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A Study on Entrepreneurial Behaviour of Chickpea Seed Growers in Raichur District of Karnataka, India

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ABSTRACT

A study was conducted in Raichur district of Karnataka to know the level of entrepreneurial behaviour of chickpea seed growers. A sample of 40 respondents were selected for the present study using purposive sampling technique. The five components of entrepreneurial behaviour were undertaken to evaluate the status of entrepreneurial behaviour such as, innovativeness, decision-making ability, achievement motivation, leadership ability and Cosmo politeness. The results revealed that three fifth (60.00%) of the growers belonged to medium entrepreneurial behavior category. Whereas, 22.50 and 17.50 per cent of the growers were in low and high entrepreneurial behaviour category, respectively. The variables like farming experience, annual income, achievement motivation and management orientation showed significant relationship with entrepreneurial behaviour at 5 per cent level of probability. Whereas, risk orientation, extension participation and information seeking behaviour showed significant relationship with entrepreneurial behaviour at 1 per cent level of probability. The R^2 (0.624) value indicated that, the twelve independent variables put together contributed a significant amount of variation (62.40%) in the overall entrepreneurial behavior of chickpea seed growers.

Keywords: Chickpea seed growers, Entrepreneurial behaviour, Zero order correlation, Multiple regression

THE chickpea or chick pea (*Cicer arietinum*) is a legume of the family Fabaceae. Its different types are variously known as gram or Bengal gram, garbanzo or garbanzo bean, or Egyptian pea. Its seeds are high in protein. It is one of the earliest cultivated legumes: 7,500-year-old remains have been found in the Middle East. In 2017-18, world production of chickpeas was 12.1 million tonnes, led by India alone with 64% of the global total (Anonymous, 2014).

The entrepreneurial behaviour is not necessarily doing new things but also doing things in a different way that already have been done. The entrepreneur is essentially an economic man, who strives to maximize his profits by adoption of innovations. However, entrepreneurs are not simply innovators, they are men with a will to act, to resume risk and to bring about changes through organization of human efforts (Ranger, 2012). Now, it is increasingly being felt that, the economic growth and development of the advanced countries are largely due to entrepreneurship quality among their community rather than to capital. Further progress of farming profession in the country depends mainly on the entrepreneurial behaviour of farmers. Human development report says that globally the gap between the rich and the poor is widening every day. It is more pertinent to India where about 500 million people are dependent on agriculture. The world wide bibliography on entrepreneurial research prepared by East West centre Hawaii reports that, studies on behaviour of entrepreneurs in agriculture are very limited (Ravikumar *et al*.2013). As indicated by world development report there is no linkage between the goals of developmental policies and appropriate environmental protection. Both must be designed in combination to improve welfare of humans.

Seed is the basic and most critical input for sustainable agriculture. The response of all other inputs depends on quality of seed to a larger extent. It is estimated that the direct contribution of quality seed alone to the total production is about 15-20% depending upon the crop and it can be further raised up to 45% with efficient management of other inputs. The developments in the

seed industry in India, particularly in the last 30 years, are very significant.

With recent technological development in agriculture, seed production has become more complex business and requires careful planning for successful operations. The seed production is systematically organized, carefully planned based on the best information available and aimed to achieve higher yields and best quality of seed out of their resources. It is the deliberate and conscious effort on the part of the seed grower to think about the seed programme in advance and adjust them according to new knowledge on technological development changes in physical and economic situation, price structures etc. (Archana *et al.* 2014)

The entrepreneurs are key persons of any country for promoting economic growth and technological change. The appearance of their activities, i.e., the development of entrepreneurship is directly related to the socio-economic development of the society in India, after independence and onwards, the government decided to pursue the path of state sponsored and planned economic development (Somvanshi *et al*.2016). This does not mean that individual or group enterprise and initiative did not have any role to play, but that these will be assisted, guided and regulated by the state in various ways, so that their activities can come to some results in the form of economic transformation along the lines considered appropriate and desirable by the state. The idea behind this was that the persons who have no financial resources or managerial background could be effective tools for widening the entrepreneurial base in the country. With this background, government introduced the comprehensive assistance programme for small-scale industries. Therefore, the good quality seed and the entrepreneurial characteristics play an important role in boosting the agricultural production.

