- The University has Directorate of Student’s welfare. The Dean Student Welfare who is heading, is vested with all powers and manpower to redress the issues associated with students of other states.

- Further, at college level, Assistant Director Student welfare functions under the Dean of the college, in coordination with DSW to sort out issues, if any. All colleges have separate cell to redress issues.

- **Foreign Students Advisory Cell:**

- The University also admits foreign students for both UG and PG Programmes. The University has redeployment / assigning additional assignment to faculty as Foreign Student Advisor and Assist Foreign Student Advisor under Dean Student Welfare to facilitate their admission, stay on the campus and their welfare with nominated faculty to perform the defined activities of the cell.

vi. In view of the increased importance of mechanization of farming activities, Agro-processing and Soil & Water conservation aspects, a separate College of Agricultural Engineering with adequate manpower and the required facilities may be established in GKVK campus to strengthen research and to offer more specialized academic programmes at Masters' and Doctoral levels.

- In pursuance of the suggestions of the ICAR and after getting the approval of the Government of Karnataka, the College of Agricultural Engineering was established at GKVK Campus, Bengaluru, with effect from the Academic year 2018-19 (vide University Notification No. R/PS/Estb/CoAE-GKVK/2018-19 dated 17-10-2018) with the Government Administrative approval of Government of Karnataka GO No. Kru E 59 Kru V Be 2017, Bengaluru dated 11.07.2018.
- Further, the Professor & Head, Department of Agricultural Engineering has been nominated as the Special Officer to look into the Academic and Administrative issues of the newly established College of Agricultural Engineering, GKVK Bengaluru, vide Order dated 24-08-2018 and the modified Order dated 21st January 2018.
- The College of Agricultural Engineering was inaugurated by Shri. N.H Shivashankar Reddy, Honorable Agricultural Minister, Government of Karnataka on 11th September 2018. (Annexure –I)

Further, the University constituted a committee to look into the immediate requirement for development of new College of Agricultural Engineering and the process initiated to create different departments on line with ICAR recommendations.

vii. The evaluation of course Teachers' by students through a questionnaire based feedback mechanism should be developed and corrective measures need to be taken accordingly.

- The University has issued a Circular in this regard (vide Circular No. AO/Evalu.of each/5257/2016-17 dated 11-03-2017).
- The questionnaire has been prepared and approved in the Board of Studies-PG, held during 2017-18 and circulated among the Heads of the Departments to implement, monitor and to report to the Deans concerned.
- The feedback on RAWE programme and HoT courses are obtained from Undergraduate students in the questionnaire prepared.

viii. Provision of Finishing school should be available for improving personality development, communication skills and project formulations etc., for students.

- The functions of the finishing schools are being performed by involving talented faculties in the respective areas at the college level and being monitored by the Deans of the College. The funds provided by the ICAR are being put to use appropriately for various activities like.
- Personality Development Programmes such as Capacity Building on communication skills; Project formulation; Depression and Stress management, coaching classes for JRF, coaching classes for sports & games, Cultural actives, etc, are being organized for the outgoing students by the respective Colleges and the Directorate of Postgraduate programs.

The University is with the proposal of starting a finishing school to impart the graduating and graduate students on various aspects of soft skills with appropriate budget and faculty by redeploying suitable faculties for the cause of overall development of the students.

- ix. **Students are accommodated in the hostels more than the carrying capacity of the hostels. Immediate steps are required to address the problem.**

The following Hostels have been constructed to accommodate students:

A. College of Agriculture, GKVK, Bengaluru:

- (1) Over the existing PG Boys hostel, First Floor is constructed to accommodate 60 boarders.
- (2) Over the existing PG Girls hostel, 2nd and 3rd floors are constructed to accommodate 68 boarders.
- (3) Second Floor is constructed over the PG Boys Hostel to accommodate 32 boarders.
- (4) Fourth Floor is constructed over PG Girls Hostel to accommodate 34 students.
- (5) Accommodation has been created during the year 2018-19 to accommodate 194 PG Students.
- (6) Girls hostel for UG students is constructed to accommodate 100 boarders.
- (7) During the year totally hostel rooms to accommodate 294 students have been created.



Newly constructed girls hostel



Interiors of newly constructed hostel



Spacious accommodation for students in the hostels

Hostel building construction have been completed and issues related to accommodation of students in hostel has been overcome to large extent.

B. College of Agriculture, Mandya:

- (1) Over the existing Boys' hostel, First Floor is constructed to accommodate 81 boarders.
- (2) Over the existing Girls' hostel, Second Floor is constructed with eight rooms to accommodate 24 boarders.



Newly constructing boys hostel building containing 44 rooms



Indoor games cum gymnasium hall at boys hostel



Study center at Boys hostel



New dressing room and toilets for boy and girls in the stadium



Newly constructed rooms in girls hostels at CoA, Mandya



Study center at girls hostel CoA, Mandya



C. College of Agriculture, Karekere, Hassan:

- (1) A new Boy's hostel is constructed to accommodate 100 boarders.



New Boys hostel block at CoA, Hassan

- (2) Over the existing Girls' hostel, second floor is constructed to accommodate 75 boarders.



Hemavathi Girls Hostel, CoA, Hassan

Status of accommodation at Girls Hostel

Shanthala and Hemavathi Girls hostel, Hassan

Accommodation capacity is 270 boarders (i.e., 90 rooms with 3 boarders per room). The current demand is for 375 boarders. As such there is a shortage of rooms for 105 boarders. Now, the ICAR has sanctioned one Girls' hostel with an outlay of 10 during the year 2018-19 to accommodate 100 students. The planning and construction process is under progress. If this is completed by 2020, all the students will be accommodated conveniently. Currently 375 boarders are accommodated at the rate of four per room and dormitories.

D. College of Sericulture, Chintamani:

- (1) Over the existing Girl's hostel, second floor is constructed to accommodate 48 boarders. With the completion of the construction of second floor at girl's hostel, sufficient accommodation facility has been provided for the boarders.



View of Girls' hostels at CoS, Chintamani

- (2) Over the existing Boys' hostel, second floor is constructed to accommodate 48 boarders and can accommodate 144 boarders. However, 192 boarders have been accommodated at the rate of four per room. Hence, it needs additional building to accommodate over 69 boarders due to the demand by the students to become boarders, and campus being located in interior rural area.



View of Boys' hostel, CoS, Chintamani

x. The following facilities need to be created at the constituent colleges:

I. Internet access in both hostels and colleges:

The action taken on the above point has already been reported as on January 2018, however, wherever updation has been done for the maintenance of the same has been reported hereunder for information.

A. College of Agriculture, GKVK, Bengaluru

- Internet access is provided in both wired and wifi mode in Departments of College, Library as well as both boys & UG & PG and Girls UG&PG and faculty. The entire internet facility is being facilitated, monitored and maintained by AKMU.

B. College of Agriculture, Mandya

- High speed internet facility has been provided to all the departments of the college, all the rooms of the girls and boys hostel and study centers in each of the hostels.
- CD rom and internet facility is available at college library.
- At boy's hostel, internet facility and study tables are provided. At girls hostel one more study center with dimension 10x20 m. is constructed during 2017-18.
- The Wi Fi facility has been created in the Hostels (Boys and Girls). The LAN internet facility has been created in the College premises. The video conference facility has been created in the campus.
- Within the campus, a 12 mbps optical fibre gateway is catering the need of web connectivity. Proxy server authenticate every user accessing the college LAN and all web resources through the college gateway. Wi-Fi connectivity is provided in the college premises. Mobile connectivity is provided through the Wi-Fi hot-spots.



e-resources information center at CoA, Mandya



1st floor is under construction with additional reading hall, information resources books stack hall and Separate journals section at CoA, Mandya



C. College of Sericulture, Chintamani

- Internet access is provided in both Boys' & Girls' hostels & computer labs



Computer lab at Girls hostel



Computer facility at library



D. College of Agriculture, Hassan

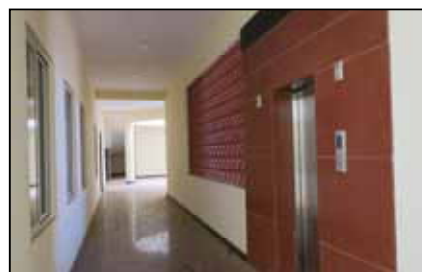
- BSNL Broad Band internet services is provided to all the teaching staff and CD ROMs are available at the Library which can be accessed by both students and staff. Internet access to students is provided at library, computer lab & Bioinformatics lab.

II. Study centres, recreation and Indoor sports facilities and specialized facilities for differentially abled students in the hostels.

