

# Remittance and investment of Tea small holders in Uva region

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## Introduction

Labor shortage is a current problem facing by tea small holding sector. The predominant reason for that is migration of workers from out of farming. These migrants send remittance to their households. Societal perception about labor migration is that it has a negative impact on the sustainability of the tea small holding sector. But, there might be some positive impacts from remittance gained by the migrants especially as investments on tea lands. Hence, it is very much important to understand the ability to compensate the labor shortage by the remittance sent by the migrants. According to Chen (2004), Migrants are defined as those who lived away from their families for migratory work for no less than one month. As well as Migrant families specifically refer to those rural families in which at least one family member is identified as migrant. Money and goods that are transmitted to households back home by people who working away from their origin community (Adams, 1989).

## Methodology

The population of the research was the total tea small holders in Uva region. There are 16 TI ranges under 3 main sub offices in Uva region. (Annual Report 2012, Tea Small Holding Development Authority). Multistage sampling method was used for the selection of the tea small holder's household units. There are three sub offices in Uva region as Haliela, Bandarawela, Welimada. There are six ranges of Haliela sub office, six ranges of Bandarawela sub office and four ranges of Welimada sub office. Three ranges each from Haliela and Bandarawela sub offices and two ranges from Walimada range were randomly selected. 100 Tea small holders were randomly selected from these 8 TI ranges. Primary data were collected from the farmers while they were interviewed at their field or their residences. Productive investment for tea land was the dependent variable of this study. It was measured calculating all the expenses for tea land within past twelve months. The expenditure for, Buying new tea land, Infilling the tea land, Fertilizer application, Soil conservation measures, Shade tree management, Pest and disease management, Within last twelve months. Household characteristics, characteristics of household head and socio economics characteristics were used as independent variables. There are thirteen independent variables as Age of house hold head, Education Level of household head, Tea cultivated land extent, Number of children, Income from Tea land, Durable consumption, Non-durable consumption, Other Investment, Migration Dummy, Remittance, Income from Other Cultivation, Income from Job of household head, Number of family members. Data were analyzed by Using Stata software package. Descriptive statistical techniques were used to present the demographic features of the sample. Multiple linear regression analysis was worked out to find out the impact of remittance on productive investment of Tea small holders in Uva region.

$$\text{InvT} = \beta_0 + \beta_1\text{AH} + \beta_2\text{Edu} + \beta_3\text{Land} + \beta_4\text{NOFM} + \beta_5\text{NOC} + \beta_6\text{InT} + \beta_7\text{InOC}$$

$$+ \beta_8 \text{InJ} + \beta_9 \text{Dura} + \beta_{10} \text{NDura} + \beta_{11} \text{OIn} + \beta_{12} \text{MigD} + \beta_{13} \text{Rem} + \epsilon_i$$

(In<sub>v</sub>T - productive investment for tea land,  $\beta_0$  – Constant,  $\beta_0$  to  $\beta_{13}$  – Coefficient,  $\epsilon_i$  – Error)

## Results and Discussion

Regression analysis were used to quantify the relationships between variables to achieve the objectives more precisely.

According to the results of the multiple regressions, coefficient value for each variable has given below.

Notation	Description	Coefficient
Land	Tea cultivated land extent	-323.5198
NOFM	Number of family members	7835.633**
AH	Age of household head	-465.2015
Edu	Education Level of household head	6778.881**
NOC	Number of Children	-7102.874***
InT	Income from tea land	1.6452*
InOC	Income from Other Cultivation	0.423728
InJ	Income from job of household head	0.3829989
Dura	Durable consumption	-0.0663617**
NDura	Non-durable consumption	-0.2829667
OIn	Other Investment	-0.436204
MigD	Migration Dummy	-18314.91***
Rem	Remittance	3.706997*
Cons		-6835.742

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

Independent variables which are giving high P- value less than 0.05 and 0.1, can be included to the regression equation as follows,

$$\begin{aligned} \text{InvT} = & -6835.742 + 6778.881\text{Edu}^{**} + 7835.633\text{NOFM}^{**} + 1.6452\text{InT}^{*} \\ & + (-0.0663617)\text{Dura}^{**} + (-18314.91) \text{MigD}^{***} + 3.706997\text{Rem}^{*} \\ & + (-7102.874) \text{NOC}^{***} \end{aligned}$$

The results of regression analysis shows that education level of household head, number of family members, income from tea land, durable consumption, migration of family members, remittance and number of children were the significant factors affecting on productive investment on tea land. Education Level of household head has a positive effect on productive investment for tea lands. Therefore having a profound sound education standard of household will lead to increase the productive investment. Numbers of family members have positive significant effect on the productive investment on tea land. It reveals that when the numbers of family members are increase, the productive investment on tea land will be increased. Income from tea land has positive significant effect on the productive investment on tea land. It explained that when income of the tea land is increased the productive investment also can be increased. Durable consumption has negative significant effect on the productive investment on tea land. It suggests that when increase durable consumption; productive investment on tea land will be decreased. There is a negative relationship between number of children and productive investment for tea land. It explained that when number of children is increased, productive investment on tea land will be decreased. Migration dummy variable has negative significant effect on the productive investment for tea land. It revealed that when labours migrate to another area out of farming, productive investment on tea land will be decreased. Even migration has negative impact on productive investment on tea land, remittance variable has positive significant effect on the productive investment on tea land. It reveals that when the possibility of remittance is increased, the productive investment on tea land will be increased.

## Conclusion

There is a significant impact of remittance gained by migrant on productive investment in tea land In Uva region among tea small holders. With increasing of remittance gained by migrants the productive investment in tea lands also increasing can be identified. My findings also imply that migrant remittances can compensate for the loss of labor in agricultural production from out migration of labours.

## References

- Adams, Richard H. 1989. Worker Remittances and Inequality in Rural Egypt. *Economic Development and Cultural Change*, 38(1): pp. 45 – 71.
- Chen, T. 2004. Migration, Consumption and investment: Evidence from rural China. New Orleans, Department of Economics, Tulane University.
- Rozelle S., Taylor J. D. & DeBrauw A. 1999. Migration, Remittances, and Agricultural Productive in China, *The American Economic Review*, 287- 291.