

**ENTREPRENEURIAL BEHAVIOUR  
OF BETEL FARMERS IN  
MANMUNAI SOUTH AND ERUVIL PATTU  
DIVISIONAL SECRETARIAT  
DIVISION OF BATTICALOA DISTRICT**

Journal of Social Review  
Volume 3 (1)  
December 2014  
Department of  
Social Sciences

*Sivashankary Vimalaraj and Thivahary Geretharan*

---

**Abstract**

*A study was carried out to find out the entrepreneurial behaviour of betel farmers in Manmunai South and Eruvil Pattu Divisional Secretariat division of Batticaloa district. By following random sampling procedure 80 betel farmers were selected and structured interview schedule was used to collect the information through personal interview. Data were analyzed by using SPSS package. The personal and socio-economic characteristics of betel farmers revealed that majority (86.2%) of betel farmers were male with the family size of 1 – 6 members, more than half of betel farmers (53.8%) belonged to old age category, 58.9% of betel farmers were educated up to secondary level of education and 53.8% of the farmers were depended mainly on betel cultivation. Majority (82.5%) of respondents obtained low income (below Rs. 20,000) from betel cultivation and 47.5% of them had more than 20 years of experience in betel cultivation. The study also concluded that 36.2% of the betel farmers belonged to low and 35% of the betel farmers belonged to medium entrepreneurial behaviour category. A positive and significant relationship was observed between entrepreneurial behaviour of betel farmers and their personal and socio-economic characteristics such as family size, size of land holding, total monthly income and education of betel farmer.*

**Introduction**

Betel is a diocious plant grown in Sri Lanka as a cash crop. Betel is grown in Sri Lanka for local consumption and export and over ten wild relatives of betel are found in Sri Lanka. The major betel growing districts in Sri Lanka includes Kurunegala (65%) and Gampaha (22%) and it is mainly for export (Sumanasena *et al.*, 2005). Since 1974, betel has gained a significant position in the export market in addition to well spread domestic market. Pakistan is the major market for Sri Lankan betel. Although the volume and corresponding value of exports of betel vine have shown a fluctuation from

1974 to 2005, it has brought in substantial amount of foreign exchange to Sri Lanka (Anon, 2004).

Betel is cultivated by some traditional farmers in Eastern province. These farmers cultivate consumer preferred quality betel varieties and follow certain agronomic practices that are unknown to other betel cultivators in the country. The quality betel leaves have steady local markets and as well as export markets in Bangladesh and Pakistan. Around 500 ha of betel vine is cultivated at present in the Eastern province.

Around 2000 better betel growers are in the Batticaloa district. In the Eastern province, betel vine cultivation is ranked amongst Batticaloa, Ampara and Trincomalee districts in the order first, second and third respectively. The coastal villages lying from Kurukkalmadam to Kaluwanchikudy in Manmunai South and Eruvil Pattu DS division are popular for betel cultivation in Batticaloa district (Eastern Provincial Council, 2013).

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. To accelerate economic development in rural areas, it is necessary to increase the supply of entrepreneurs, thus building up the critical mass of first generation entrepreneurs, who will take risks and engage in the uncertainties of a new venture creation, create something from practically nothing and create values by putting together a unique package of resources to exploit an opportunity (Dannof, 1949).

Betel cultivation is occurred as main occupation of betel farmers in Manmunai South and Eruvil Pattu Divisional Secretariat (DS) division and the betel farmers mainly depends on betel cultivation for their livelihood even though they have other crops. The betel farmers in this area follow indigenous practices for long time which leads to low production and results in low income. Understanding of entrepreneurial behaviour of betel farmers will help to increase the production and to design better extension activities. In this context a study was carried out to find out the entrepreneurial behaviour of betel farmers in Manmunai South and Eruvil Pattu Divisional Secretariat area of Batticaloa district.