The facilities created /established/ equipped in different college campuses are updated hereunder:

A. College of Agriculture, GKVK, Bangalore:

- Indoor sports facilities are made available to differentially abled students in the hostels. Western Commodes are fixed for use for differentially abled.
- Lift facility and ramps have been provided in newly built hostels.



Ramps provided at the entrance of the GH for the convenience of differentially abled students

Lift facility in newly constructed GH for the convenience of differentially abled students

B. College of Agriculture, Mandya:

- Indoor games cum gymnasium hall at boys' hostel and new dressing room & toilets for boy and girls have been constructed in the stadium premises.



Study center at Girls hostel



Study center at Boys hostel at CoA, Mandya



New dressing room and toilets for boys and girls constructed at the stadium, at CoA, Mandya



Indoor games cum gymnasium hall construction at CoA, Mandya

C. College of Sericulture, Chintamani

- Study centre for students in the hostels and college is created
- Up-gradation of basketball court, 400 mtr athletic track & volley ball court.



Study Center at Girls hostel



Study Center at Boys hostel



Computer lab at Girls hostel



Basketball court



400 m Athletic Track



Volley ball court

- All the college campuses have both indoor and outdoor facilities for sports and games adequately. Since the education is residential all the boarders can avail the facility. However, in the hostels indoor games facilities like Chess, Carom, Table tennis, etc have been created.
- Hitherto, sports and games facility for differentially-abled though not created specially, the existing is being used to the extent possible wherever required. However, considering the strength of such students, facilities will be created as a need based ones.

D. College of Agriculture, Chamarajanagar (Started from the year 2018-19)

- *Internet* access has been provided to the students.
- Study centre, Recreation and Indoor Sports facilities have been established.
- Specialized facilities for differentially abled students in the hostel will be crated as and when the funds are available.



Indoor sports facility, College of Agriculture, Chamaranagar



**Student Redressal Grievance Cell,
College of Agriculture, Chamaranagar**



**Study center,
College of Agriculture,
Chamarajanagar**

III. Pilot plant for food processing College of Agriculture, Hassan:

Establishment of pilot plant for food processing is under progress and status is as below:

- The Pilot plant for Food Processing has been initiated and the procurement of equipments is has been done partially.
- Some more equipments have been planned to be procured from out of the funds provided by Govt. of Karnataka to the extent of Rs. 75.00 lakhs in this regard under National Mission on Food processing, Ministry of Food processing, Govt. of India.

IV. Engineering drawing laboratory at College of Agriculture, Hassan:

Establishment of Engineering drawing laboratory is under progress.

- Required numbers of Drawing Boards have been procured and classes are conducted in the ad-hoc laboratory for time-being.
- As per the V Deans committee recommendation the undergraduate course related to Engineering Drawing has been removed. Hence, now this facility is not required.

College of Agricultural Engineering (Newly started during 2018-19)



Inauguration of College of Agricultural Engineering, GKVK, Bangalore

PRT observations of 2015-16 & Action Taken Report on: Observations / recommendations of ICAR- PRT in accreditation of University of Agricultural Sciences Bangalore (Compliance as on January 2020)

- 1. It has been observed that some recommendations of the earlier PRT have not been fully implemented. The PRT reiterates earlier recommendations and strongly recommends to initiate immediate actions for the effective implementation on priority on the following issues:**

The ATR on the points of observation has been complied in the report as on 31.01.2019. However, for clarity and ready reference it is reproduced hereunder-

In respect of the observation of earlier PRT, the University has already submitted the compliance reports during reports 2010, 2012, 2016, and also presented and appraised the same to the PRT during their visit to UAS, Bangalore on 27th -30th January 2016.

The updated information on the points of observation have been already submitted as on January 2017, January 2018, and **further updated information for January 2019 (as on January 2020)** is presented below.

The University has been attempting in complying on the observations wherever possible within the limits of the University.

❖ The Constitution of separate Board of Studies for each UG programme

The observations made by PRT has been compiled during 2018, 2019 itself and however it is reproduced below for ready reference with updated information:

The University has constituted separate Board of studies for each degree programme through a notification with due approval of Academic Council. Accordingly, the following are the six Boards of Studies for Undergraduate programme Viz.,

- Board of Studies for Agriculture
- Board of Studies for Agricultural Biotechnology
- Board of Studies for Agriculture Marketing and Cooperation
- Board of Studies for Sericulture
- Board of Studies for Agricultural Engineering
- Board of Studies for Food Science and Technology

The first meeting of Board of Studies was convened and deliberated on the adoption of V Deans committee recommendation on 13-01-2017.

Updated points:

The meetings have been convened for each degree programme separately as listed below:

- 2nd meeting of reconstituted Board of Studies UG/PG 16.03.2017
- 3rd meeting of reconstituted Board of Studies (UG) 10.01.2018
- 4th meeting of reconstituted Board of Studies (UG) 01.03.2019
- 5th meeting of reconstituted Board of Studies (UG) 29-07-2019

❖ Steps to enhance internal revenue generation and commercialization of technologies generated by the University

The following measures have been taken to the internal revenue generation at each college specifically and University as a whole:

- Enhancement of students' education fee by 10% annually.
- "Dr. Babu Rajendra Prasad International Convention Center" is being permitted for the use of Government programmes on rental basis.
- The Bakery Training Unit (BTU) and Staff Training Unit (STU) organizes training programmes sponsored by Government of Karnataka / Government of India /Public & private sector organizations
- Student Fee collections
- Facilitating the Internship of students from other colleges / Universities
- Campus visit charges to Public / School children
- A course on "Diploma for Input dealers" has been started during 2018-19 for two batches per year consisting of 40 students per batch.
- Extended Lab facility in different departments of the College to many research students of traditional Colleges.
- Increased intake of candidates to the college under NRI quota

As a measure of revenue generation, the following activities are taken up in the constituent College campuses:

A. College of Agriculture, GKVK, Bangalore (Updated):

The College of Agriculture, GKVK, Bengaluru generated additional income of Rs. 493.81 lakh through activities listed in the below table:

Sl. No.	Means of Income generation	Amount (₹ in lakhs)
1	Fee collected	488.70
2	Internship	3.90
3	Campus visits	1.01
4	Playground hiring	0.20
	Total	493.81

B. College of Agriculture, Mandya (Updated):

The measures taken for enhancement of internal revenue generation of the college are below:

- Diploma for Input Dealers consisting of two batches of 40 students per batch has been started during 2019-20
- Lab facilities of different departments of the college are extended to many research students from other traditional colleges.
- Increased intake under NRI quota has generated an internal revenue of Rs. 1,48.67 Lakhs.
- The college has generated an income of Rs.148.67 lakhs during 2019-20 through the admission of NRI students and collection of fees from first, second, third and final year NRI students.

Abstract of NRI students fee remitted to the university

Sl. No.	Year	NRI fee (₹ in lakhs)
1	1 st B.Sc. (Agri.)	56.27
2	2 nd B.Sc.(Agri.)	54.92
3	3 rd B.Sc.(Agri.)	24.20
4	4 th B.Sc.(Agri.)	13.28
	Total	148.67

C. College of Agriculture, Hassan (Updated):

1. Soil fertility improvement measures are initiated to increase the fertility and productivity. 800 loads of Tank silt and 250 tons of Press mud compost are applied to soil to enhance crop productivity.
2. Chia/sage (*Salvia hispanica*), an exotic crop, is introduced and cultivated for the last two years to assess its performance in the campus farm. The crop is found promising with high returns.
3. During year 2019-20 about five quintals of Chia was grown. It is planned to expand the area in the coming years.
4. Vermicompost production units are created in campus farm under ICAR Developmental Grants. A target of 100 tones is set for the year 2020-21.

The college of Agriculture, Hassan generated an income of Rs. 142.72 lakh from farm receipts such as sale of seeds, potato and milk.

