



E-ISSN: 2278-4136
P-ISSN: 2349-8234
JPP 2019; 8(2): 238-242
Received: 01-01-2019
Accepted: 05-02-2019

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Socio-economic and psychological profile of Agri-entrepreneurs of Bhagalpur district of Bihar

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Abstract

The main purpose of this study was to investigate Socioeconomics and Psychological Profile of various enterprises like mushroom, nursery, poultry, honey bee and dairy. Statistical population of this study consisted of all agricultural enterprises (N=256), that 100 of them were selected as research sample using proportionate stratified sampling method. The main instrument in this study was questionnaire which its validity was confirmed by the panel of experts and its reliability was established by Cronbach's alpha coefficient. Data was analyzed by SPSSWin20 software. Findings revealed that agriculture enterprises at Bhagalpur district in Bihar state have the entrepreneurial socioeconomics and psychological profile. India in general and Bihar in particular, is struggling to promote agri-entrepreneurships. Agri industries or agri-business continue to be traditional, old fashioned and still appears to be far away from the innovative ways with which the youth in Andhra Pradesh, Gujarat or Maharashtra are used to raise their agri business and agri-export. Why Bihar is lacking behind in agri-entrepreneurship and what should be done to shed the bar and embark on the path of success on this front? In order to answer these haunting questions in the mind of Agricultural scientists, the administrators and the policy makers, this investigation has been planned.

Keywords: Age group, Agri-entrepreneurs, education level, psychological profile, socio-economics

Introduction

Entrepreneurship in recent times has become an important area of study. It is considered to be a solution for creating wealth, generating employment and providing new and better goods and services. Developing the spirit of entrepreneurship among the young has become vital because the government cannot provide jobs for all kinds of unemployed youth and the corporate sector will provide limited jobs only to the best and that too without any job security. Agriculture entrepreneurs are those who classify all activities that help farmers to adjust a free market economy as entrepreneurial (Richards and Bulkley, 2007)^[4] and who introduces changes which directly or indirectly lead to higher agricultural inputs (Haredero, 1979)^[3]. This makes agricultural entrepreneurs a fairly diverse group with farm activities (Richard and Bulkley, 2007)^[4].

Materials and methods

Bhagalpur District of Bihar was purposively selected for the study. In this study selected 100 different entrepreneurs like mushroom, nursery, poultry, honey bee and dairy on the basis of position of the socio- economic and psychological status with the help of structured interview schedule, semi structured interview, test, scale, and through direct observation. Socio-economic status is the individual entrepreneur occupies with reference to the prevailing average living standards, assets and material possession and socio-political participation. The dependent and independent variables were selected in the light of the objectives of the study and their measurement was done with the help of standard tools which were either already developed by the researchers in the past or certain schedule developed for the purpose. In independent variable included three variable, first personal and socio-economic variable like- age on the basis of chronological age in year, education and socio- economic status. Second was psychological variable like- self-confidence, innovativeness, leadership ability, competition orientation, scientific orientation, risk orientation and management orientation. Third was communication variable like-sources of information, training received and institutional support. Dependent variable added annual income, decision making and achievement motivation. Applied statistical methods like frequency, percentage, mean, standard deviation, correlation and regression were worked out for meaningful analysis and presentation of the data.

Result and Discussion

From the table 1 it was noted that within the entrepreneurs there was maximum number of young group of respondents to the dairy and beekeeper entrepreneurs and it was 35.00%; followed by poultry entrepreneurs (25.00%), mushroom entrepreneurs (20.00%) and nursery entrepreneurs (20.00%). The maximum middle age group respondents was noted for

poultry entrepreneur (60.00%), followed by mushroom entrepreneurs (50.00%), dairy entrepreneurs (40.00%), beekeeper (40.00%) and nursery entrepreneurs (30.00%). It was also noted that among the different age groups, overall 45.00% respondents belong to middle age group, followed by old (28.00%) and young (27.00%).