## Methodology

The study was carried out in the Manmunai South and Eruvil Pattu DS division of Batticaloa district. Seven villages namely Kaluthavalai, Thettativu, Mankadu, Cheddi palayam, Kurukkalmadam, Kaluwanchikudy and Eruvil were selected from this DS division for the study. By following random sampling procedure 80 betel farmers were selected from the selected seven villages and structured interview schedule was used to collect the information through personal interview. Secondary data relevant for the study also collected. The collected data were analyzed using SPSS (Statistical Package for Social Science) version 16.0 software package. Percentages were calculated for making simple comparison.

Entrepreneurial behaviour was taken as a function of five components, Decision making ability, Risk taking ability, Leadership ability, Knowledge on betel cultivation and Cosmopolitaness. The summation of scores of all these five components constitutes the entrepreneurial behavior score of the respondents. The five selected components of entrepreneurial behaviour were measured by using the following methods.

### Decision making ability

The scale developed by Supe (1969), which was also adopted by Rao (1985) with modifications was found to be more appropriate to measure decision making ability of farmers. Hence, it was used in the present study with suitable modification. The scale contained seven statements. The weightages of 3, 2 and 1 as suggested by Supe (1969) were assigned to the three rationality levels namely -rationalø, -intermediateø and -less rationalø, respectively. Thus, the possible score for each farmer on his decision making ability ranged

from 7 to 21. Based on the total score obtained by respondents on decision making, they were grouped into three categories, keeping the mean and standard deviation as check.

### **Knowledge on betel cultivation**

In the present study, knowledge on betel farming was measured with the help of a scale developed by Venkataramaiah (1991) with suitable modifications by using rating scale which consists of 'Yes' and 'No' type of questions. The 'Yes' item was scored by giving one and zero, if respondent has not answered correctly. The maximum score on this scale was 06. Based on the total score obtained by the respondents on knowledge on betel cultivation, they were grouped into three categories, keeping the mean and standard deviation as check.

### **Risk taking ability**

In the present study, risk taking ability of respondents was measured with the help of a scale developed by Supe (1969). The scale contained six statements of which first and fifth statements were negatively keyed. Modification in the scoring procedure was made by giving a weightage of 2 for the 'Agree' response and 1 for 'Disagree' response for positive statement. This was reversed in case of negative statements. The aggregate of weights over six statements was the total score of a respondent on this variable. The possible score range was from 6 to 12. Based on the total score obtained by the respondents on risk taking ability, they were grouped into three categories, keeping the mean and standard deviation as check.

### **Leadership ability**

Scale developed by Nandapurkar (1980) with suitable modifications was used to

measure leadership ability. In the present study, leadership ability was measured along a three point rating scale 'Always', 'Sometimes' and 'Never' with decreasing score from 2, 1 and 0 respectively. The total score was computed for each respondent by summing up the scores recorded. Based on the total scores obtained, the respondents were classified into 3 categories, keeping the mean and standard deviation as check.

### **Cosmopolitaness**

In the present study cosmopolitaness was measured by using the procedure adopted by Nandapurkar (1980) and Venkataramaiah (1991). The scale consists of three statements. The responses were obtained and scores were given in terms of 1 for 'Yes' and 0 for 'No'. The total score was computed by summing up all the scores recorded based on the total scores obtained, the respondents were classified into 3 categories, keeping the mean and standard deviation as check.

## **Results And Discussion**

### **Personal and socio-economic characteristics of betel farmers**

Table 1 shows the personal and socio-economic characteristics of betel farmers in the Manmunai South and Eruvil Pattu DS division.