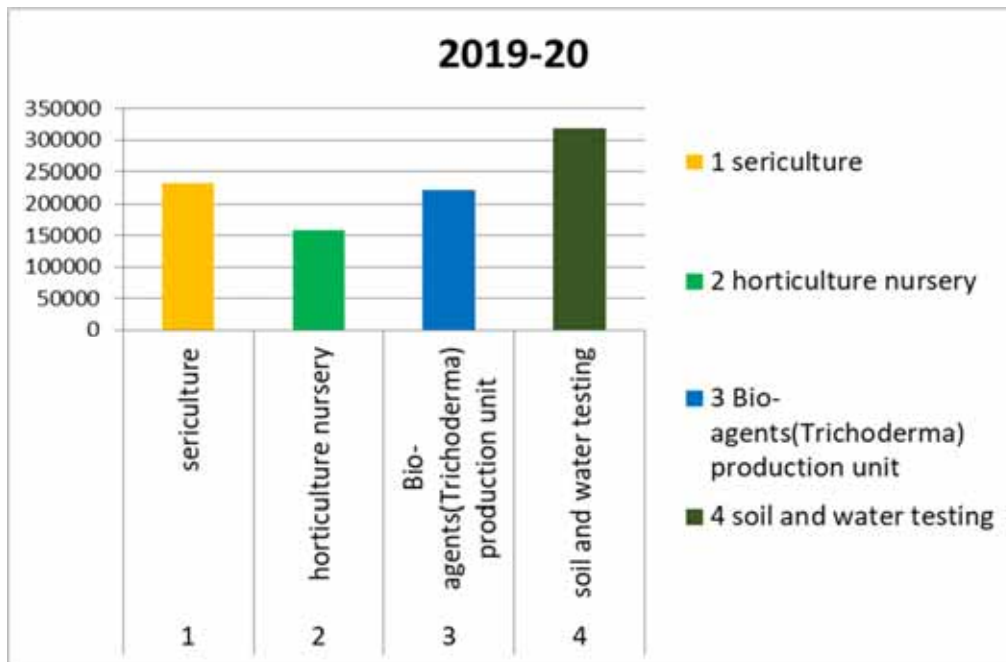
Year	Farm Receipt (₹. In lakh)	Fees Receipt (₹. In lakh)	Total (₹. In lakh)
2016-17	6.74	144.08	150.82
2017-18	5.46	163.52	168.98
2018-19	8.97	194.08	203.05
2019-20 (up to Dec-19)	8.67	134.05	142.72
Total	29.84	635.73	665.57

D. College of Sericulture, Chintamani (Updated):

On revolving fund mode, the seed money and 50% of the net profit remitted to the university regularly and internal resources were generated by the following activities:

2019-20 (April 2019 to January 2020)

Sl. No.	Particulars	Amount (₹.In Lakhs)
1	Sericulture	2.32
2	Horticulture nursery	1.58
3	Bio-agents (<i>Trichoderma</i>) production unit	2.22
4	Soil and Water testing	3.18
	Total	9.30



Silk Weaving Unit



Silk Shirt



Silk Sarees



Bio-craft unit – Prepared garlands and flower bouquets from waste cocoons



Spraying chemical to nursery seedlings



Mound layering in Guava



Bagging of palm seedlings



Preparing cuttings



Harvesting of ripe worms



Feeding of mulberry leaves



Harvesting of cocoons



Soil Testing Unit



Harvesting of ripe worms



Feeding of mulberry leaves



Harvesting of cocoons



Soil Testing Unit

E. Directorate of Research:

During the year 2019-20, the University has taken up the following measures to enhance the Internal revenue generation and commercialization of technologies generated by the University

- Establishment of Nursery and sale of seedlings at Zonal Agricultural Research Stations and Agricultural Research Station.
- Production and distribution of quality seeds.
- Production of high value vegetable seeds under poly houses by harvesting roof water.
- Practicing of IFS model both under rain fed & irrigated ecosystem.
- Establishment of hydroponics for the production of fodder and vegetables.
- Rejuvenation of existing mango, sapota and other fruit crops to enhance the production.
- Enrichment of vermicompost and sale of vermiwash and earth worms
- Sale of Bio fertilizers
- Value addition to compost and production of liquid fertilizers
- Commercialization of earthworm species (*Eisenia fetida*)
- Establishment of livestock units
- Establishment of model piggery unit
- Introduction of IVF (In-vitro fertility) in dairy animal in order to improve animal and milk production
- Production of ornamental and genetically improved Tilapia (GIFT) fish

- Growing of green manure crops all along the bunds for enhancing soil fertility
- Utilization of treated sewage water for protective irrigation for high value crops
- Growing of agroforestry trees for timber purpose like *Melia dubia*
- Adoption of advanced micro irrigation technologies with automation, fertigation for higher water and nutrient use efficiency and productivity.

Updated: During the year 2019-20:

- Five new crop varieties developed and endorsed varieties for the benefit of farming community along with eighteen new technologies.
- Produced a total of 815.30 quintals of breeder seeds and 16469.25 quintals of quality seeds in cereals, pulses and oil seeds.
- Commercialized five technologies and generated a revenue of ₹.16.57 lakhs
- Tested 334 new varieties / lines/ chemicals/molecules for control of pests /diseases / weeds / soil samples and agricultural equipment's and generated a revenue of ₹.436.23 lakh.
- Forty-one new research projects ₹.2147.47 lakh sanctioned during the year 2019-20.
- The University has close linkage with Karnataka State Seed Corporation / National Seed Corporation, Karnataka Oil Seed Growers Federation and other private seed industries of Bengaluru for supplying basic seeds and quality seeds for popularization of varieties released by the University.
- In addition, commercialization of varieties / technologies as well as obtaining patent is implemented through NRDC (GOI undertaking) to the private industries.

F. Directorate of Extension:

The Directorate of Extension has generated total internal revenue of ₹ 77.28 Lakhs through Sale of seeds, Planting material, books, Micronutrients, Farm Equipments & other tools and Collection of Fees, Guesthouse, Rental Charges & other sources.

Sl. No	Particulars	Amount (₹.In Lakhs)
a) Sale of Seeds, Planting material, Books, Micronutrients & Farm Equipments		
1	Agriculture Technology Information Center	7.52
2	KVK Ramanagar, Bengaluru Rural	3.27
3	KVK Chintamani, Chikkaballapur	1.18
4	KVK Hadonahally, Bengaluru rural	1.87
5	KVK Konehally Tumkur	4.30
6	KVK Kandali, Hassan	3.77
7	KVK Haradanahally, Chamarajanagar	2.49
8	KVK, VC Farm, Mandya	4.79
	Total (a)	29.19
b) Collection of Fees, Guesthouse Rental Charges & other sources		
1	Staff Training Unit	14.19
2	Distance Education Unit	12.74
3	Bakery training Unit	12.78
4	Farmers training Institute	8.38
5	DAESI Programme	48.09
	Total (b)	48.09
Grand Total (a+b)		77.28

2. Regarding financial resources, the internal revenue generation is only about 7-9% in last few years. There is an urgent need for contemplating new ways of internal revenue generation to reduce the dependency on State agencies.

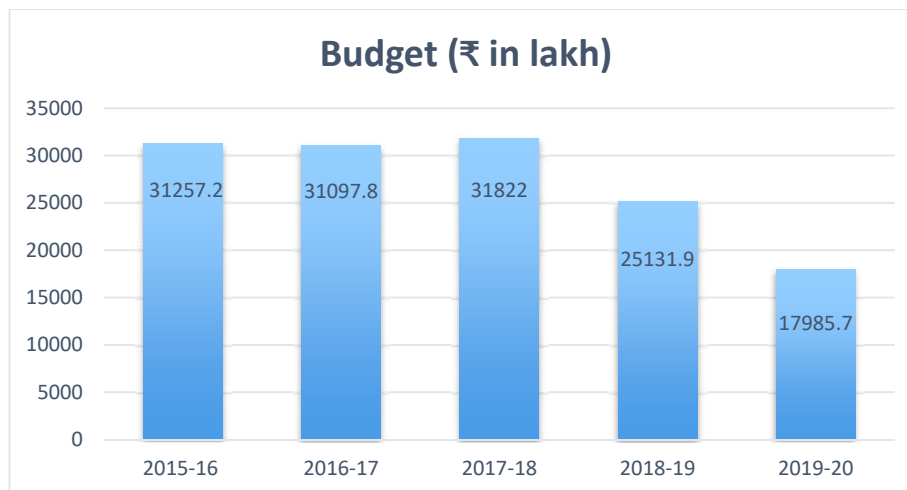
The University has generated an internal revenue of **.3388.24** Lakhs (18.83% of the budget) for the year 2019-20 (up to Jan 2020) from the following means:

Sl. No.	Means of Income	Amount (₹ in lakh)
1	Income from fees	1460.21
2	Income from university property	388.92
3	Income from farms	174.17
4	Other miscellaneous receipt	103.43
5	Receipt from ICAR –AICRP schemes	1.17
6	Other miscellaneous income	1260.34
	Total	3388.24

