

Awareness of Farmers on National Food Security Mission Programme

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ABSTRACT

The study was conducted in 12 Raitha Samparka Kendras of Tumakuru district in Karnataka State during 2018-19. Thirty farmers from 12 Raitha Samparka Kendras were randomly selected and interviewed for the study. It was found that a majority of the farmers (80.00 %) had medium to high level of awareness on NFSMP. Education, achievement motivation, management orientation, innovativeness, scientific orientation, risk orientation, cosmopolitanism mass media participation and extension agency contact of farmers had significant to highly significant relationship with the awareness level of farmers on NFSMP. All the 15 independent variables had contributed to the tune of 67.82 per cent in creating awareness among farmers on NFSMP. Extension agency contact alone has contributed to the tune of 37.13 per cent in creating awareness among farmers regarding NFSMP. The Karnataka State Agricultural Department should popularize the NFSMP through mass media (radio, newspaper, television etc.) and displaying the benefits of NFSMP at Raitha Samparka Kendras would create more awareness among the farmers to take full advantage of the programme.

Keywords: Awareness, NFSMP, Mass media and Agricultural Department

RAITHA Mitra Yojane, a demand driven Agricultural Extension System was initiated in Karnataka state during 2001, replacing the earlier extension system (Training and Visit system) by establishing agricultural extension centres at hobli levels called as Raitha Samparka Kendras (Agricultural Extension Centres). Till now, 747 Raitha Samparka Kendras (RSKs) are established in Karnataka state at Hobli/ Sub-block level in 176 taluks. These RSKs are located in proximity to the farming community and are aimed at addressing wide range of issues related to agriculture. They also act as a common platform by creating a terminal linkage to the farmers to access and interact about agriculture based technology and information at the grass root level. The main objectives of RSK are: (1) to provide updated information on crop selection, crop production related know-how and market information, (2) to facilitate on site provision of critical inputs like seeds, bio-fertilizers, micro-nutrients etc. (3) to provide primary seed and soil testing facilities, and (4) to provide a forum for on-farm demonstration about new technologies developed by both public and private sector agencies (Raghuprasad *et al.*, 2012)

Agriculture being the state subject in the country almost all the Centrally and State sponsored

agricultural programmes are operated by the State government through their Development Departments. Centrally sponsored agricultural programmes such as National Food Security Mission, Rastriya Krishi Vikas Yojana, National Mission for Sustainable Agriculture (NMSA) and National Mission on Agriculture Extension and Technology (NMAET) are presently implemented at Raitha Samparka Kendras. State sponsored agricultural programmes/schemes like Savayava Bhagya (Organic farming), Krishi Bhagya, Krishi Abhiyyan, Pradhan Mantri Fasal Bima Yojana, Agricultural Inputs and Quality Control, Custom hiring etc., are also being implemented through Raitha Samparka Kendras in Karnataka state.

National Food Security Mission Programme (NFSMP) is a centrally sponsored scheme launched in 2007-08 with an objective of increasing production of rice, wheat, pulses, coarse cereals and commercial crops through area expansion and productivity enhancement in a sustainable manner, restoring soil fertility and productivity at the individual farm level and enhancing farm level economy (farm profits) to restore confidence amongst the farmers. It allows the distribution of certified seeds and agricultural inputs, plant protection

equipments, conveyance pipe, diesel / kerosene pump sets at 50 per cent subsidy to all types of farmers. With this background, the present study was undertaken with the following specific objectives:

1. To know the extent of awareness of farmers on National Food Security Mission programme
2. To find out the relationship between personal, socio-economic, psychological and communication characteristics of farmers and their awareness level
3. To find out the relative importance of personal, socio-economic, psychological and communication characteristics of farmers in creating awareness on National Food Security Mission programme