It is apparent from table 1 that majority of the respondents (53.8%) were under old age category followed by middle age (33.8%) and young age (12.5%) categories. It might be due to the reason that, earlier it had been the primary occupation for the traditional betel farmers, but nowadays young generation has switched to other occupations, therefore number of old age farmer were higher than other group. Majority of respondents (86.2%) were male and 13.8% of respondents were female. It was observed

**Table 1: Personal and socio-economic characteristics of betel farmers**

Category	%
<b>Age</b>	
Young age (Below 35 years)	12.4
Middle age (35 to 45 years)	33.8
Old age (Above 45years)	53.8
<b>Gender</b>	
Male	86.2
Female	13.8
<b>Education level</b>	
Illiterate	1.2
Primary	32.5
Secondary	58.8
Diploma/Graduate	7.5
<b>Main occupation</b>	
Betel farming	53.8
Vegetable farming	12.5
Government job	11.2
Business	10.5
Labour	7.0
Paddy farming	5.0
<b>Size of land holding</b>	
Lesser than 2 ac	62.5
2 ó 4 ac	28.8
More than 4 ac	8.7
<b>Monthly income</b>	
Low income (below Rs. 20, 000)	23.8
Middle income ( Rs. 20, 000 ó Rs. 40, 000)	50.0
High income (more than Rs. 40, 000)	26.2
<b>Family size</b>	
Small family (1 ó 3 members)	32.5
Medium family (4 ó 6 members)	58.8
Large family (above 6 members)	8.7
<b>Experience in betel farming</b>	
Up to 10 years	22.5
11 ó 20 years	30.0
Above 20 years	47.5

that at overall level, out of the total of betel farmer engaged in betel cultivation, female number was low. The low participation of the women in betel cultivation has been attributed to the religious and social belief that the access of the women in the betel garden breaks the purity of the same. It might be the reason for low number of female betel farmers. This result is supported by Amalendu Kumar (2007).

It is clear from the table that more than half of the respondents were under secondary level of education. The results indicates that majority (53.8%) of the respondents were depended mainly on betel cultivation. These results might be due to the reason that although betel farmers obtain low income from betel cultivation, it was a sustainable income. Therefore they were depended mainly on betel cultivation. This result is supported by the findings of Amalendu Kumar (2007). More than half (62.5%) of the betel farmers had land size lesser than 2 acres whereas, 28.8% of farmers had 2 to 4 acres of land.

The findings shows 50.0 percent of betel farmers belonged to medium income group whereas 26.2 percent of betel farmers belonged to high income group and 23.8 percent of farmers belonged to low income group. This is due to the fact that additional income from other sources probably contributed much to their total income. The findings are in conformity with the findings of Suresh (2004) who also noted that majority of milk producers (80.33 %) were in medium income group. The data indicates that more than half of the betel farmers (58.8%) had medium family size. A glance at table 1 revealed that 47.5% of betel farmers had high (above 20 years) experience in betel cultivation. This is because of most of the farmers were old age and they had engaged in betel cultivation for long period.

## Entrepreneurial behaviour of betel farmers with its components

Table 2 indicates the distribution of betel farmers according to their entrepreneurial behaviour with its components. The results from table 2 indicate that 45.0% of the respondents had medium risk taking ability. It might be due to inability of farmers under small land holding and they were not financially sound to face risk. Other reason could be attributed that their old age. The above findings are in accordance with the findings of Bhagyalaxmi *et al.* (2003) and Suresh (2004) who reported that majority of farmers had medium level of risk orientation.

It is evident from the table that 45.0% of the respondents had low decision-making ability. This might be due to their irresponsibility in record keeping. The other possible reason might be that decision making in farming, especially in Sri Lankan conditions, it is very difficult due to ever changing agro-climatic conditions and lack of stabilized price policy. The results are in conformity with Suresh Kumar (1997).

Majority (47.5%) of the respondents had high level of knowledge regarding the betel cultivation. It might be due to the reason that betel farmers in Manmunai South and Eruvil Pattu DS division of Batticaloa district have engaged in betel cultivation for long period therefore they had adequate knowledge on betel cultivation. This finding is contradicted by the results of Shreeshailaja and Veerabhadraiah (1992) and Suresh (2004) who reported that most of the respondents had medium level of knowledge regarding their cultivation.