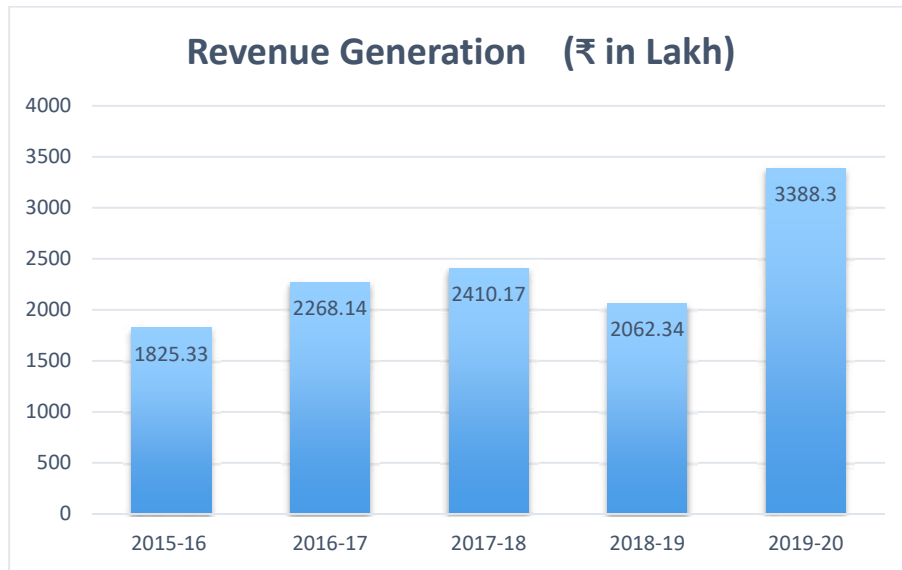
Comparative income generation over the years

Year	Budget (₹ in lakh)	Revenue (₹ in lakh)	Percentage
2015-16	31257.2	1825.33	5.84
2016-17	31097.8	2268.14	7.29
2017-18	31822.0	2410.17	7.57
2018-19	25131.9	2062.34	8.21
2019-20	17985.7	3388.3	18.83

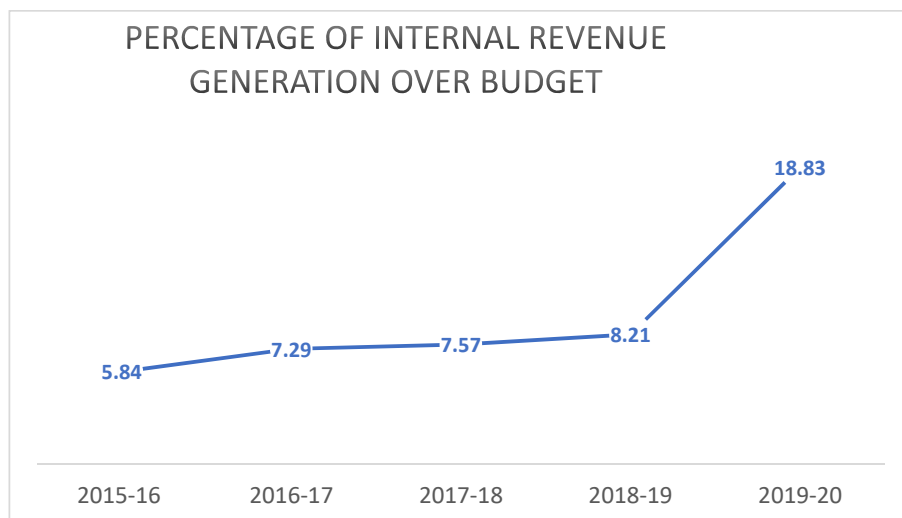
The revenue generation has increased from 5.84 % during 2015-16 to 18.83 % as on 2019-20



Comparative Budget over the years



Comparative Revenue generation over the years



Comparative Revenue generation over the year

3. The nomenclature of Colleges may be amended suitably to reflect the academic programmes being offered by the respective colleges.

Board of Studies for each of the UG Degree programme has been created as per the suggestions of the ICAR Peer Review Committee (vide Notification No.R/PS/AC-182/ 20/2016-17 dated 17th October 2016) as indicated below:

1. Board of Studies (UG), Faculty of Agriculture
2. Board of Studies (UG), Faculty of Agril. Marketing & Cooperation
3. Board of Studies (UG), Faculty of Agril. Engineering
4. Board of Studies (UG), Faculty of Agril. Biotechnology
5. Board of Studies (UG), Faculty of Food Science & Technology
6. Board of Studies (UG), Faculty of Sericulture

Further, in order to facilitate offering of various courses prescribed for the respective Degree programmes, separate sections were created as indicated below:

I. Faculty of Agri. Marketing & Cooperation

1. Section I – Agribusiness Management
2. Section II – Agricultural Marketing & Trade
3. Section III – Agricultural Finance and Accounting
4. Section IV – Cooperation

II. Faculty of Agricultural Biotechnology, College of Agriculture, Hassan

1. Section of Plant Biotechnology
2. Section of Microbial & Environmental Biotechnology
3. Section of Biochemistry
4. Section of Bioinformatics

III. Faculty of Food Technology, College of Agriculture, Hassan

1. Section of Basic Engineering
2. Section of Food Science & Nutrition
3. Section of Food Processing Technology
4. Section of Food Safety and Quality
5. Section of Food Process Engineering
6. Section of Food Business Management

IV. Faculty of Agricultural Engineering

1. Section of Agricultural Processing & Food engineering
2. Section of Soil & Water Engineering
3. Section of Farm Machinery & Power Engineering

4. **The nomenclature of UG programmes should be changed as per the recommendations of Deans' Committee of ICAR. B.Sc. (Agriculture) may be reamed as B.Sc. (Hons) Agriculture and B.Tech. (Food Science & Technology) may be changed as B.Tech. (Food Technology).**

The University has adopted the nomenclature in principle and reported during 2017-18, 2018-19, however, reproduced once again.

SL. No.	Nomenclature of the Colleges under UASB	Degree programmes offered at present
1.	College of Agriculture, GKVK, Bengaluru	i) B.Sc. (Hons) Agriculture ii) B.Sc. (Hons) Ag. Maco.
2.	College of Agriculture, Mandya	B.Sc. (Hons) Agriculture
3.	College of Agriculture, Hassan	i) B.Sc. (Hons) Agriculture ii) B.Tech. Biotechnology iii) B.Tech. (Food Technology)
4.	College of Sericulture, Chintamani	i) B.Sc.(Hons) Sericulture ii) B.Sc.(Hons) Agriculture
5.	College of Agriculture, Chamarajanagara*	B.Sc. (Hons) Agriculture
6.	College of Agricultural Engineering, GKVK, Bangalore #	B.Tech. (Agricultural Engineering)

Note: * College of Agriculture, Chamarajanagara, started during the year 2018-19

College of Agricultural Engineering, GKVK, Bangalore, started during the year 2018-19

5. The following cells / units need to be established with dedicated manpower for effective delivery of the required functions.

The University has already established the following cells to address the issues appropriately during 2017-18 itself and same was reported, however for clarity it is reproduced once again. The cells are performing their mandated activities and functions, being monitored by the Deans at respective colleges and at the University level, by the competent authority as defined.

▪ **Placement cell**

- The Placement cells are under Dean of student Welfare, and have been functioning since 2010, with the main objective of providing career guidance and job opportunities to the graduates of the University.
- The cell organizes placement drives where the companies visit the campus to conduct interviews for recruitment. Besides, the placement cell also arranges to send the graduates directly to the companies as and when the request for suitable candidates is received by the University.
- The University has well established placement cell at University main campus and also at each college level with manpower – i.e. Re-deployment of faculty as coordinator / Assistant coordinator as the case may be with necessary office facilities. All these centers' are performing the function/s defined for the cell.
- During February 2019 to January 2020, recruitment drive by seventy private companies /organizations and NABARD & ICRISAT were facilitated by the Placement cell of UASB through the University website for the benefit of graduating students.
- During the year 2019-20, a total of 79 students were absorbed in public/ private companies banking sectors. Most of these candidates are placed in leading public sector and private organization / companies, like Nationalized banks, seed companies, fertilizer companies, R&D institutions, etc.

▪ **Nodal Agricultural Education Cell (NODAEC):**

- The University established and operationalized the “Nodal Agricultural Education Cell (NODAEC)” vide order No. AO/Gen-II/NODAEC/4244/2016-17 dated 04.01.2017, in the office of the Vice Chancellor, UAS, GKVK, Bengaluru by nominating Prof. K. P. Chinnaswamy, Coordinator, PPMC as Nodal Officer of Nodal Officer-Agricultural Education to ICAR, (vide letter No. AO/Est-Res./Coordinator-KPC/Nodal Officer/2016-17 dated 19.09.2016) with effect from 28.07.2016. The Nodal Officer will act as a Key person to coordinate all the activities of education division including grants and accreditation issues. The Nodal Cell will function as Single window system (SWS) for liaising with Agricultural Education Division, ICAR, New Delhi.
- The University has established Nodal Agricultural Education Cell in the Office of the Vice-Chancellor with a Nodal Officer to liaise with the ICAR Education Division.
- The item was placed in the 187th Academic Council meeting held on 2nd Nov. 2018 and ratified the decision taken by approving the establishment of Nodal Agricultural Education Cell – ICAR.