In a heterogeneous and stratified society like India, it is not adequately realized that, the characteristics which distinguish entrepreneurship may not be only because of its different strata. Therefore, the entrepreneurial activity in a particular section of the population based on preset objective has to be considered. Presently, development of farmers producing seeds has become the primary concern in the area of seed production. In this regard, the role played by entrepreneurs also assumes greater importance. This necessitates conducting studies on the entrepreneurial behaviour of chickpea seed growers. With this background a study was undertaken to asses the entrepreneurial behavior of chickpea seed growers about improved seed production technology and to know the relationship of entrepreneurial behaviour of chickpea seed growers with their independent variables.

Methodology

The research was conducted in Raichur district of Karnataka state during 2014-15. Raichur district has been purposively selected for the study because of the availability of the maximum number of seed growers in a particular district. Expost-facto research design was employed in the study. In Raichur district, Raichur taluk had maximum number of seed growers and hence selected purposively as a locale of the study. The villages having maximum number of farmers involved in seed production were listed in descending order in consultation with seed unit UAS Raichur. From the list, three villages namely, Sitanagar camp, Gunjalli, Idapnur having maximum number of seed growers were selected. By using purposive sampling procedure 20 seed growers from Sitanagar camp, 13 seed growers from Gunjalli, 7 seed growers from Idapnur, were selected. Thus, the total sample size constituted to 40 respondents. The data was collected with the help of a pre tested interview schedule through personal interview. The entrepreneurial behaviour of chickpea seed growers was measured in terms of five dimensions namely, innovativeness, decision-making ability, economic motivation, leadership ability and Cosmopoliteness. The scale developed by Chaudhari, *et al.* (2007) was used to measure first four dimensions and Cosmo politeness was measured by using the procedure adopted by Nagesha (2005). The entrepreneurial behavior categories were formulated as low, medium and high on the basis of mean ± SD. The correlation analysis was carried out to find out

the relationship between personal, socio-economic variables with entrepreneurial behaviour. To explain the contribution of selected factors on entrepreneurial behaviour stepwise multiple regression analysis was carried out.

Results and Discusison

Overall entrepreneurial behaviour of chickpea seed growers

It is evident from the Table 1 & Fig.1 that the sample as a whole indicated that, three fifth (60.00%) of the growers belonged to medium entrepreneurial behaviour category. Whereas, 22.50 and 17.50 per cent of the growers were in low and high entrepreneurial behaviour category, respectively. The possible reason may be due to medium innovativeness, achievement motivation, economic motivation, leadership ability cosmopoliteness and majority were falling under medium income level. Other reason for medium entrepreneurial behaviour of chickpea farmers might be due to positive and significant relationship of farming experience, risk orientation, management orientation, mass media participation, extension participation and information seeking behaviour with entrepreneurial behaviour. The results are in conformity with the findings of Mehta *et al.* (2012), Somvanshi *et al.* (2016).

Table 1

Distribution of chickpea seed growers according to their overall entrepreneurial behaviour

(n=40)

Category	Frequency	Percentage
Low (Mean – 0.425*SD)	9	22.50
Medium (Mean ± 0.425*SD)	24	60.00
High (Mean + 0.425*SD)	7	17.50
Mean	82.05	
SD	10.18	

SD= Standard Deviation

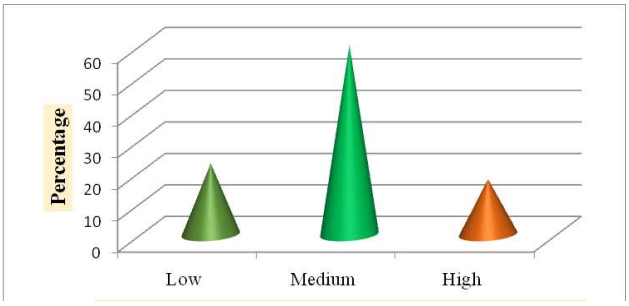

Fig.1: Distribution of chickpea seed growers according to their overall entrepreneurial behaviour

Component wise entrepreneurial behaviour of chickpea seed growers

Innovativeness

From Table 2 it could be vividly observed that nearly half (47.50%) of the growers had medium