**Table 2: Distribution of respondents according to their entrepreneurial behaviour along with its components**

Category	%	Mean and Standard deviation
<b>Risk taking ability</b>		
Low	32.5	X=9.71 SD = 1.070
Medium	45.0	
High	22.5	
<b>Decision making ability</b>		
Low	45.0	X=13.30 SD = 2.389
Medium	20.0	
High	35.0	
<b>Knowledge on betel cultivation</b>		
Low	20.0	X=3.28 SD = 1.136
Medium	32.5	
High	47.5	
<b>Leadership ability</b>		
Low	35.0	X=6.41 SD = 2.103
Medium	36.2	
High	28.8	
<b>Cosmopolitaness</b>		
Low	70.0	X=0.36 SD = 0.601
High	30.0	
<b>Entrepreneurial behaviour</b>		
Low	36.2	X=33.06 SD = 4.344
Medium	35.0	
High	28.8	

The findings from table 2 shows that 36.2% of the respondents had medium level of leadership ability followed by low (35.0%) and high (28.8%) level of leadership ability, respectively. It is also evidenced from the table that majority (70.0%) of the respondents had low level of cosmopolitaness. Cosmopolitaness is the degree to which a farmer is oriented outside his community to seek information. This result is due to the low interest of betel farmers to conduct extension services to adopt new cultivation practices, poor economic condition and low social participation. The results are in conformity with the findings of Suresh (2004).

The summation of scores of all the five selected components constitutes the entrepreneurial behaviour score of the respondents. Table 2 indicates that 36.2% of the respondents belonged to low entrepreneurial behaviour category. The possible reason for low entrepreneurial behaviour of betel farmers might be due to their low financial condition and small size of land holding to take risk, low level of extension services and low interest to adopt new technologies.

### **Relationship between selected independent variables of betel farmers and their entrepreneurial behaviour**

Table 3 represents the relationship between selected independent variables of betel farmers and their entrepreneurial behaviour. It could be observed from table 3 that among 08 independent variables of betel farmers, three variables viz., family size, size of land holding and total monthly income showed positive and significant relationship at 0.01 level of probability, whereas education of betel farmer showed positive and significant correlation at 0.05 level of probability with entrepreneurial behaviour. Hence, it can be concluded that these characteristics were correlated with entrepreneurial behaviour. The remaining four variables namely, age of betel farmer, gender of betel farmer, main occupation of betel farmer and experience of betel farmer in betel cultivation did not establish any significant relationship with entrepreneurial behaviour. Hence, it can be concluded that these characteristics were not correlated with entrepreneurial behaviour.

Age of betel farmers was non-significant with their entrepreneurial behaviour. The similar results have reported by Mundhwa and Padheria (1998) who found that there was non-significant relationship between age and entrepreneurial behaviour of dairy women. With respect to education of betel

farmers, there was positive and significant relationship with their entrepreneurial behaviour. Education broadens the vision of an individual. The educated persons develop more access to extension agencies, mass media and have higher leadership ability, decision making ability, cosmopolitaness and inclined to use innovations by taking the high risk. Hence, education was the influencing factor for entrepreneurial behaviour of betel farmers. These findings are in accordance with the findings of Murali and Anitha Jhamtani (2003) and Mundhwa and Padheria (1998) who also reported that there was positive significant relationship between education and entrepreneurial behaviour.