▪ **Intellectual Property Rights & Commercialization Unit:**

The structure of IPR Cell of UASB:

- The proposal to establish IPR Cell was approved in the 55th Research Council meeting and 367 meeting of Board of Management of UAS Bangalore held on 25.01.2016.
- The following committees were constituted with effect from 02.05.2016 with definite functions to protect IP generated in the University.

i. Intellectual Property advisory committee (IPAC):

The Committee is headed by the Vice-Chancellor as Chairman.

At the University level the IPAC shall monitor and guide the functioning of the Intellectual Property Management Cell (IPMC) on broad policy matters including protection mission, policy implementation, Government-University interactions and other high level advisement and review to the IPMC. It is envisaged that the committee shall meet at once per calendar years.

The structure of the committee is as follows:

1	The Vice-Chancellor, UAS, GKVK, Bengaluru	Chairperson
2	The Director of Education, UAS, GKVK, Bengaluru	Member
3	The Director of Extension, UAS, Bengaluru	Member
4	The Registrar, UAS, GKVK, Bengaluru	Member
5	The University Librarian, UAS, GKVK, Bengaluru	Member
6	The Comptroller, UAS, GKVK, Bengaluru	Member
7	One Advocate specialized in the legal aspects IPR (to be nominated by the Vice-Chancellor on the recommendations of Director of Research)	Member
8	All the Members of the IPMC of the University	Member
9	The Director of Research, UAS, GKVK, Bengaluru	Member Secretary

The Functions, terms and the references of the IPAC

1. To guide and advise the IPMC of the University on the IPR issues related in the concerned area.
2. The Committee will meet once in six months or whenever there is need as per directions of the Chairman.
3. The Member Secretary will convene the meeting as per the direction of the Chairman.

ii. Intellectual Property Management Cell (IPMC) of the UASB

The structure of the IPMC committee is as follows:

1	The Director of Research, UAS, GKVK, Bengaluru	Chairperson
2	The Director of Extension, UAS, Bengaluru	Member
3	The Dean (PGS), UAS, GKVK, Bengaluru	Member
4	The University Head, GPB	Member
5	The University Head, Biotechnology	Member
6	The University Head, Social Sciences	Member
7	One Senior Professor having expertise in IPR	Member Convener / Co-ordinator

The Functions, terms and the references of the IPMC

1. To prepare the guidelines for functioning of the IPMC in the University.
2. Scrutiny of the applicants for any IPR claims and coordinates the forwarding of the applications on Case-by-Case basis.
3. To document all the updated information of the applications and other IPR related activities in the University.

4. The Cell will implement all the advises of the IPAC.
5. The committee will meet once in two months regularly and whenever there is urgent need as directed by the Chairman of the IPMC.
6. The Co-ordinator will convene the meeting as per the directions of the chairman.

At Present the IPMC is coordinating all the IP issues in the University.

1) New varieties recommended for release (5 New and 2 Endorsed*)

Crops	No.	Variety / Hybrid	Recommended for
Cereals: Paddy	1	Gangavathi Sona (IET-20594)*	Zone 6
Pulses: Cowpea Black gram	2	PGCP-6 LBG-791	Zone 5 and 6
Oilseeds: Sunflower	1	KBSH 78*	Zone 6
Commercial: Sugarcane	2	COVC-16061 COVC-16062	Zone 6
Horticulture: Jack Fruit	1	Lalbagh Madhura	Zone 5
Total	7		

2) New Technologies recommended for package of Practices (18)

A total of 18 new technologies in various crops on different aspects have been recommended for inclusion in the package of practices. They are as follows:

Division	Department	Technology recommended
Crop Improvement (2)	Seed Technology (1)	<ul style="list-style-type: none"> ▪ Management of storage insect through botanicals and their influence on seed quality of cowpea during storage
	Plant Biotechnology (1)	<ul style="list-style-type: none"> ▪ Patch budding technique in jackfruit
Crop Production (8)	Agronomy (6)	<ul style="list-style-type: none"> ▪ Weed management in cotton ▪ Drip fertigation in groundnut ▪ Weed management in groundnut ▪ Weed management in black gram ▪ Post-emergent herbicide in cowpea ▪ Chapter about grain amaranth
	Soil science and Agri. Chemistry (2)	<ul style="list-style-type: none"> ▪ Use of diatomaceous earth and rice hull ash for sustainable development of rice ▪ Use of Bio-K as an alternative to potassic fertilizers in hybrid maize
Crop Protection (7)	Entomology (4)	<ul style="list-style-type: none"> ▪ Chemical control of thrips in chilli ▪ Management of diamond back moth and other caterpillars in cabbage ▪ Chemical control of brinjal shoot & fruit borer using chlorantraniliprole (at vegetative growth stage) and emamectin benzoate at flowering/fruitletting stage ▪ Chemical control of serpentine leaf miner in tomato proposed

	Plant Pathology (3)	<ul style="list-style-type: none"> ▪ Management of wilt in pigeon pea ▪ Management of yellow mosaic virus in green gram ▪ Compost tea for the management of late blight and higher tuber yield in potato
Horticulture (1)	Horticulture (1)	<ul style="list-style-type: none"> ▪ Chopped maize stalk can be used as alternate substrate for enhanced production of oyster mushroom.

▪ **Grievance Redressal Cells for students and Staff**

- The University has high power Grievance Committee consisting of Members of Board of management and Administrative officer as the Member- Convener at the University level.
- At each College level also, redressal cells are functioning to redress the issues pertaining to students and staff in coordination with HQ.

▪ **Separate cell to address the issues of Students from other State**

- The University has been admitting 15 per cent of the student strength for UG programmes and 25 per cent for PG programmes allotted by ICAR.
- The University has Directorate of Student's welfare. The Dean Student Welfare who is heading, is vested with all powers and manpower to redress the issues associated with students of other states. Further, at college level, Assistant Director Student welfare functions under the Dean of the college, in coordination with DSW to sort out issues, if any. All colleges have separate cell to redress issues.

Updated:

- The Nodal Officer, Agril. Edn. to ICAR, Nodal Agricultural Education Cell (NODAEC) -ICAR is conducting regular meeting and interacting with the all ICAR students in all the colleges with the support of the Deans and faculty. The important proceedings of the Annual Nodal Officers meeting of SAUs and ICAR Guidelines issued from time to time are discussed and updated. The student's issues if any, are heard and addressed at appropriate time and resolved.

▪ **Foreign Students Advisory Cell**

- The University also admits foreign students for both UG and PG Programmes. The University has redeployment / assigning additional assignment to faculty as Foreign Student Advisor and Assist Foreign Student Advisor under Dean Student Welfare to facilitate their admission, stay on the campus and their welfare with nominated faculty to perform the defined activities of the cell.

▪ **International Center**

- International Centre was established on 1st July, 2019 in the Directorate of Student Welfare, at UAS, GKVK, Bengaluru to facilitate exchange of students & faculty between UASB and International Organizations.

Activities:

- Strengthen/inflate the International awareness among students & faculty
- Refine the quality of teaching and research through international mobility programmes.
- Foster International Co-operation and capacity building
- Promote internationalization of the curriculum.
- international networking by faculty and researchers.

During the year 2019-20:

- Dual degree programme has been initiated with Western Sydney University supporting two students [Sanjay Pradhan, PhD (Agri. Entomology) & Naveen. B.M, PhD (Agronomy)].
- As a part of the Next Generation Technologies in Adaptive Agriculture under CAAST project funded by ICAR-World Bank, 13 PG students are facilitated for International Exposure Training in Australia (5), USA (3), Germany (5).
- The student exchange programme between the University of Agricultural Sciences, Bengaluru & Gottingen, Germany is in the process.
- Collaborations have been initiated with different reputed International Organizations/ Institutes for student / faculty exchange towards teaching / research collaboration/ training programmes.

