

The Relationship between Socio-Economic Factors and Paddy Production

Kajenthini Ganeshamoorthy

Department of Economics, Faculty of Commerce and Management,

Eastern University, Sri Lanka

vpkaji@gmail.com

Abstract

The study is carried out in Batticaloa District based on primary data which were gathered via structured questionnaire for 2015/2016 Maha season to engage cross-sectional analysis. The study utilised descriptive and correlation analysis to reveals empirically the socio-economic factors and the relationship between paddy yield and paddy growers' socio-economic factors in Batticaloa District. This study analysis via investigating the following factors namely paddy growers' gender, marital status, household size, age, education, nature of paddy farm, family income, training and experience. The findings reveal that male and ageing paddy growers engage on paddy farm compare to female and youngest. Further, if most of the them have primary education and secondary education, and experience, those are not corresponding with paddy farm since those factors do not show correlation with paddy yield. Though few of paddy growers have obtained both higher education and training. Further their family's average income also relatively lower.

In

addition, correlation analysis found that gender and training of paddy growers have relationship between with paddy yield. Vice-Versa other socio-economic factors are not corresponding with paddy yield since those factors have not seem correlation between them.

Keywords: Paddy, Paddy growers, Batticaloa district, Socio -economic factors

01. Introduction

Paddy farming is a direct source of income for the majority of the rural farmers as well as an indirect source of income for the providers of support services, paddy millers and traders of paddy and rice (Gamawelagedara et al, 2011). The growth in Agriculture activities was largely attributable to the significant expansion in the growing of rice. Agriculture sector contribution to GDP is estimated to be 7.9 percent in 2015 it indicating lower contribution of agriculture to the country's gross domestic product compare to another sectors. Though, paddy production growth rate had enhanced from 90.4% to 128.9% in during the period of 2014 -2015 (Central Bank of Sri Lanka, 2015).

The Economy of the District is depending mostly on Agriculture and Fishing. The District has about 49,850 Agriculture families. There are about 61,321 Hectares of paddy land in the District out of 263,390 total land use. Paddy farms carried out in Maha, Yala and late Maha¹ seasons (District Secretariat, Batticaloa, 2015). Thus paddy growers engage on paddy farm for their livelihood. In general, paddy output is different paddy growers to another paddy grower it may be differ account of input factors, social factors, economic factors, institutional factors etc. In this line the present study undertaken to set out the contribution of social – demographic factors which effect of paddy cultivation.

02. Objective

The main objective of this study are examine to reveals the socio-economic factors of paddy growers and the relationship between paddy yield and paddy growers' socio-demographic factors in Batticaloa District.

03. Materials and Methods

The study is carried out in Batticaloa District Which comprising appropriate paddy land to paddy growers engage paddy cultivation. Data collection is done using the participatory approach, through structured questionnaires by using combination of random-sampling

¹ Between the normal seasons Maha and Yala an inter seasonal cultivation it called late Maha which is practiced by the farmers in some areas with the help of minor tanks during the periods from February to May

and snowball sampling. Random-sampling technique was utilised to choose the Grama Niladari Divisions which were chosen under the appropriate 10 Divisional Secretariat, Batticaloa District. Those 10 Divisional Secretariat, Batticaloa District has paddy land more than 100 acres. Further, snowball sampling was engaged among the selected Grama Niladari Divisions to select the two hundred samples.

Thus, primary data were gathered in the cultivated season 2015/2016 Maha season to engage on cross-sectional analysis. Both descriptive statistics and correlation analysis were utilised to obtain study objective. STATA statistical software have used for the data analysis.

04. Findings

According to the data, following socio-economic factors namely paddy growers' gender, marital status, household size, age, education, nature of paddy farm, family income, training and experience take part to analyse the present study objective.

In terms of gender of the head of household distribution, 84% of the paddy growers are male and 16 % female. In Batticaloa district, the main paddy growers in the field of paddy farm are male. It reveals that majority of the paddy farmers are male who engage on paddy farm.

Moreover, in terms of age of the paddy growers, the majority of paddy growers around (28%) are within the 41-50 age range, while 22.5% are being the age range of 51-60 and 26 % of paddy growers exist the 31-40age range. Further, 11.5% of the paddy growers are below 31 years and approximately the above 60 years age range. Based on this findings, most of the paddy farmers are exist above 31 years. It indicating that participation of the young paddy growers are lowers than others.

Furthermore, majority of the paddy growers around 87% are married while only 5 % of the paddy growers are unmarried. Rest of the paddy growers (8%) are widow who also engage on paddy farm. It reveals that unmarried paddy growers are not like to engage on paddy farm for their livelihood. Moreover, the finding of household size reveals that 41.5 % of the paddy growers' families has between one and three members, 45 % of the paddy growers' family has between four and five members. While 13.5 % of paddy growers' families have six to eight family members.