Table 3: Correlation coefficient between selected personal and socio-economic characteristics of betel farmers and their entrepreneurial behaviour along with its components

Occupation of betel farmers had not shown any significant relationship with their entrepreneurial behaviour. Majority of betel farmers were engaged in betel cultivation along with vegetable farming. Hence, less variation in their occupation might be the reason for non-significant relationship. The similar findings have reported by Pandeti (2005) and Anitha (2004) who concluded that occupation had not shown any significant relationship with entrepreneurial behaviour of respondents. With respect to family size, there was positive and significant relationship with their entrepreneurial behaviour. The family size plays an important role for taking a rational decision regarding adoption of innovation, and risk taking ability and also education of family members influence the thinking and actions of an individual. In the present investigation, it was experienced that old age respondents possessed high cosmo politeness and family size of old age betel farmers was larger compared to young age betel farmers, thus

**Table 3: Correlation coefficient between selected personal and socio-economic characteristics of betel farmers and their entrepreneurial behaviour along with its components**

Personal and socio-economic characteristics	Decision making ability	Risk taking ability	Knowledge on betel cultivation	Leadership ability	Cosmopolitanness	Entrepreneurial behavior
Age	- 0.014 <sup>NS</sup>	- 0.085 <sup>NS</sup>	0.029 <sup>NS</sup>	- 0.033 <sup>NS</sup>	0.175 <sup>NS</sup>	- 0.013 <sup>NS</sup>
Gender	- 0.081 <sup>NS</sup>	0.074 <sup>NS</sup>	- 0.129 <sup>NS</sup>	0.251*	- 0.243*	0.028 <sup>NS</sup>
Education	0.399**	0.075 <sup>NS</sup>	- 0.220 <sup>NS</sup>	0.082 <sup>NS</sup>	0.208 <sup>NS</sup>	0.249*
Family size	0.166 <sup>NS</sup>	0.205 <sup>NS</sup>	0.219 <sup>NS</sup>	0.172 <sup>NS</sup>	0.220*	0.313**
Main occupation	0.156 <sup>NS</sup>	0.207 <sup>NS</sup>	- 0.109 <sup>NS</sup>	0.038 <sup>NS</sup>	0.067 <sup>NS</sup>	0.136 <sup>NS</sup>
Total monthly income	0.405**	0.221*	0.138 <sup>NS</sup>	0.069 <sup>NS</sup>	0.139 <sup>NS</sup>	0.366**
Experience in betel cultivation	- 0.008 <sup>NS</sup>	0.018 <sup>NS</sup>	0.116 <sup>NS</sup>	0.162 <sup>NS</sup>	0.238*	0.141 <sup>NS</sup>
Size of land holding	0.396**	0.138 <sup>NS</sup>	0.048 <sup>NS</sup>	0.117 <sup>NS</sup>	0.244*	0.311**

\* Significant at 0.05 level of probability  
NS Non-significant

\*\* Significant at 0.01 level of probability

family size might be influenced entrepreneurial behaviour of betel farmers. These findings are in accordance with the findings of Mundhwa and Padheria (1998) who also reported that there was positive significant relationship between family size and entrepreneurial behaviour.

With regard to gender of betel farmer, it had not shown any significant relationship with their entrepreneurial behaviour. In the present study, it was noticed that majority of betel farmers (86.2%) were male. Hence, less variation in gender might be the reason for non-significant relationship. Size of land holding of betel farmers was positively and significantly correlated with their entrepreneurial behaviour. This was due to positive and significant relationship of size of land holding with decision making ability

and Cosmopolitanness. The results are in conformity with Pandya (1996). Total monthly income of betel farmers was positively and significantly correlated with their entrepreneurial behaviour. This might be due to positive and significant relationship of total monthly income with decision making ability and risk taking ability. The present results are in accordance with the reports of Patil *et al.* (1999).

### Conclusion

This study was carried out to find out the entrepreneurial behaviour of betel farmers in Manmunai South and Eruvil Pattu DS division of Batticaloa district. The results from the study concluded that 36.2% of the betel farmers belonged to low and 35% of the betel farmers belonged to medium

entrepreneurial behaviour category. Around 28.8% of the betel farmers come under high entrepreneurial behaviour category. So, it is evident that majority of the betel farmers have low and medium entrepreneurial behaviour. Therefore, betel farmers should be given educational efforts and policy support by the field extension workers of the development departments, Non Governmental Organizations and private organizations. Also intensive training programs need to be conducted by government and nongovernment agencies for awareness about entrepreneurial opportunities, decision making, innovations, participation in implementation of government schemes, time and financial management, which would enable betel farmers for efficient utilization of their potentials.