Table 2

Component wise of entrepreneurial behaviour of chickpea seed growers

(n=40)

Components	Category	F	%
Innovativeness			
	1. Low (Mean-0.425*SD)	14	35.00
	2. Medium (Mean ± 0.425*SD)	19	47.50
	3. High (Mean+0.425*SD)	7	17.50
	Mean: 19.60 S.D: 3.65		
Decision making			
	1. Less rational (Mean-0.425*SD)	12	30.00
	2. Intermediate (Mean ± 0.425*SD)	17	42.50
	3. Rational (Mean+0.425*SD)	11	27.50
	Mean: 18.80 S.D: 1.80		
Economic motivation			
	1. Low (Mean-0.425*SD)	8	20.00
	2. Medium (Mean ± 0.425*SD)	25	62.50
	3. High (Mean+0.425*SD)	7	17.50
	Mean: 36.07 S.D: 1.91		
Leadership ability			
	1. Low (Mean-0.425*SD)	11	27.50
	2. Medium (Mean ± 0.425*SD)	20	50.50
	3. High (Mean+0.425*SD)	9	22.50
	Mean: 6.00 S.D: 1.76		
Cosmopoliteness			
	1. Low (Mean-0.425*SD)	13	32.50
	2. Medium (Mean ± 0.425*SD)	16	40.00
	3. High (Mean+0.425*SD)	11	27.50
	Mean: 1.77 S.D: 1.04		

*F = Frequency, % = Percentage

innovativeness, followed by 35.00 and 17.50 per cent of the growers having low and high innovativeness, respectively. The reason could be that majority of the chickpea seed growers belonged to medium land holding category (42.50%) and their level of education (25.00%) was only up to pre-university. Further, they have medium extension participation and information seeking behaviour regarding decision making in farming activities. All these factors might have contributed for their medium level of innovativeness. The low innovativeness of chick pea seed growers might be due to their less education, smaller size of land holding, less social participation which leads to restricted information about new technologies. The results are in accordance with the findings of Bhagyalaxmi *et al*. (2003) and Nagesh (2005).

Decision making

It is evident from the Table 2 that around 42.50 per cent of the growers belonged to intermediate decision making ability, followed by 30.00 and 27.50 per cent of growers belonging to less rational and rational decision making ability, respectively. This sort of distribution might be due to their medium annual income and size of land holdings. The results are in conformity with Suresh (2004) and Archana *et al*. (2014).

Economic motivation

The results from the Table 2 showed that more than half (62.50%) of the growers had medium economic motivation, followed by 20.00 and 17.50 per cent of the growers belonging to low and high economic motivation categories, respectively. The probable reason for majority of growers belonging to medium economic motivation might be due to medium mass media exposure and extension participation. The results are in accordance with the findings of Chauhan and Patel (2003), Aregawi (2014).

Leadership ability

It is apparent from Table 2 that exactly half (50.00%) of the growers belonged to medium level of leadership ability, followed by 27.50 and 22.50 per cent of the growers having low and high level of leadership ability, respectively. The reasons for the above findings might be due to their medium socio-economic status and extension participation. With respect to low leadership ability they had low education, low knowledge and low social participation, which might be responsible to consider them as followers but not as leaders. The results are in confirmity with the finding of Suresh (2004) and Nagesha (2005).

Cosmopoliteness

It is evident from the Table 2 that about 40.00 per cent of the growers had medium cosmopoliteness, followed by 32.50 and 27.50 per cent of the growers having low and high level of cosmopoliteness, respectively. Cosmopoliteness is the degree to which a farmer is oriented outside his community to seek information. Majority fall under medium because, due to their medium economic condition and land holding and due to their outside contact with private companies officials and low may be because of disinterest and illiteracy. The results are in conformity with the findings of Nagesha (2005).

Zero order correlation between entrepreneurial behaviour of chickpea seed growers with their independent variables

The correlation presented in Table 3 shows that seven variables *viz.,* farming experience, annual income, achievement motivation, risk orientation, management orientation, extension participation and information seeking behaviour of farmers had a positive and significant relationship with their entrepreneurial behaviour.