In addition, the finding also reveals the educational level of paddy growers in Batticaloa district. According to the result, around 39% of paddy growers exist with primary education and 29 % of paddy growers have secondary education. Approximately 23% of paddy growers have passed ordinary level and only 8.5% of the paddy growers

have passed advanced level. Additionally, about one percent of paddy growers having with degree. In order to the findings, most of the farmers being primary education and secondary education. In contrast, few of paddy farmers obtained advanced level and also very lowest paddy farmers achieved degree level of education.

Under the nature of paddy farm, the present study find answer for the question that do paddy growers engage on paddy farm as either main occupation or part-time. In this line, among paddy growers, 69% of paddy growers engage paddy farms as main occupation and 31% of paddy growers engage on paddy farm in part time. It indicating that, if farmers engage on other field, they are willing to engage on paddy farm as part-time work.

The paddy growers have at least family income within 10,000 -20,000, representing 58.5%. as well as 17% and 11% of the paddy growers have family income between 21,000-30,000 and 31,000-50,000 respectively. Rest of the paddy growers representing 13.5% have more than 50,000 Rs. On the whole, the average family income of the paddy growers is, Rs. 20,280. According to the finding, family income of paddy grower is lower in Batticaloa district.

Further, the present study reveals the paddy growers' experience regarding paddy farm. 25% of paddy growers have below 10 years

of experience and 57.5% of paddy growers have experienced as 10 to 30 years. Moreover, 14% and 3.5% of paddy growers have experienced 31 to 49 years and above 50 years respectively. It indicating that probably majority of the paddy growers have more years of experience regarding paddy farm. In addition, only 20% of paddy growers have obtained training regarding paddy farm while 80% of paddy farmers do not obtain any training regarding paddy farm in Batticaloa district.

Furthermore, the present study found the correlation results to identify the relationship between paddy yield and socio- demographic factors. Following table 1 represents the results of them.

There is a positive linear relationship between gender of paddy growers and training of paddy growers. Other socio-economic factors of paddy growers have no relationship with paddy yield of them since there are no correlation between them. This finding is in line with the work of Igboji et al, (2015) & Assis (2014) who identified the same results but they found gender also insignificant factor. Conversely, Siriwardana and Jayawardena (2014) found that male farmers recording superior performances than female farmers in the productivity of paddy farming.

Table 4.1: Results of correlation analysis

Variables	Paddy
-----------	-------

	Yield
Gender of paddy growers	0.3107
Marital status of paddy growers	-0.1439
household size of paddy growers	0.1654
age of paddy growers	0.1127
education of paddy growers	0.1981
Nature of paddy farm	0.1655
experience of paddy growers	0.2705
training of paddy growers	0.30

Source: Author's survey (2016)

05. Conclusions

The study found the paddy growers' socio-economic factors regarding paddy farm and also found their relationship on paddy yield. Based on this study, male and ageing paddy growers engage more on paddy farm than female and youngest. Further, they have primary education and secondary education than higher level of education. The percent of part-time paddy growers' intensity also appear as better. Even though, paddy grower maintains average family income around Rs, 20,280. According to the correlation results, except gender and training of paddy growers' other socio- economic factors do not corresponding with their paddy yield.

Even if few of paddy growers obtain training regarding paddy farm, highest percent of farmers have more year of experience on paddy farm in Batticaloa district. However, experience and education are not corresponding with paddy farm.

References

Assis, K., Nurul, A, Z., & Mohammad, A. (2014). Relationship between Socioeconomic Factors, Income and Productivity of Farmers: A Case Study on Pineapple Farmers, *International Journal of Research in Humanities, Arts and Literature*, Vol. 2: 12, 67-78.

Central Bank of Sri Lanka. (2015). *Annual Report*, Colombo: Central Bank of Sri Lanka.

Gamawelagedara, W.C., Wickramasinghe, Y.M., and Dissanayake, C.A.K. (2011). Impact of Rice Processing Villages on House Hold Income of Rural Farmers in

Anuradhapura District, *The Journal of Agricultural Sciences*, 6:2, 93-99.

Igboji, C., Anozie R.O., and Priscilia, N, C (2015). Analysis of Socio-Economic Factors and Profitability of Rice Production among Smallscale Farmers in Ebonyi State, *IOSR Journal of Agriculture and Veterinary Science*, Vol 8: 2, 20-27.

Siriwardana, A. N., and Jayawardena, L, N, A, C. (2014). Socio-Demographic Factors Contributing to the Productivity in Paddy Farming: A Case Study, *Tropical Agricultural Research* 25 (3), 437 – 444.