## References

- Amalendu Kumar, A. (2007). Economics of Production and Marketing of Betel vine in Bihar, Agro-economic research centre for Bihar and Jharkhand, Ministry of Agriculture, Government of India.
- Anitha, B. (2004). A study on entrepreneurial behaviour and market participation of farm women in Bangalore rural district of Karnataka. *M. Sc. (Agri.) Thesis*, University of Agricultural Sciences, Bangalore.
- Anonymous, (2004). Administrative Report, Department of Export Agriculture, Peradeniya.
- Bhagyalaxmi, K., Gopalakrishna Rao, V. and Sudarshanreddy, M. (2003). Profile of the rural women micro-entrepreneurs. *Journal of Research*, Acharya N. G. Ranga Agricultural University, Hyderabad, 31(4): 51-54.
- Dannof, C. H. (1949). Observations at entrepreneurship in agriculture change and the entrepreneur. Harvard University Press, Cambridge.
- Eastern Provincial Council (2013). *Eastern Development Plan 2012-2016 Vol III óSector Analysis*. Eastern Provincial Council, Trincomalee, Sri Lanka.
- Mundhwa, A. B., and Padheria, M. M. (1998). A study on entrepreneurial behaviour of dairy women among their different variables categories. *Gujarat Agricultural University Research Journal*, 23(2): 72-76.
- Murali, K., and Anitha Jhamtani. (2003). Entrepreneurial characteristics of floriculture farmers. *Indian Journal of Extension Education*, 39(1&2): 19-25.
- Nandapurkar, C. G. (1980). A study on entrepreneurial behaviour of small farmers. *Ph.D. Thesis*, University of Agricultural Sciences, Bangalore.
- Pandeti, C. M. (2005). A study on entrepreneurial behaviour of farmers in Raichur district of Karnataka. *M. Sc. Thesis*, Department of Agricultural extension education, College of Agriculture, University of Agricultural sciences, Dharwad.
- Pandya, R. D. (1996). Entrepreneurial behaviour of sugarcane growers. *Journal of Extension Education*, 6(7): 1299-1301.
- Patil, V. G., Mahadik, R. P., and Patil, A. S. (1999). Entrepreneurial behaviour of little gourd growers. *Maharashtra Journal of Extension Education*, XVIII: 240-243.
- Rao, V. G. K. (1985). A prediction analysis of farming performance of farmers through their entrepreneurial behavioural factors. *Ph.D. Thesis*, Andhra Pradesh Agricultural University, Hyderabad.



- Shreeshailaja, K. T., and Veerabhadraiah, V. (1992). Knowledge and adoption of improved dairy practices among farm women. *Indian Journal of Dairy Science*, 27(8): 40-42.
- Sumanasena, H. A., Kadigamuwa, H. M. J. J. K., and Gunathilaka, H. A. W. S. (2005). Proceedings of 5<sup>th</sup> Agricultural Research Symposium Part II, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila.
- Supe, S. V. (1969). Factors related to different degrees of rationality in decision-making among farmers in Buldana district. *Ph. D. Thesis*, Indian Agricultural Research Institute, New Delhi.
- Suresh kumar. (1997). Feasibility analysis of privatization of extension services for selected farm enterprises. *Ph. D. Thesis*, Acharya N. G. Ranga Agricultural University, Hyderabad.
- Suresh, (2004). Entrepreneurial behaviour of milk producers in Chittoor district of Andhra Pradesh-A critical study. *M. V. Sc. Thesis*, Acharya N. G. Ranga Agricultural University, Hyderabad.
- Venkataramaiah, P. (1991). Entrepreneurial behaviour of small and marginal farmers of Guntur district in Andhra Pradesh. *Extension Research Series*, II (2): 1-120.