Table 1: Distribution of the respondents according to their Age Groups

Age Groups (in yrs.)	Mushroom (n ₁ =20)		Nursery(n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Overall (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Young (<35)	4	20	4	20	5	25	7	35	7	35	27	27
Middle (35-55)	10	50	6	30	12	60	8	40	8	40	45	45
Old (>55)	6	30	10	50	3	15	5	25	5	25	28	28
Total	20	100	20	100	20	100	20	100	20	100	100	100

f=Frequency

From the table 2 it was interesting to note that only 10.00% beekeeper was functionally illiterate. This is also note that 15.00% nursery entrepreneur and poultry entrepreneur education level is up to primary level, followed by dairy entrepreneur (10.00%), beekeepers (10.00%);mushroom entrepreneurs(5.00%).The middle school level of education was noted to 25.00% mushroom, Nursery, Poultry and Beekeeper entrepreneurs. In the intermediate level of education, poultry entrepreneur (50.00%) has maximum number followed by dairy entrepreneur & beekeeper (40.00%) mushroom entrepreneur (35.00%) and nursery entrepreneur (15.00%).In the graduate level of education,

nursery entrepreneurs (40.00%) has maximum number followed by dairy entrepreneurs (35.00%), mushroom entrepreneurs(25.00%),Beekeeper (15.00%) and Poultry entrepreneurs (10.00%).In the post graduate mushroom entrepreneur (10.00%) has maximum number followed by nursery entrepreneur (5.00%). Among all these groups maximum number of entrepreneurs fall under the Intermediate education level (36.00%) followed by graduate (25.00%), middle class (23.00%), primary school (11.00%), Post graduate (3.00%) and least number of entrepreneur fall under the illiterate (2.00%).

Table 2: Distribution of the respondents according to their Education Level

Education Level	Mushroom (n ₁ =20)		Nursery (n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Overall (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Functionally Illiterate	0	0	0	0	0	0	0	0	2	10	2	2
Primary School	1	5	3	15	3	15	2	10	2	10	11	11
Middle	5	25	5	25	5	25	3	15	5	25	23	23
Intermediate	7	35	3	15	10	50	8	40	8	40	36	36
Graduate	5	25	8	40	2	10	7	35	3	15	25	25
Postgraduate	2	10	1	5	0	0	0	0	0	0	3	3
Total	20	100	20	100	20	100	20	100	20	100	100	100

f= Frequency

From the table 3 it is observed that 95.00% beekeepers family size is more than 5 followed by poultry (95.00%),Mushroom

growers (60.00%). Over it was noted that 82.00% respondents have more than five numbers.

Table 3: Distribution of the respondents according to their Family Size

Family Size	Mushroom(n ₁ =20)		Nursery(n ₂ =20)		Poultry(n ₃ =20)		Dairy(n ₄ =20)		Beekeeper(n ₅ =20)		Overall(n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Up to 05	8	40	4	20	2	10	3	15	1	5	18	18
More than 05	12	60	16	80	18	90	17	85	19	95	82	82
Total	20	100	20	100	20	100	20	100	20	100	100	100

f=Frequency

From the table 4 it was interesting only 35% kaccha type of house was observed in case of beekeepers followed by mushroom entrepreneurs (10.00%) nursery entrepreneurs (10.00%) and dairy entrepreneurs (10.00%). In mixed type of house, maximum number was observed in mushroom (45.00%) and nursery entrepreneur (45.00%) followed by beekeeper entrepreneur (35.00%), poultry and dairy entrepreneur (25.00%) respectively.pucca house type was observed maximum in poultry (75.00%) followed by dairy

entrepreneur (70.00%), nursery entrepreneur(45.00%), mushroom entrepreneur(35.00%), and beekeepers(30.00%). It was interesting to note that mushroom entrepreneurs has only 10.00% home present in urban area. Among all these groups maximum number of entrepreneurs fall under the pucca type house (52.00%) followed by mixed (35.00%), kaccha (11.00%) and least number of entrepreneur fall under home in town (10.00%).