Visits Abroad

- Dr. S. Rajendra Prasad, Vice-Chancellor and Principal Investigator, UAS, Bangalore Visited North Caroline State University, North Carolina,; Perdue University, Noble Research Institute and Green Life Technologies, USA for strengthening collaboration and facilitate student exchange programmes (19th to 31st August 2019)
- Dr. Nataraja Karaba, N., Professor, Dept. of Crop Physiology, GKVK, Bangalore visited Friedrich Schiller University, Jena, Germany as visiting faculty to initiate the collaboration for student training in Plant-Microbe research. (10th to 24th May 2019)
- Dr. Ramesh, S., Professor, Ms. Sunitha and Dr. Anil Kumar, Dept. of GPB, GKVK, Bangalore, visited CYMMIT Mexico for an International training on "Statistical analysis of genetic and phenotypic data for breeders" (15th to 26th July)
- Dr. C. Seenappa, Associate Professor and Mr. Santosh Ningoji, Dept. of Agronomy, GKVK, Bangalore, participated in the training programme on irrigated Agriculture in times of Climate change Geelille International Management Institute, Nahalal, Israel (10th to 23 September 2019)

▪ Skill development Center, ICAR SC-SP:

- The University has established Skill Development Center (SDC) under ICAR- SC-SP: 2019-20 at UAS, GKVK, Bengaluru from the academic year 2019-20 vide AO order No. AO/Gen/SDC/3824/2019-20 dtd. 31.12.2019. The Skill development center building is being planned to construct, to house 30-50 students with 15-20 rooms, training hall, kitchen, etc. with an out lay of Rs. 280 Lakhs. An amount of Rs. 204 lakhs has been released by ICAR, New Delhi during the year 2019-20 vide letter no. F. No. Agril Edn./21-65/2017-EP&HS dtd. 18.09.2019 (Rs. 153 lakhs for I instalment under ICAR SC-SP for the year 2019-20) and second instalment of Rs. 51 lakh released on 17.01.2020.
- Prof. Chinnaswamy, K. P., Nodal Officer-Agril. Edn. to ICAR is the Director, Skill Development Center," UAS, GKVK, Bengaluru from 01.01.2020 vide AO order No. AO/Gen/SDC/G. B/3824/2019-20 dtd. 31.12.2019.

Vision:

"Development of graduates with skills of fundamental and contemporary technology and gross root work force of agricultural production processes with multi skills"

Mission:

"Imparting skills to graduating students and transforming rural unskilled youth work force to skilled workforce for self-sustained agro-ecosystem with entrepreneurship for livelihood"



Prof. Chinnaswamy, K. P.
Director
Skill Development Center
UAS, GKVK, Bengaluru-560065

6. **In view of the increased importance of mechanization of farming activities, Agro-processing and Soil & Water conservation aspects, a separate College of Agricultural Engineering with adequate manpower and the required facilities may be established in GKVK campus to strengthen research and to offer more specialized academic programmes at Masters' and Doctoral levels.**

The observations made by PRT has been compiled during 2019 and is reproduced below once again for ready reference

- In pursuance of the suggestions of the ICAR and after getting the approval of the Government of Karnataka, the College of Agricultural Engineering was established at GKVK Campus, Bengaluru, with effect from the Academic year 2018-19 (vide University Notification No. R/PS/Estb/CoAE-GKVK/2018-19 dated 17-10-2018) with the Government Administrative approval of Government of Karnataka GO No. Kru E 59 Kru V Be 2017, Bengaluru dated 11.07.2018.
- Further, the Professor & Head, Department of Agricultural Engineering has been nominated as the Special Officer to look into the Academic and Administrative issues of the newly established College of Agricultural Engineering, GKVK Bengaluru, vide Order dated 24-08-2018 and the modified Order dated 21st January 2018.
- The College of Agricultural Engineering was inaugurated by Shri. N.H. Shivashankar Reddy, Honourable Agricultural Minister, Government of Karnataka on 11th September 2018. (Annexure –I)

Further, the University constituted a committee to look into the immediate requirement for development of new College of Agricultural Engineering and the process initiated to create different departments on line with ICAR recommendations.

Presently, there are three sections to facilitate offering of the courses:

- I. Agricultural Processing & Food engineering
- II. Soil & Water Engineering
- III. Farm Machinery & Power Engineering

7. **The evaluation of course teachers by students through a questionnaire based feedback mechanism should be developed and corrective measures need to be taken accordingly.**

- The University has developed a questionnaire for obtaining the feedback by the students and circulated the same to all Head of the Departments vide No. Dean (PGS) / HoD / Evalu. of Teach. /2018-19 dated: 23rd January, 2019 for evaluation of faculty by the students based on

which corrective measures will be taken. The Proforma for Evaluation of teachers is enclosed as Annexure –I

- The feedback on RAWE programme and HoT courses are obtained from Undergraduate students in the questionnaire.

8. Provision of Finishing school should be available for improving personality development, communication skills and project formulations etc., for students.

- In order to address the selected areas for employability and also to equip the students with skills, the University has established **Skill Development Center with Vision & Mission** to upscale the skill of graduating and graduate students of the University in the area of HRD, Tutorials, classes, training and capacity building programme and entrepreneurship development programme.
- However, with the funds available under ICAR developmental grants and State grants the University could organize several of such programmes. Some are listed below.
- The functions of the finishing schools are being performed by involving talented faculties in the respective areas at the college level and being monitored by the Deans of the College. The funds provided by the ICAR are being put to use appropriately for various activities like.
- Personality Development Programmes such as Capacity Building on communication skills; Project formulation; Depression and Stress management, coaching classes for JRF, coaching classes for sports & games, Cultural activities, etc. are being organized for the outgoing students by the respective Colleges.

Updated Information:

a) The Directorate of Postgraduate studies: has also conducted programmes on

- Capacity Building on communication skills
- Project formulation
- Awareness programme on e-resources in agriculture at Video Library cum virtual class room
- Depression and stress management
- Writing thesis and research papers: the nitty-gritty of style and presentation
- Foldscope: Hands on training workshop
- Aquaponics industrial landscape, sewage water treatment and its usage in Agri./Horticulture
- Big data analytics & Digital in Agriculture
- Good laboratory Practice (GLP) and environmental safety.

b) College of Agriculture, GKVK

- Training programme on “Digital teaching Techniques” for faculties of UAS, Bangalore facilitated by NAARM, Hyderabad at UAS, GKVK, Bengaluru.
- Three months training programme on Soft skill and personality development was organized for the benefit of Undergraduate students of main campus through placement cell.

c) College of Agriculture, Mandya

- Personality development programmes and Coaching classes for various competitive examinations organized for Undergraduate and Postgraduate students.

d) College of Agriculture, Hassan

- Guest lectures arranged on Personality development, Improvement of communication skills, stress management and other extracurricular activities by inviting resource persons for Undergraduate students.

e) College of Sericulture, Chintamani

- Coaching classes for JRF, Communication skills & Personality development, Fine arts and cultural activities organized for Undergraduate students

9. Students are accommodated in the hostels more than the carrying capacity of the hostels. Immediate steps are required to address the problem.

The information has already been provided during 2019, however, the updated information is provided once again for consideration.

The following Hostels have been constructed to accommodate students:

A. College of Agriculture, GKVK, Bengaluru:

- On the existing PG Boys hostel, First Floor is constructed to accommodate 60 boarders.
- On the existing PG Girls hostel, 2nd and 3rd floors are constructed to accommodate 68 boarders.
- Second Floor is constructed on the PG Boys Hostel to accommodate 32 *boarders*.
- Fourth Floor is constructed on PG Girls Hostel to accommodate 34 students. Accommodation has been created to for 194 PG Students for stay.
- Girls hostel for UG students is constructed to accommodate 100 boarders.

During the year 2018-19, hostel rooms have been created to accommodate totally 294 students.

However, alternate arrangement has been made for 282 UG Boys and for 308 UG Girls and 48 PG Girls for accommodation and there is a need for one boys hostel and one girls hostel.



**Newly constructed
Girls hostel**



**Interiors of newly constructed
hostel**



**Spacious accommodation for
students in the hostels**

Hostel building construction have been completed and issues related to accommodation of students in hostel has been overcome to large extent. However, accommodation needs to be created for 282 boys and 308 girls. Every year, the intake of student is increased by 10%, accordingly lodging facility needs to be created which is a continuous process.

B. College of Agriculture, Mandya:

- (1) On the existing Boys' hostel, First Floor is constructed to accommodate 81 boarders. Also improvements are made with additional cooking and dining facilities and renovated the rooms and toilets in existing building.

(2) On the existing Girls' hostel, Second Floor is constructed with eight rooms to accommodate 24 boarders.



Newly constructing boys hostel building containing 44 rooms



Indoor games cum gymnasium hall at boys hostel



Study center at Boys hostel



New dressing room and toilets for boy and girls constructed at the stadium, at CoA, Mandya



Newly constructed rooms in girls hostels at CoA, Mandya



Study center at girls hostel CoA, Mandya



LAN facilities

(3) There is a deficit of hostel facility for 45 UG Girls. Construction of Girls Hostel to accommodate 100 students is under progress funded by ICAR.

The ICAR has sanctioned one Girls' hostel with an outlay of ₹.780.00 Lakh and ICAR share of 300.00 lakh during the year 2018-19 to accommodate 100 students. The technical vetting of the plan is accorded by the Council. The construction work is under progress and to be completed by 2020.

(4) There is deficit of hostel facility for 64 UG Boys Mandya at present. However, accommodation

needs to be created for 100 students, as the campus has both UG and PG degree programme and student strength is increasing.



