ANALYSIS OF FACTORS THAT MOTIVATE SMALL FARMERS TOWARDS AGRICULTURAL ENTREPRENEURSHIP ACTIVITIES

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ABSTRACT: Entrepreneurship is coupled with finding ways and means to create and develop a profitable farm business. The objectives are to identify the factors motivating small farmers to engage in farming and entrepreneurial activities, recognize socio-economic background, detect the involvement of entrepreneurial activities; and investigate opportunities and hindrances of small scale farmer to involve in the agricultural entrepreneurship activities in Batticaloa District. The primary data were obtained through informal interviews and distribution of pre-tested structured questionnaires for 120 farmers. Proportionate stratified random sampling technique was used to collect data from each stratum where respondents from small farmers involved in the cultivation of paddy, vegetables, other crops and aquaculture. Information and data obtained from questionnaires were coded and analyzed in SPSS 22 software. The results revealed that most farmers (77%) sold their farm produce for monetary exchange while only 15% traded the balance after home the consumption. The probit regression analysis has identified that educational level, land and opportunities positively and significantly related to the involvement in the activity of entrepreneurship. Contrastingly, the family size and the age of the key farmer negatively and significantly related to the dependent variable.

KEYWORDS: ENTREPRENEURSHIP, FACTORS, FARMERS

1. INTRODUCTION

Entrepreneurs are defined as people who are involved in a business or enterprise whether in agriculture, livestock, production or service (Hussin *et al.*, 2012). Entrepreneurial agriculture can also be explained as the incorporation of entrepreneurship skills and models to farming business. Further, an entrepreneurial farmer as a person who is able to create and develop a profitable farming business in a changing business environment.

The role of entrepreneurship in enlightening the productivity and economic growth of a country is unquestionable (Zahra, 1991). In fact, Harper (1991) encourages entrepreneurial activities, mainly in a developing country, in order to rouse economic growth. Further, this argument is reinforced by Sternberg and Wennekers (2005) who identified that there is a positive association between entrepreneurial activities and economic growth. Adenutsi (2009) concluded that entrepreneurship not only created jobs, generated incomes and reduced poverty, but it is a driver to innovation, redistribution of income, knowledge and technological development.

The main objective of the study is to identify the factors motivating small farmers to engage in farming and entrepreneurial activities. The specific objectives are i) to recognize socio-economic background of the farmers, to detect the involvement of entrepreneurial activities; and iii) to investigate opportunities and hindrances of



small scale farmer to involve in the agricultural entrepreneurship activities in Batticaloa District.

2. METHODOLOGY

The primary data were obtained through informal interviews and distribution of pre-tested structured questionnaires with the help of two enumerators. Random sampling was carried out by applying the proportionate stratified random sampling technique to ensure that the respondents in each stratum where respondents from small farmers involved in the cultivation of paddy, vegetables, other crops and aquaculture were interviewed in person (face-to-face). Therefore, the total sample size is 120.

The questionnaire was designed to acquire the information on (a) sociodemographic characteristics of the farmer, (b) special characteristics of farmers, (c) information on services from the government and other organizations, and (d) Entrepreneurship factors. In this study, the focus was on the fourth part, i.e., the entrepreneurship factors which used to determine the involvement of farmers in entrepreneurship activities. Information and data obtained from questionnaires were coded in SPSS 22 software. Frequency tables for all separate items were calculated. The probit model was estimated where the dependent variable is a binary which takes the value of 0 if the person is not involved in an activity of entrepreneurship, and 1 in the event that he or she is. The independent variable included in the analysis were self-perception of specific skills for entrepreneurship in which underlies the specific broker of acquired knowledge for that venture - and the fear of failure variable, which is used as a proxy of risk perception by the entrepreneur as well as the other variables were family size, age, educational level, income, land area, gender, skills (self-perception of the of the person in terms of their own skills) and opportunities.

$$Y = \beta_0 + \beta_1 X 1 + \beta_2 X 2 + \beta_3 X 3 + \beta_4 X 4 + \beta_5 X 5 + \beta_6 X 6 + \beta_7 \beta X 7 + \beta_8 X 8 + \varepsilon$$

Y= Involved in the activity of Entrepreneurship

Y = 0, not involved in an activity

Y = 1, involved in an activity

X1 = Family Size

X3 = Educational level

X5 = Land Area

X6 = Gender

X7 = Skills (self-perception of the person in terms of their own skills)

X8 = Opportunities (chances and facilities to involve in the entrepreneurship activities)



3. RESULTS AND DICUSSION

The selected socio demographic characteristics of the sample studied are given in table 1. Age of the farmer was ranged from 18 to 71 years with a mean of 49.5 years. Education level of the households was measured by the number of years attended to school. The education level of the farmers found to be average where majority studied up to G.C.E Ordinary Level and mean level of schooling was 11.5 years. This indicates good education background of the households. The average family size was 4.7 which range from 2 - 11. Income is the most essential factor from being an entrepreneur. Most of the above respondents' income found to be a composite of various sources. Most of the respondents' main activities were farming, wholesale business and some of them doing retail sales as well. Monthly income of the farmer was good and range from Rs. 3 ,900 to Rs. 78,250 with the average of Rs. 23,820.

