

Determinants of income diversification in Tea estates households in Badulla district

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Introduction

Tea is the main foreign exchange owner in Sri Lanka. It shows that Tea industry is playing major role in national economy. Estate laborers are one of the major players in tea industry. Tea industry economically depends on sweat and blood of estate workers (Muthulingam, 2010). In initial stage of tea industry, laborers who were working in tea industry had estate income as sole income source. If it was sole way of income, the labor wage was very low. They had not enough facilities to engage with other agricultural and non-agricultural like income activities. Also management of tea estates was provided facilities to estate households to work only in estates. To improve the estate workers living condition, there is an alternative way called as an income diversification. Income diversification has talked world widely with various sectors. But, no any research has carried out on income diversification in tea estate households. Therefore, study of this matter is most important to the tea estate sector. In this study the income diversification and pattern of income diversification of tea estates households are considered in Badulla district.

Materials and Methodology

The Survey was conducted in Badulla district by using 298 tea estates households. Censored Tobit regression analysis method was used to examine the determinants of income diversification. In many research on income diversification have used censored Tobit model to find out determinants of the income diversification. In this research dependent variables are including value zero to high amount of value. Therefore for Tobit model is used for data analyzing. (Schwarz and Zeller, 2005). In this study three dependent variables are taken as estate income, other agricultural income and non-agricultural Income. Nine variables are used as explanatory variable. Those are age of household head, gender of household head, number of dependents in a family, number of male, number of female, monthly expenditure, distance to the city, years of schooling household head and loan receipt.

Results and Discussion

Table 03: Determinants of income diversification

Explanatory variables	Estate income	Other agricultural income	Non-agricultural income
	Coefficient	Coefficient	Coefficient
Number of dependent	-7871.379***	-2256.287**	-4596.131***
Number of male	5566***	87.8478	8231.956***
Number of Female	7416.034***	686.482	6434.544***

Monthly Expenditure	.2750591**	.2519957**	.1913611
Distance to City	133.5043	191.6546	-540.0511
Age of Household Head	-225.4097***	52.19788	279.7119***
Gender of Household Head	1307.716	1898.897	4320.42
Years of Schooling Household Head	-557.2577*	767.5238	629.9214*
Received of Loan	9767.181***	1926.039	-13556.9***

[Note: *** p< 0.01(99% confident interval), ** p<0.05 (95% confident interval), *p<0.1 (90% confident interval)]

The results in the table 01 shows that number of dependents of the family, number of males, number of females, monthly expenditure, age of household head, and household head year of schooling and received of loan were the significant factors affecting on estate income share in total income of estate households. Number of dependents has negative significant effect on the income generate from estate activities. Number of males and number of females have positive significant effect on income share from the estate activities. Monthly expenditure has positive significant effect on share of income received from the estate income. Age of household head has negative significant effect on the income share from the estate activities. Household head year of schooling has negative significant effect on the income share from the estate activities. Loan receipt has positive significant effect on the income share from the estate working. Above Tobit results further revealed that monthly expenditure, number of dependents and household head year of schooling were the significant factors that affecting on other agricultural income share in total income of estate households. Monthly expenditure has positive significant effect on income share from the other agricultural activities. Total dependents in a family have negative significant effect on the other agricultural income. Household head year of schooling has positive significant impact on the other agricultural income. According to the findings of Barratt et al. (2001), years of schooling household head has negative significant impact on other agricultural employment.

According to the table 01 number of dependent in a family, Number of males, number of females, age of household head, household head year of schooling and received of loan were the significant factors affecting nonagricultural income share in total income of estate households. Number of dependents has negative significant effect on the income share from the nonagricultural activities. Number of males and number of females has positive significant effect on income share from the nonagricultural activities. There is a positive significant effect on the income share from the nonagricultural activities by age of household head. In many literature findings shows that age of household head has positive significant impact on non-agricultural income. (Mishra et al., 2010; Olay, 2010; Abdulai and Delgado, 1999). Years of schooling of household head has positive significant effect on the income share from nonagricultural activities. Barratt et al. (2001) and Minot et al. (2003) also have found that years of schooling household head has strong positive relationship with the non-agricultural income. Receipt of loan has negative significant impact on the income share from the non-farming activities. It suggested households that share their income from the nonagricultural activities are not going to receipt of loans.

Number of dependent is the only one factor which influenced on the both estate income, other agricultural income and non-agricultural income.

Conclusion

Through this research we are mainly focused on the analyzing the determinants of tea estates households income diversification. This study showed that tea estates households in Badulla district had involved mainly in three income generating activities. Those are estate income, other agricultural income and non-agricultural income. The regression analysis revealed that diversification of income is determined by some socio economic factors. From those factors number dependents, number of males and females, monthly expenditure, access of loan, age of household head, years of schooling household heads are influenced on estate income. Other agricultural income activities are determined by monthly expenditure and years of schooling household head. Number of males and females, age of household head, years of schooling household head, number of children's, number of dependents and received of loan are determined the non-agricultural income. Only the Number of dependents is influenced on both estates, other agricultural and non-agricultural income activities.

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