METHODOLOGY

The study was conducted during 2017-18 in Tumakuru district of Karnataka State. Tumakuru district is purposively selected for the study since it is having the highest number of Raitha Samparka Kendras (50 Nos.) among the 30 districts of Karnataka state (747 Nos.). A comprehensive list of all the Raitha Samparka Kendras (RSKs) of Tumakuru district was obtained from Karnataka State Department of Agriculture. Tumakuru district comprises of ten taluks, having 50 Hoblis (sub - blocks) and 50 RSKs. Four taluks namely, Gubbi (6 Nos.), Kunigal (6 Nos.), Madhugiri (6 Nos.) and Tumakuru (6 Nos.) were purposively selected for the study, since these four taluks were having maximum number of RSKs among the ten taluks of Tumakuru district. Three RSKs were randomly selected for the study from each of the four sampled taluks, thus 12 RSKs were selected for the study from Gubbi, Kunigal Madhugiri and Tumakuru taluks from Tumakuru district.

Thirty beneficiary farmers of NFSMPP during 2016-17 were purposively selected from 12 RSKs for the study. The farmers who provided the required information voluntarily were selected for the study. Ex-post-facto research design was adopted for the present study.

Awareness on National Food Security Mission Programme (dependent variable) : Awareness of

farmers is operationalized in the present study as ‘the extent of farmer’s ability to know about the objectives, interventions, mode of operation, selection criteria of beneficiaries, subsidy on various agricultural inputs, etc., available under NFSMP’. A list of ten awareness statements on NFSMP were prepared covering aspects such as the objectives, interventions, mode of operation, selection criteria of beneficiaries, subsidy on various agricultural inputs etc. Each statement had two possible responses *viz.*, ‘Aware’ and ‘Not aware’ with the score of 1 and 0 respectively. Minimum and maximum score one could get was 0 and 10, respectively. The score obtained for all the ten awareness statements was added to arrive at the total awareness score of the respondents. Later, the respondents were grouped into three categories namely, less aware, aware and more aware based on mean (6.44) and half standard deviation (1.92).

Category	Criteria	Awareness score
Less aware	< (Mean - ½ SD)	<4.52
Aware	(Mean ± ½ SD)	4.52 - 8.36
More aware	> (Mean + ½ SD)	> 8.36

Information regarding 15 personal, socio-economic, psychological and communication characteristics (independent variables) of farmers were measured using a structured schedule with suitable scales. The collected data was scored, tabulated and analyzed using zero order correlation test and stepwise regression analysis.

RESULTS AND DISCUSSION

Statement-wise awareness of farmers on National Food Security Mission

Table 1 presents the results on the awareness of farmers on NFSMP. The results reveals that a little less than three-fourth of the farmers (73.33%) were ‘not aware’ of the statement ‘NFSMP is a centrally sponsored scheme’. Further, the results revealed that a vast majority of farmers were ‘aware’ about the statements: *viz.*, NFSMP aims at restoring soil fertility and productivity at individual farm level (93.33%), display board are installed at demonstration plots

TABLE 1
Awareness of farmers on National Food Security Mission (n=30)

Awareness statements	Farmers			
	Aware		Not aware	
	No.	%	No.	%
NFSMP is a centrally sponsored scheme	08	26.67	22	73.33
NFSMP aims at restoring soil fertility and productivity at individual farm level	28	93.33	02	06.67
Interventions are demonstrated and popularized through cluster demonstrations	27	90.00	03	10.00
NFSMP promotes both Integrated nutrient management and Integrated pest management	26	86.67	04	13.33
Gram panchayats select the beneficiaries of NFSMP	26	86.67	04	13.33
All the farmers can avail the assistance of this scheme limited to 2 ha in a season	23	72.67	07	23.33
Thirty three percent of the total beneficiaries must be marginal and small farmers	24	80.00	06	20.00
Women farmers should constitute 30 per cent of the total beneficiaries	23	72.67	7	23.33
Fifty per cent subsidy is provided to beneficiary farmers on manure, plant protection measures and farm mechanization	27	90.00	03	10.00
Display board are installed at demonstration plots containing information on critical inputs and intervention being demonstrated	28	93.33	02	06.67