Table 4: Distribution of the respondents according to their House type

House type	Mushroom(n ₁ =20)		Nursery(n ₂ =20)		Poultry(n ₃ =20)		Dairy(n ₄ =20)		Beekeeper(n ₅ =20)		Total(n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Kaccha	2	10	1	5	0	0	1	5	7	35	11	11
Mixed	9	45	9	45	5	25	5	25	7	35	35	35
Pucca	7	35	10	50	15	75	14	70	6	30	52	52
Home in town	2	10	0	0	0	0	0	0	0	0	2	2
Total	20	100	20	100	20	100	20	100	20	100	100	100

f=Frequency

Perusal of table 5 revealed that the majority of respondents i.e.38 per cent used boring for irrigation, followed by 36 per cent,27 per cent,13 per cent,6 per cent, 3 per cent respondents

used diesel engine, sprayer, disc harrow, tractor, zero tillage and cultivator respectively.

Table 5: Distribution of the respondents according to their possession of Agricultural implements

Agricultural implement	Mushroom (n ₁ =20)		Nursery (n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Total (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Tractor	0	0	0	0	3	15	3	15	0	0	6	6
Cultivator	0	0	0	0	1	5	2	10	0	0	3	3
Disc Harrow	0	0	0	0	10	50	3	15	0	0	13	13
Zero Tillage	1	5	0	0	0	0	2	10	0	0	3	3
Boring	7	35	7	35	10	50	10	50	4	20	38	38
Disel Engine	6	30	4	20	12	60	11	55	3	15	36	36
Sprayer	5	25	11	55	3	15	3	15	5	25	27	27

f= Frequency

The Perusal of table 6 revealed that amongst the five types of entrepreneur, 85.00% nursery growers were marginal category farmers followed by beekeeper entrepreneurs (80.00%),mushroom entrepreneurs(65.00%),poultry

entrepreneurs (65.00%) and dairy entrepreneurs (20.00%).Again it can be inferred that overall 63.00% entrepreneurs belong to marginal category of farmers, followed by small category.

Table 6: Distribution of the respondents according to their Land holding

Land holding (in ha.)	Mushroom (n ₁ =20)		Nursery (n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Overall (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Marginal(<1)	13	65	17	85	13	65	4	20	16	80	63	63
Small(1-2)	5	25	2	10	5	25	9	45	3	15	24	24
Semi-medium(2-4)	2	10	0	0	0	0	1	5	1	5	4	4
Medium(4-10)	0	0	0	0	0	0	3	15	0	0	3	3
Large(>10)	0	0	1	5	2	10	3	15	0	0	6	6
Total	20	100	20	100	20	100	20	100	20	100	100	100

f=Frequency

In table 7 Entrepreneurs were categorized on the basis of their self confidence level i.e. low, medium and high. The low self confidence level was noted to 85.00% beekeeper followed by dairy entrepreneur (80.00%), poultry entrepreneur (55.00%), mushroom entrepreneur (10.0%) and nursery entrepreneur (5.00%). In the medium self confidence level nursery (95.00%) was maximum number respondents followed by mushroom (85.00%), poultry entrepreneur (45.00%), dairy

entrepreneur (20.00%) and beekeeper entrepreneur (15.00%).In the high self confidence level mushroom entrepreneur (5.00%). Above all these level maximum number of respondents fall under the medium self confidence level (52.00%) followed by low self confidence level (47.00%) and least number of respondents fall under the high self confidence level (1.00%).

Table 7: Distribution of the respondents according to their Self confidence

Self confidence Level	Mushroom (n ₁ =20)		Nursery (n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Overall (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Low(<5)	2	10	1	5	11	55	16	80	17	85	47	47
Medium(≥5 to ≤9)	17	85	19	95	9	45	4	20	3	15	52	52
High(>9)	1	5	0	0	0	0	0	0	0	0	1	1
Total	20	100	20	100	20	100	20	100	20	100	100	100

f= Frequency

The innovativeness of the respondents were categorized into three categories i.e. Low, medium, high. It was noted from the table 8 for dairy entrepreneur (45.00%) maximum low level of innovativeness was observed, followed by mushroom entrepreneur (40.00%), nursery entrepreneur (25.00%),

beekeeper (25.00%) and poultry entrepreneur (20.00%) respectively. In the medium innovativeness nursery entrepreneur (45.00%) was maximum number followed by mushroom entrepreneur, beekeeper (25.00%) poultry entrepreneurs (20.00%) and dairy entrepreneur (10.00%).In

the high innovativeness poultry entrepreneur (60.00%) has maximum number followed by beekeeper (50.00%), dairy entrepreneur (45.00%), mushroom entrepreneur (35.00%) and nursery entrepreneur (30.00%). Above all these groups

maximum number of respondents fall under the high innovativeness (41.00%) followed by low innovativeness (31.00%) and least number of respondents fall under the medium innovativeness (25.00%).