This inferred that, farmers with different farming experience, annual income, had different entrepreneurial behaviour. Significant relationship of achievement motivation of chickpea seed growers might be due to their enthusiasm and zeal to become economically sound. Achievement motivation is more of a psychological variable which differs from individual to individual. It is assumed that achievement motivation forces the individual towards reaching some goals, which he/she has set for him/herself. This can be attributed to their social status.

Results related to extension participation indicated that the 'r' value was highly significant. The positive

TABLE 3

Zero order correlation between entrepreneurial behaviour of chickpea seed growers with their independent variables (n=40)

Independent variables	Entrepreneurial behaviour (r value)
Age	0.006 NS
Education	0.067 NS
Size of land holding	0.072 NS
Farming experience	0.174 *
Annual income	0.184 *
Risk orientation	0.242 **
Achievement motivation	0.151 *
Management orientation	0.165 *
Cropping intensity	0.022 NS
Mass media participation	0.086 NS
Extension participation	0.406 **
Information seeking behaviour	0.544 **

NS – Non-significant

r = Correlation co-efficient,

* Significant at 5%, ** Significant at 1%

relationship indicated that the entrepreneurial behaviour increased with the increase in extension participation. The farmers with high information seeking behaviour and risk orientation would be willing to know more about new technologies, ready to take risk about technologies and more of managing capability also more. In case of management orientation, the 'r' value was positive and highly significant. This implies that proper and purposeful need based management orientation improves the knowledge and skill of chickpea seed growers and thereby increase their entrepreneurial behaviour. The results are in conformity with the findings of Manjunath (2011) and Satish *et al.* (2017).

Step wise regression analysis of the different independent variables with entrepreneurial behaviour of chickpea seed growers

The seven components *viz.,* farming experience, annual income, risk orientation, achievement motivation, management orientation, extension participation and information seeking behaviour, were found to be the important contributing factors for entrepreneurial behaviour of chickpea growers. The contribution from all these factors to entrepreneurial behaviour is 62.40 per cent. To raise one unit of entrepreneurial behaviour the contribution from farming experience is 1.096 along with other components (Table 4).

TABLE 4

Step-wise regression analysis of the independent variables of chickpea seed growers with their entrepreneurial behaviour (n=40)

Independent variables	Standard error	Regression coefficient (B)	t' values
Age	0.220	0.169	0.099 NS
Education	0.285	1.128	0.053 NS
Size of land holding	0.017	0.093	0.088 NS
Farming experience	1.265	0.190	1.096 *
Annual income	1.321	0.180	1.013 *
Risk orientation	1.052	1.233	1.443 **
Achievement orientation	0.151	0.278	1.143 *
Management orientation	1.497	1.347	1.111 *
Cropping intensity	0.031	0.033	0.042 NS
Mass media participation	1.089	0.237	1.075 NS
Extension participation	1.001	0.216	1.506 **
Information seeking behaviour	1.649	0.261	2.489 **

R^2 : 0.624

**: Significant at 0.01 probability level , * Significant at 0.05 probability level

The contribution from annual income is 1.013 along with other components. Likewise, risk orientation is 1.443, from achievement motivation is 1.143, from management orientation is 1.111, from extension participation is 1.506 and from information seeking behaviour is 2.489 with other components, respectively.

Thus, all the seven components *viz.,* farming experience, annual income, risk orientation, achievement motivation, management orientation, extension participation and information seeking behaviour individually and in combination greatly contributed for entrepreneurial behaviour of chickpea

growers. The results are in partial conformity with the findings of Kin Mar Oo (2005) Wankhade *et al.* (2013).

Socio – economic characteristics of chickpea seed growers

It is clear from the Table 5 that 45.00 percent of the chickpea seed growers belonged to middle age group, 25.00 percent of them were educated up to pre-university. Further it is apparent from the table that 42.50 percent of the growers were medium farmers. more than half (52.50%) the growers had medium farming experience and annual income. 40.00 per cent of the growers had high risk orientation and 42.50 per

TABLE 5

Distribution of the seed growers according to their personal and socio-economic characteristics

(n=40)