New Girls' Hostel under construction at College of Agriculture, Mandya

C. College of Agriculture, Karekere, Hassan

- (1) A new Boys' hostel is constructed to accommodate 100 boarders. There is deficit of Hostel facility for 158 under graduate students and alternate arrangements is made for these students.



New Boys hostel block at CoA, Hassan

- (2) On the existing Girls' hostel, second floor is constructed to accommodate 75 boarders.



Hemavathi Girls Hostel, CoA, Hassan

Status of accommodation at Girls Hostel

Shanthala and Hemavathi Girls hostel, Hassan

Accommodation capacity is 99 rooms with 3 boarders per room = 297 boarders; The current demand is for 380 boarders. **As such there is a shortage of rooms for 83 boarders.**

Currently 380 boarders are accommodated with alternate arrangements including 83 boarders.

- (3) Construction of Girls Hostel to accommodate 100 boarders is under progress funded by ICAR.
- (4) The ICAR has sanctioned one Girls' hostel with an outlay of 750.00 Lakh and ICAR share of 300.00 lakh during the year 2018-19 to accommodate 100 students. The technical vetting of the plan is accorded by the Council and construction work is under progress.
- (5) By completing the construction of this Hostel, the shortage of 83 boarders is addressed.



Contraction of New Girls' Hostel under progress at CoA, Hassan

D. College of Sericulture, Chintamani

- (1) On the existing Girl's hostel, second floor is constructed to accommodate 48 boarders. Presently 171 boarders are accommodated in 57 rooms. Another 26 boarders are accommodated in Guest rooms. Girls hostel needs additional building to accommodate 100 students in future as the girl student strength is increasing.



View of Girl's hostels at CoS, Chintamani

- (2) Over the existing Boys' hostel, second floor is constructed to accommodate 48 boarders.
- (3) The boys' hostel at present has 48 rooms and can accommodate 144 boarders. However, another 82 boarders have been accommodated in T. V. hall, sports Dormitories. Hence, it needs additional building to accommodate over 82 boarders due to the demand by the students to become boarders, and campus being located in interior rural area.



View of Boys' hostel, CoS, Chintamani

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE														
Hostel Availability Status, Number of Boarders and alternate arrangements in UAS, Bangalore and its constituent colleges as on 2019-20														
Name of the Hostels and blocks	Type of Hostel UG, Masters, PhD / Boys / Girls / International)	Place with District	Wi-Fi connected or not	Actual Accommodation Facilities		Actual status		Deficit	Alternative Arrangements If made for boarders (e)				Remarks	Total Deficit in campuses
				No. of rooms	No. of Beds per room	No. Boarders can be accommodated	No. of Boarders allotted		No. of boarders	Blocks / Remodelling existing facility / Conversions	Rooms	No. of Beds per room		
				a	b	c (a*b)	d	e = (d-c)	f	g	h	I (=e)		
Ambera - Block II	UG Boys	GKVK, B'lore	No	66	3	198	264	66	Room is provided with one bunk cot	one bunk /room	66	66	Deficit of 66 beds	Total deficit in GKVK-282 Boarders
Nisarga-Block III	UG Boys	GKVK, B'lore	No	66	3	198	256	58	Room is provided with bunk cot	one bunk /room	58	58	Deficit of 58 beds	
						0	0	54	Two Dormitory	Two Halls	27	54	Deficit of 158 beds	
						0	0	99	Teachers Hostel	Seven teen One BHK	6	99		
						0	0	5	C1 Type Quarters	Two BHK	5	5		

						0	0	0	-	-	-	282	Total deficit in GKVK - 282 Boarders	
Hongirana-Block I	Masters Boys	GKVK, B'lore	No	66	3	198	177	0	-	-	-	-	Rooms are available for boarders	
Hombelaku	Ph.D. Boys	GKVK, B'lore	No	99	2	198	198	0	-	-	-	-	Requirement for accommodation is met	
Arkavati Girls hostel complex	UG Girls Hostel			103	3	309	617	308	Room is provided with 2 bunk cots	I block :38 x2=76 II Block : 28x1=28 III Block : 37x1=37	I block : 2 Bed Per room II Block : 1 Bed Per room III Block : 1 Bed Per room	I block 76 II Block : 28 III Block : 37 Total 141	Deficit of 308 students	Deficit of hostel facility for 308

Bhuvi-Block I	UG Girls	GKVK, B'lore	Yes	38	3	114	0	0	Avani (Working Women's Hostel)	19 one bunk/room extra (3+1)	4	76		UG Girls GKVK
Dhare-Block II	UG Girls	GKVK, B'lore	Yes	28	3	84	0	0	Dormitory	7	12	84		
Dhatri - Block III	UG Girls	GKVK, B'lore	Yes	37	3	111	0	0	Dormitory	1	7	7		
Samruddhi	Masters Girls	GKVK, B'lore	Yes	48	2	96	144	48	Guest room	3	15	45	Deficit of 48 students	
						0	0	0	Ph.D. block	2	2	3		
Avani (Working Women's Hostel)	Masters Girls	GKVK, B'lore	No	31	2	62	36	0	19 rooms provided to UG Girls hostel for 76 boarders	0	0	0	Rooms are available for boarders	Deficit of hostel facility for 48 PG Girls GKVK
Ph.D. Block - New	Ph.D. Girls	GKVK, B'lore	Yes	83	2	166	166	0	No Alternate arrangement	0	0	0	Requirement for accommodation is met	
Kuvempu Boys Hostel	UG Boys	CoA, Mandya	Yes	79	3	237	301	64	By providing extra 1 bed in each room	55 2	55 4+5=9	64	Deficit of 64 beds accommodate by extra	Deficit of hostel facility for 64 UG Boys

													bed in the same rooms	Mandya
Kaveri Girls Hostel	UG Girls	CoA, Mandya	No	49	3	147	167	20	Dormitory-1 Dormitory-2	1 1	10 10	20	Deficit of 20 beds	Deficit of hostel facility for 45 UG Girls Mandya
Kalpavruksha	Girls	CoA, Mandya	No	50	3	150	175	25	Room is provided with one bunk cot	one bunk /room	1 per room x 25	25	Deficit of 25 beds	
Hoysala	UG Boys	CoA, Hassan	No	78	3	234	392	158	Dormitory is provided with additional bed	20 rooms	8 beds	158	Deficit of 158 beds	Deficit of hostel facility for 158 UG Boys Hassan
Shanthala Girls Hostel	Girls		No	99	3	297	380	83	Room is provided with bunk cot	83	1 per bed	83	Deficit of 83 beds -	Deficit of hostel facility for 83 UG Girls Hassan
Kousheya	UG Boys	CoS, Chintamani	No	48	03	144	226	82	T.V hall and sports Dormitory with bunker cots.	1 TV Hall 1 Sport Dormitory	20 42	40 42	Deficit of 82 beds	Deficit of hostel facility for 82 UG

										with bunker cots.				Boys Chintamani
Reshma Girls hostel	Girls			57	03	171	197	26	Allotted guest rooms with bunker cots	9 guest rooms	3	26	Deficit of 26 beds	Deficit of hostel facility for 26 UG Girls
Boys hostel at KSOU University facility in the town for boys Chamarajanagara	Boys and girls Hostel - (Common Boarding in the campus)	CoA, Chamarajanagara	Hostel yet to be constructed		0	0	63	63	34 Boys accommodated KSOU University Hostel in town for boys	11 rooms	3	34	Deficit of 34 beds	Deficit of hostel facility for 29 UG Girls and 34 boys in Chamarajanagara Total 63 deficit
Girls hostel facility in the KVK training hostel Chamarajanagara							0			KVK training hostel converted girls hostel in the campus	09	03	29	
Grand Total						3114	3759	1159					Total Deficit of 1159 beds	1159 deficit

The University has hostel accommodation facility to house 3114 boarders. Whereas we have accommodated 3759 boarders. Alternate arrangement has been made to accommodate 1159 students by converting teachers' hostel, quarters, creating Dormitories of sports facility (indoor games) TV Halls etc. and also providing bunk cots to existing rooms.

10. The following facilities need to be created at the constituent colleges

I. Internet access in both hostels and colleges

The action taken on the above point has already been reported during 2019, however, the same has been reported hereunder for information.

A. College of Agriculture, GKVK

- Internet access is provided in both wired and Wi-Fi modem in Departments of College, Library as well as both boys & UG & PG and Girls UG&PG and faculty.
- Internet is provided to all boarders in UG, PG, Ph.D. Girls Hostels and in UG, PG and Ph. D. Boys Hostel, also in International students hostel through LAN.