Table 8: Distribution of the respondents according to their Innovativeness

Innovativeness	Mushroom (n ₁ =20)		Nursery (n ₂ =20)		Poultry (n ₃ =20)		Dairy (n ₄ =20)		Beekeeper (n ₅ =20)		Overall (n=100)	
	f	%	f	%	f	%	f	%	f	%	f	%
Low(up to 6)	8	40	5	25	4	20	9	45	5	25	31	31
Medium (>6 to <8)	5	25	9	45	4	20	2	10	5	25	25	25
High(≥8 to 9)	7	35	6	30	12	60	9	45	10	50	41	41
Total	20	100	20	100	20	100	20	100	20	100	100	100

f= Frequency

The Perusal of table 9 showed that the self confidence of respondents were positively and significantly correlated with the variable X₁ (0.198) and X₅ (0.251) at 5% level. From this finding it can be concluded that as the age of respondents

increase so, the confidence of entrepreneur strengthen. Again, it can be inferred that as the land holding(X₅) of respondents increase so, the self confidence of the entrepreneur augment.

Table 9: Correlation Co-efficient between variable self confidence and SES variable of Entrepreneurs n=100

Sl. No.	Independent Variables	r
1	Age(X ₁)	0.198*
2	Education(X ₂)	0.107 ^{NS}
3	Occupation(X ₃)	0.122 ^{NS}
4	Family Size(X ₄)	-0.012 ^{NS}
5	Land holding(X ₅)	0.251*
6	Ownership(X ₆)	-0.096 ^{NS}
7	Loan (X ₇)	0.053 ^{NS}
8	Training (X ₈)	-0.055 ^{NS}
9	Entrepreneurship experience(X ₉)	0.030 ^{NS}
10	House type(X ₁₀)	-0.024 ^{NS}
11	Annual income(X ₁₁)	-0.094 ^{NS}

*Correlation is significant at the 0.05 level

^{NS}= Non- significant

It was interesting to note that not a single SES variable is significantly correlated with the dependent variable innovativeness. The plausible reason may be that there is limited scope to introduce new things or innovation to this

five enterprises (Mushroom. Nursery, Poultry, Dairy, Beekeeper). As these enterprises are already established through the year long research and development.

Table 10: Correlation Coefficient between variable Innovativeness and SES variable of Entrepreneurs, n=100

S. No.	Independent Variables	r
1	Age(X ₁)	0.134 ^{NS}
2	Education(X ₂)	-0.057 ^{NS}
3	Occupation(X ₃)	-0.059 ^{NS}
4	Family Size(X ₄)	0.185 ^{NS}
5	Land holding(X ₅)	-0.116 ^{NS}
6	Ownership(X ₆)	0.014 ^{NS}
7	Loan recieved(X ₇)	0.104 ^{NS}
8	Training Recieved(X ₈)	0.078 ^{NS}
9	Entrepreneurship experience(X ₉)	-0.040 ^{NS}
10	House type(X ₁₀)	0.177 ^{NS}
11	Annual income(X ₁₁)	-0.060 ^{NS}