containing information on critical inputs and intervention being demonstrated (93.33%), interventions are demonstrated and popularized through cluster demonstrations (90.00%), fifty per cent subsidy is provided to beneficiary farmers on manure, plant protection measures and farm mechanization (90.00%), NFSMP promotes both integrated nutrient management and integrated pest management (86.67%), gram panchayats select the beneficiaries of NFSMP (86.67%), thirty three per cent of the total beneficiaries must be marginal and small farmers (80.00%), all the farmers can avail the assistance of this scheme limited to 2 ha in a season (72.67%) and women farmers constitute 30 per cent of the total beneficiaries (72.67%). It is observed from the results of the study that a majority of farmers were aware about the objectives, interventions, mode of operation, type of beneficiaries, amount of subsidy, distribution of input kits, etc. of National Food Security Mission

Programme. It is quite interesting to note that a majority of farmers (73.33%) were not aware whether National Food Security Mission was a State government sponsored or Central government sponsored agricultural programme, even though they were availing benefits of National Food Security Mission Programme.

Overall awareness of farmers on National Food Security Mission Programme

It is observed from Table 2 that 46.67 of the farmers had high level of awareness on NFSMP. whereas one-third of the farmers (33.33%) and 20.00 per cent of the farmers had medium and low level of awareness on NFSMP. It can inferred that a majority of the farmers (80.00%) had medium to high level of awareness on NFSMP. Regular participation of farmers in extension activities of RSKs, frequent contact with agricultural extension functionaries and

TABLE 2

Overall awareness of farmers on National Food Security Mission Programme (n=30)

Awareness category	Farmers	
	No.	%
Less aware (<4.52 score)	6	20.00
Aware (4.52-8.36)	10	33.33
More aware (>8.36 score)	14	46.67
Total	30	100.00
Mean		6.44
Standard deviation		3.84

propaganda about NFSMP through mass media and display of information on NFSMP at RSKs are the major reasons for a vast majority of the respondents (80.00%) for having medium to high level of overall awareness on NFSMP. More or less similar findings were reported by Thirumoorhty and Geetha (2017).

Relationship between personal, socio-economic, psychological and communication characteristics of farmers with their awareness level on NFSMP

The results in Table 3 reveals that age, family size, land holding, annual income, farming experience and location of RSKs from farmers' villages were not having significant relationship with the awareness level of farmers on NFSMP. Whereas, education, management orientation, scientific orientation, risk orientation and cosmopolitaness of farmers had significant relationship with the awareness level on NFSMP at five per cent level. Variables such as, achievement motivation, mass media participation, innovativeness and extension agency contact of farmers had highly significant relationship with the awareness level of farmers on NFSMP at one per cent level. For every unit increase in the education, management orientation, scientific orientation, risk orientation, cosmopolitaness, achievement motivation, mass media participation, innovativeness and extension agency contact of farmers, there will be an increase in the awareness level on NFSMP. Similar findings were observed by Sobanbhai (2014), Reddy *et al.* (2017) and Anju & Dhingra (2018).

TABLE 3

Relationship between personal, socio-economic, psychological and communication characteristics of farmers and their awareness level on NFSMP (n=30)

Variable No..	Characteristics	Correlation coefficient (r)
X1	Age	0.028 ^{NS}
X2	Education	0.398 *
X3	Family size	0.092 ^{NS}
X4	Land holding	0.111 ^{NS}
X5	Annual income	0.178 ^{NS}
X6	Farming experience	0.068 ^{NS}
X7	Location from RSKs	0.192 ^{NS}
X8	Achievement motivation	0.596 **
X9	Management orientation	0.396 *
X10	Scientific orientation	0.413 *
X11	Risk orientation	0.400 *
X12	Innovativeness	0.519 **
X13	Cosmopolitaness	0.399 *
X14	Mass media participation	0.596 **
X15	Extension agency contact	0.461 **