B. College of Agriculture, Mandya

- High speed internet facility has been provided to all the departments of the college, all the rooms of the girls and boys hostel and study centers in each of the hostels.
- CD rom and internet facility is available at college library.
- At boys' hostel, internet facility and study tables are provided. At girls hostel one more study center with dimension 10x20 m. is constructed during 2017-18.
- The Wi Fi facility has been created in the Hostels (Boys and Girls).
- The internet facility has been provided to all the departments of the college, all the rooms of the girls and boys hostel and study centers in each of the hostels.
- The video conference facility has been created in the campus.
- Within the campus, a 12 mbps optical fiber gateway is catering the need of web connectivity. Proxy server authenticate every user accessing the college LAN and all web resources through the college gateway. Wi-Fi connectivity is provided in the college premises. Mobile connectivity is provided through the Wi-Fi hot-spots



e-resources information center at CoA, Mandya

1st floor is under construction with additional reading hall, information resources books stack hall and Separate journals section at CoA, Mandya

C. College of Sericulture, Chintamani

- Internet access is provided in both Boys' & Girls' hostels & computer lab.



D. College of Agriculture, Hassan

- BSNL Broad Band internet services is provided to all the teaching staff and CD ROMs are available at the Library which can be accessed by both students and staff. Internet access to students is provided at library, computer lab & Bioinformatics lab.

The status of internet connection in campuses

SI No	Name of Hostel	Type of Hostel (Boys/Girls/International)	Place with District	Wi-Fi Connected or not	Remarks, if Any
1	College of Agriculture, UAS, GKVK, Bengaluru	Ph.D. Block - Boys Hostel	GKVK, Bengaluru	No	Internet provided to all students through LAN
		Ph.D. Block-Girls Hostel	GKVK, Bengaluru	Yes	Internet provided to all students through LAN
		PG Block - Boys Hostel	GKVK, Bengaluru	No	Only one LAN connection provided in each room. At least two more LAN connections are required in each room
		PG Block -Girls Hostel	GKVK, Bengaluru	Yes	Internet provided to all students through LAN
		Boys Hostel - UG Block II	GKVK, Bengaluru	No	Only one LAN connection provided in each room. At least two more LAN connections are required in each room
		Boys Hostel - UG Block III	GKVK, Bengaluru	No	Only one LAN connection provided in each room. At least two more LAN connections are required in each room
		UG Girls Hostel	GKVK, Bengaluru	Yes	Three LAN connections are required in each room
		Working women's hostel	GKVK, Bengaluru	No	Internet provided to all students through LAN
2	College of Agriculture, Mandya	UG Boys Hostel	VC Farm, Mandya	No	Internet provided to all students through LAN
		UG Girls Hostel	VC Farm, Mandya	No	Internet provided to all students through LAN
3	College of Agriculture, Hassan	UG Boys Hostel	Hassan	No	As reported during 18-19 BSNL Broad Band internet services is provided to all the teaching staff and CD ROMs are available at the Library which can be accessed by both students and staff. Internet access to students is provided at library, computer lab & Bioinformatics lab.
		UG Girls Hostel	Hassan	No	
4	College of Sericulture, Chintamani	UG Boys Hostel	Chintamani	No	Internet provided to all students through LAN
		UG Girls Hostel	Chintamani	No	Internet provided to all students through LAN

II. Study centers, recreation and Indoor sports facilities and specialized facilities for differentially abled students in the hostels.

The information has already been provided during 2018-19 and updated information is provided below.

A. College of Agriculture, GKVK

- Indoor sports facilities are made available to differentially abled students in the hostels. Western Commodes are fixed for use for differentially abled.
- Lift facility and ramps have been provided in newly built hostels.
- The entrance of both North and South Blocks of College of Agriculture, GKVK is provided with ramps.
- The South block which hosts various departments, laboratories and lecture halls is provided with lift.
- All the hostels are provided with ramps and newly constructed girls hostel block has a lift also.
- Faculty house has been established at South Block, College of Agriculture, GKVK.



Ramps provided at the entrance of the girls hostel for the convenience of differentially abled students at CoA, GKVK



Lift facility in newly constructed girls hostel for the convenience of differentially abled students CoA, GKVK

B. College of Agriculture, Mandya

- Indoor games cum gymnasium hall at boys' hostel and new dressing room & toilets for boy and girls have been constructed in the stadium premises.
- The accommodation for differentially abled students is provided in the ground floor.



Study center at girls hostel at CoA, Mandya



Study center at Boys hostel at CoA, Mandya



New dressing room and toilets for boys and girls constructed at the stadium, at CoA, Mandya



Indoor games cum gymnasium hall construction at CoA, Mandya

C. College of Sericulture, Chintamani

- Study centre for students in the hostels and college is made
- Up-gradation of basketball court, 400 m athletic track & volley ball court.
- Both boys' and girls' hostels are equipped with gymnasium.
- Wheel chairs purchased for use in hostels, college and library for Differentially abled students.



Study Center at Girls hostel, CoS Chintamani



Study Center at Boys hostel, CoS Chintamani



Computer lab at Girls hostel, CoS Chintamani



Basketball court, CoS Chintamani



Football court, CoS Chintamani



Volley ball court, CoS Chintamani



Chess- indoor game facility, CoS Chintamani



400 m Athletic Track, CoS Chintamani



Kabaddi field, CoS Chintamani



Kho-Kho field, CoS Chintamani



Gymnasium Materials at Girls hostel, CoS Chintamani

- All the college campuses have both indoor and outdoor facilities for sports and games adequately. Since the education is residential all the boarders can avail the facility. However, in the hostels indoor games facilities like Chess, Carom, Table tennis, etc. have been created.
- Hither to, sports and games facility for differentially-abled though not created specially, the existing is being used to the extent possible wherever required. However, considering the strength of such students, facilities will be created as a need based ones.

D. College of Agriculture, Chamarajanagar (Started from the year 2018-19)

- Internet access has been provided to the students.
- Study centre, Recreation and Indoor Sports facilities have been established.
- Specialized facilities for differentially abled students in the hostel will be created as and when the funds are available.



Indoor sports facility, College of Agriculture, Chamarajanagar



**Student Redressal Grievance Cell,
College of Agriculture, Chamarajanagar**

**Study center,
College of Agriculture, Chamarajanagar**

III. Pilot plant for food processing College of Agriculture, Hassan

Establishment of pilot plant for food processing is under progress and status is as below:

- The Pilot plant for Food Processing has been initiated and the procurement of equipment's is having been done partially.
- Some more equipment's have been planned to be procured from out of the funds provided by Govt. of Karnataka to the extent of Rs. 75.00 lakhs in this regard under National Mission on Food processing, Ministry of Food processing, Govt. of India.

IV. Engineering Drawing Laboratory- College of Agriculture, Hassan

Establishment of Engineering Drawing Laboratory is under progress.

- Required numbers of Drawing Boards have been procured and classes are conducted in the ad-hoc laboratory for time-being.
- As per the V Deans committee recommendation the undergraduate course related to Engineering Drawing has been removed. Hence, now this facility is not required.

Annexure –9: Inaguration of College of Agricultural Engineering (Newly started during 2018-19)



Annexure-10 : Format of Evaluation of Course and Course Teacher by Students**I. General Aspects**

Sl. No.	Degree Programme	Name of the Department	Course Number, Title of the Course & Credit hours	Semester and Academic Year	Name of the Teacher	Designation of the Teacher
1.						

II. About the Course / Subject

Sl. No.	Content	Marks	Remarks
1.	Provided entire Course content / syllabus	Yes - No -	
2.	Suggested reference of Books / Journals / reading materials if any	Yes - No -	
3.	Manual Quality	Good - Average - Need Improvement -	
4.	Evaluation of Manual	Regular - One time - Never -	

III. About the Teacher

Sl. No.	Content	Marks	Remarks
1.	Listens to the student's question / queries	Always – Sometimes – Less response -	
2.	Support to students to solve problems	Always – Sometimes – Less response -	
3.	Cooperation with students	Excellent - Good - Average -	
4.	Stimulation to students to be active learner	Excellent - Good - Average -	
5.	Creation of good teaching atmosphere	Good - Average - Need Improvement -	

6.	Planning and distribution of subject	Excellent - Good - Average -	
7.	Use of ICT and different Technology aids	Yes – Occasionally – Not used –	
8.	Entire Syllabus Covered	Fully covered – Partly covered –	
9.	Classes handled by the Course teacher	All – Some – Very few –	
10.	Special lectures / Classes arranged	Regular - Sometimes - Never -	
11.	Subject knowledge and Competence of the Teacher	Excellent - Good - Average -	
12.	Skill development / training / techniques provided	Excellent - Good - Average -	
13.	Punctuality in handling classes	Good - Average - Need Improvement -	
14.	Student Overall opinion	Excellent - Good - Average -	

Dean of Post Graduate Studies