^{NS}= Non- significant

The Perusal of table 11 revealed that decision making of the respondent was positively and significantly correlated with the variable X₁₀ (0.318) at 1% level. From this finding it can be concluded that if the planning orientation of the respondent is proper, then their decision making will be better. The self confidence (X₂) of the entrepreneurs positively and significantly correlated with the variable X₆ (0.378), X₇(0.410), and X₁₀ (0.426) at 1% level. It implied that as the competition orientation (X₆), scientific orientation (X₇), planning orientation(X₁₀) of the respondent strengthen, self confidence (X₂) of the entrepreneurs will increase. The

variable innovativeness (X₃) was positively and significantly correlated with the variable X₁₀ (0.201) at 5% level and from this result it can be concluded that through the strengthening of planning orientation(X₁₀) of the respondents, the innovativeness (X₃) can be facilitated. If the planning orientation (X₁₀) of the respondent improves, then their leadership ability (X₅) will be increased, as variable X₁₀ (0.259) is positively and significantly correlated with the variable leadership ability (X₅). It was interesting to note that planning orientation (X₁₀) was positively and significantly correlated with the variable X₁₂(0.327). It implied that as the

planning orientation(X_{10}) of the respondent increase so, their marketing orientation(X_{12}) will also increase. From the above discussion it can be inferred that the planning orientation

(X_{10}) was more manoeuvring effect to the remaining variables.

Table 11: Correlation matrix among the psychological variables, n=100

Components	(X_1)	(X_2)	(X_3)	(X_4)	(X_5)	(X_6)	(X_7)	(X_8)	(X_9)	(X_{10})	(X_{11})	(X_{12})
Decision making(X_1)	1											
Self confidence(X_2)	0.012	1										
Innovativeness(X_3)	0.191	-0.123	1									
Achievement Motivation(X_4)	0.079	-0.157	-0.036	1								
Leadership ability(X_5)	0.015	0.153	-0.027	0.009	1							
Competition orientation(X_6)	0.177	0.378**	-0.158	0.101	-0.135	1						
Scientific orientation(X_7)	0.048	0.410**	0.052	-0.056	0.268**	-0.263**	1					
Risk orientation(X_8)	-0.097	-0.062	0.086	-0.017	-0.154	0.007	-0.092	1				
Institutional Support(X_9)	-0.106	0.177	-0.093	-0.164	0.210*	-0.067	-0.184	0.085	1			
Planning orientation(X_{10})	0.318**	0.426**	0.201*	0.022	0.259**	0.282**	0.190	0.012	-0.181	1		
Production orientation(X_{11})	-0.010	-0.076	0.114	-0.001	0.077	-0.180	0.160	0.241*	0.068	-0.065	1	
Marketing orientation(X_{12})	-0.127	0.013	-0.031	0.030	-0.097	0.046	-0.173	0.133	-0.093	0.327**	-0.177	1

**Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

^{NS}=Non-significant

Conclusions

The majority of the respondents, i.e.45 per cent were of 35-55 age group followed by 28 per cent and 27 per cent respondents above 55 years and below 35 years of age group, respectively. As many as 36 per cent of the respondents were educated up to intermediate followed by 25 per cent graduates. The majority of the respondents (82.0 percent) had large sized families, i.e., the number of their family members was more than 5. The majority of the respondents (63.0%) belonged to marginal category of holding size. The majority of the respondents earned an income up to 1.0 lac (39.0%) annually from their enterprises. Majority of respondents had self- enterprises (62.0%), meaning by that these people were the sole owners of their enterprises. The entrepreneurial experience of majority of the respondents (55.0 %) was less than 5 years. The majority of the respondents were middle aged, belonged to backward and scheduled castes group, were educated up to intermediate and above, enjoyed large family size belonged to marginal category of holding size and earned handsomely. Also, the majority of the enterprises were under the sole ownership but the entrepreneurial experience of the majority of the respondents was less than 5 years. The confidence level of the majority of the respondents was medium. Lack of Government support in starting the enterprise, adequate training in the technology of the enterprises and lack of ensured market for input as well as production were the major constraints in all the enterprises. Despite this, however, there was a good level of innovativeness among the entrepreneurs. But the achievement motivation of the majority of the respondents was medium. Further, the majority of the respondents had high level of planning orientation (81.0%), high level of production orientation (69.0%), but medium level of marketing orientation (45.0%). This study is possibly the first attempt to peep in to the challenges of agriculture based entrepreneurs of Bihar State and as such the findings of this study are likely to lead to several political, administrative and strategic implications in future.

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