Characteristics	Frequency	Percentage
Age		
Young (<30)	12	30.00
Middle (between 31-49)	18	45.00
Old (above 50 years)	10	25.00
Education		
Illiterate	3	7.50
Primary	4	10.00
Middle school	7	17.50
High school	9	22.50
Pre-university	10	25.00
Degree and above	7	17.50
Size of land holding		
Marginal farmers (up to 2.50)	0	0.00
Small farmers (2.51-5.00)	4	10.00
Semi Medium farmers (5.01-10.00)	9	22.50
Medium farmers (10.01-25.00)	17	42.50
Big farmers (> 25)	10	25.00
Farming experience		
Low (Mean-0.425 SD)	11	27.50
Medium (Mean ± 0.425 SD)	21	52.50
High (Mean+0.425 SD)	8	20.00
	Mean: 4.06	**S.D: 0.77**
Annual income		
Low (< 70,000)	9	22.50
Medium (75,001-2,00,000)	21	52.50
High (>2,00,001)	10	25.00
Risk orientation		
Low (Mean-0.425*SD)	10	25.00
Medium (Mean ± 0.425*SD)	14	35.00
High (Mean+ 0.425*SD)	16	40.00
	Mean: 4.06	**S.D: 0.76**
Achievement motivation		
Low (Mean-0.425*SD)	9	22.50
Medium (Mean ± 0.425*SD)	14	35.00
High (Mean+0.425*SD)	17	42.50
	Mean: 15.6	**S.D:5.56**
Management Orientation		
Low (Mean-0.425*SD)	9	22.50
Medium (Mean ± 0.425*SD)	13	32.50
High (Mean+0.425*SD)	18	45.00
	Mean: 13.90	**S.D:0.89**
Cropping intensity		
Low (Mean-0.425*SD)	11	27.50
Medium (Mean ± 0.425*SD)	16	40.00
High (Mean+0.425*SD)	13	32.50
	Mean: 98.72	**S.D: 13.02**
Mass media participation		
Low (Mean-0.425*SD)	9	22.50
Medium (Mean ± 0.425*SD)	23	57.50
High (Mean+0.425*SD)	8	20.00
	Mean: 10.53	**S.D: 4.45**
Extension participation		
Low (Mean-0.425*SD)	13	32.50
Medium (Mean ± 0.425*SD)	17	42.50
High (Mean+0.425*SD)	10	25.00
	Mean: 18.60	**S.D: 6.53**
Information seeking behaviour		
Low (Mean-0.425*SD)	11	27.50
Medium (Mean ± 0.425*SD)	20	50.00
High (Mean+0.425*SD)	9	22.50
	Mean: 28.56	**S.D: 5.04**

cent of the growers had high achievement motivation. About 45.00 per cent of the growers had high management orientation and 40.00 per cent of them had medium cropping intensity. More than half (57.50%) of the growers had medium mass media participation followed by medium extension participation (42.50%). Half (50.00%) of the growers were belonged to medium information seeking behavior. The results are in conformity with the findings of Kin Mar Oo (2005), Manjunatha (2011), Nagesha (2005) and Wankhade *et al.* (2013).

The study has clearly shown that majority of the farmers had a medium level of entrepreneurial behaviour. More than half of the respondents had medium level of innovativeness, economic motivation, decision making ability & leadership ability and cosmopoliteness. Correlation analysis indicated that variables *viz.,* farming experience, annual income, achievement motivation and management orientation were showed significant relationship with entrepreneurial behaviour at 5 per cent level of probability. Whereas, risk orientation, extension participation and information seeking behaviour showed significant relationship with entrepreneurial behaviour at 1 per cent level of probability. The R^2 (0.624) value indicated that, the twelve independent variables put together, contributed a significant amount of variation (62.40%) in the overall entrepreneurial behavior of chickpea seed growers. Therefore, efforts should be made to increase the level of entrepreneurial behaviour through entrepreneurship awareness, intensive training programmes, group discussions, demonstrations, tours, field visits etc., for socio economic upliftment of the pigeon pea seed growers. The Study was limited only to chickpea growers totalling to 40 members. Seed grower's behaviours were also assessed only based on their perceptions. The static nature of data is a serious weakness of contemporary management research. This study also falls into this category as the data collection (interviewing and surveying) was carried out at a particular point in time during the year 2015-16. A longitudinal research with higher numbers of farmer groups representation, incorporating more objective data (i.e. profits, and profitability of farmers, times spent for farming, along with the feedback of key stakeholders) is bound to provide more insightful facts.

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