NS: Non-Significant; *Significant at 5% level; ** Significant at 1% level

Relative importance of personal, socio-economic, psychological and communication characteristics of farmers in creating awareness on NFSMP

Table 4 reveals the analysis of regression co- efficients, standard error and 't' values of stepwise regression analysis showing the final step with all the significant independent variables included in creating awareness among farmers on NFSMP. The 'F' value (16.82) was highly significant at one per cent level indicating the significance of regression equation in predicting the creation of awareness among farmers regarding NFSMP. Variables like extension participation (X15), mass media participation (X14), education (X2), achievement motivation (X8), management orientation (X9), cosmopolitaness (X13), innovativeness (X12), risk orientation (X11) and scientific orientation (X10) were found significantly contributing in creating

TABLE 4
Stepwise regression analysis showing the final step with all the significant independent variables included in creating awareness among farmers on NFSMP (n=30)

Variable No.	Variables	Regression co-efficient	Standard error or regression co-efficient	't' value
X15	Extension agency contact	0.220	0.690	3.196 **
X14	Mass media participation	0.209	0.441	2.110 *
X2	Education	0.318	0.6719	2.111 *
X8	Achievement motivation	0.124	0.519	4.180 **
X9	Management orientation	0.279	0.812	2.910 *
X13	Cosmopolitaness	0.200	0.475	2.375 *
X12	Innovativeness	0.107	0.3078	2.861 **
X11	Risk orientation	0.126	0.252	2.000 *
X10	Scientific orientation	0.666	0.3178	4.777 **

*Significant at 5% level; ** Significant at 1% level; F-16.82

awareness among farmers on the NFSMP in the final stepwise regression analysis.

Results depicted in Table 5 reveals that out of 15 independent variables only nine variables *viz.*, extension participation (X15), mass media participation (X14), education (X2), achievement motivation (X8), management orientation (X9), cosmopolitaness (X13),

innovativeness (X12), risk orientation (X11) and scientific orientation (X10) entered the final stage of stepwise regression. A single factor in the first step is the extension agency contact (X15) contributing 37.13 per cent of the variation in creating awareness among farmers on National Food Security Mission programme. The percentage of variation as expressed by regression equation (R²) is also depicted in the table.

TABLE 5
Stepwise regression analysis showing the significant steps predicting the percentage contributions of selected independent variables in creating awareness among farmers on NFSMP (n=30)

Step No.	Variables entering regression	Degrees of freedom	't' value	Percentage of variation explained by regression (R ²)
1	X15	58	44.10	37.13
2	X15, X14	57	40.01	40.33
3	X15, X14, X2	56	38.10	42.59
4	X15, X14, X2, X8	55	31.29	49.88
5	X15, X14, X2, X8, X9	54	30.18	51.68
6	X15, X14, X2, X8, X9, X13	53	29.88	52.19
7	X15, X14, X2, X8, X9, X13, X12	52	29.08	59.02
8	X15, X14, X2, X8, X9, X13, X12, X11	51	27.68	63.01
9	X15, X14, X2, X8, X9, X13, X12, X11, X10	50	20.00	67.82

R²=0.6782; F-16.82

All the nine variables together contribute to 67.82 per cent of the variation in creating awareness among farmers on National Food Security Mission programme.

Education and mass media have greatly influenced the farmers in creating awareness on NFSMP, hence the Agricultural Department should popularize the NFSMP through mass media (puppet show, radio, newspaper, television, internet, face book etc.) and displaying the benefits of NFSMP at RSKs would help in creating more awareness among farmers and take full advantage of the programme. In addition, the extension agency contact of farmers had significant relationship with the awareness on NFSMP, therefore farmers should be in regular contact with the agricultural extension functionaries for knowing more about the benefits available for farmers under various Centrally and State sponsored agricultural programmes / schemes implemented at Raitha Samparka Kendras.

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