Table 2 reflects the frequency percentage of the categorical variables which were gathered. It can be seen that 73% of the household heads were male while 27% of the heads were female. When considering the off-farm experience, 33% of the respondents were professionals where 34% were involved in Sales and support service, 18% in production and only 15% were having specialized experience.

Variables and units	Mean and Standard Deviation	Categories	Percentage of the household (%)
Age of the household	49.5±9.5	<24	2
respondent (Years)		25-34	8
		35-44	28
		45-54	32
		55-64	17
		65-74	6
		>75	7
Household size	4.7±1.4	Members < 3	23
(Number)		Members 4-6	69
		Members > 7	8
Education Level (Years)	11.5±3.1	No schooling	5
		Up to grade 5	29
		Passed G.C.E O/L	39
		Passed G.C.E A/L	18
		Graduate	09
Experience (Years)	17.3±3.7	High >20	16
		Middle 10-20	63
		Low <10	21
Monthly Income of the	23,820.2±6,887.6	<5,000	8
head (Rupees/Month)		5,001-15,000	39
		15,001-25,000	42
		25,001-40,000	7

TABLE 1. SELECTED SOCIO-DEMOGRAPHIC CHARACTERS OF THE SAMPLE



>40,000	4

The study also showed that most farmers (77%) sold their farm produce for monetary exchange while only 15% traded the balance after home the consumption (Figure 1).

TABLE 2. FREQUENCY PERCENTAGE OF THE CATEGORICAL VARIABLES

Variable	Description of the Variable	Categories	Percentage (%)
Gender	Gender of head	Female	27
		Male	73
HHhead	Current Activity of the head	Unemployment	29
		Employment	71
OfffarmExp	Type of off farm experience 0 for Professionals 1 for Sales and Support 2 for Production 3 for Specialized Experience	Professionals	33
		Sales & Support	34
		Production	18
		Specialized Experience	15
NewFarmActi	Did you start any new farm activity in the last five years?	No (0)	95
		Yes (1)	5
FarmBackground	Do you come from a farming background?	No	78
		Yes	22
Entreskills	Entrepreneurship Skills (self- perception of the person in terms of their own skills)	Having	86
		Not Having	14

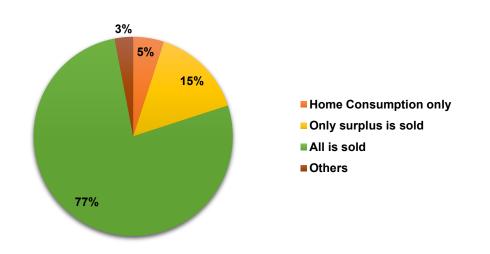
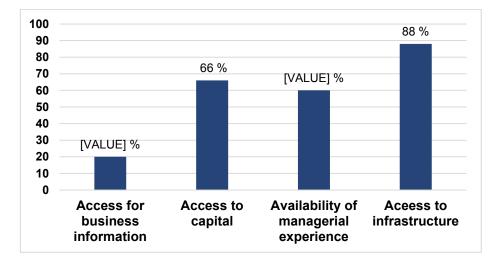


FIGURE 1. USE OF FARM PRODUCE



Independent Variables	Unit of Measurement	Involved in the activity of Entrepreneurship		
		Coefficients	Marginal Probability	Standard Error
Family size	Number of members	-0.389*	-0.017	0.230
Age	Number of years	-0.056**	-0.004	0.021
Educational level	Number of years	0.261**	0.007	0.182
Income	Rupees per month	2.96E-05**	1.74E-06	1.18E-05
Land area	Perches	0.009***	0.0005	0.003
Gender	1=Male 0=Female	-0.83	-0.023	0.639
Skills (self- perception of the person in terms of their own skills)	1=Having 0=Not having	0.341	0.083	0.305
Opportunities	1=Yes 0=No	1.038*	0.029	0.582
Pseudo R ²			0.37	
No of observation			120	
LR chi2(11)		41.17***		
Functional form		Probit model		

TABLE 3. RESULTS OF THE PROBIT REGRESSION







The figure 2 states about the access and availability of resources for farmers in order to be an entrepreneur. 88% of the farmers accept that they have access to infrastructure and 66% have access to capital, 60% have the availability of managerial experience and only 20% have access to business information.

The probit regression results (table 3) indicated that total educational level, income, land area and opportunities for the entrepreneurship activities are positively and significantly related with the involvement in the activity of entrepreneurship. It could be explainable that with the high-income people tend to involve more in entrepreneurship activities. Likewise, when the size of the land area were high people tend to use land for different activities to generate more income in addition of farming. Educational level also positive relationship with the involvement of entrepreneurship activities. When opportunities like facilities and important services available people have a tendency to involve in several entrepreneurship activities other than farming.

The family size and age of the household head are negatively and significantly related with the involvement of entrepreneurship activities. It could be justifiable that farmers with older ages has low probability to involve in the extra income generating activities.

4. CONCLUSIONS

Government authority should take actions to facilitate the farmers to market their produce with low transfer cost. Productivity, skills and involvement in the entrepreneurial activities of agricultural farmers could be improved by providing training, workshops and courses related to farming and agribusiness activities by government agencies. The knowledge on entrepreneurial could be given to farmers through courses organized either by the government or private sectors, in addition to sharing of involvements and information with those who have been involved in the related agribusiness fields. Furthermore, consideration should be given to efforts to attract additional farmers to venture into agro-entrepreneurship in the future.

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