Factors Influencing the Replanting of Tea Small Holdings: A Case Study in Matara District

GG Bandula^{1*}, LM Abeywickrama², and Mangala De Zoysa²

- ¹ Tea Small Holdings Development Authority, Sri Lanka
- ² Faculty of Agriculture, University of Ruhuna, Sri Lanka

Abstract

It has been estimated that the economical harvest of tea can be obtained up to 20 years and thereafter it is recommended to replant, after rehabilitation of soil. However, the replanting rate is much lower (720 ha) than the expectation of estimated area of 134840 ha in the small holding sector in 2014. This study mainly focuses to identify the reasons behind the low interest for replanting of unproductive tea lands of tea small holders. Randomly selected 180 farmers from six DS divisions in Matara District were interviewed using a structured questionnaire. The Descriptive Statistical Tools were used to present the data while Chi-square test was used to find the associations between demographic variables and the interest of replanting. The study revealed that about 75% of the small holders mainly depend on the income from tea. More than 80% of the farmers were aware about the subsidy scheme and the procedures to follow to get subsidy while about 70% of the farmers were aware about the economic age of the tea bush and the requirement of renewal after 20 years. However, 88% of the farmer having plantations aged more than 20 did not wish to replant. Some farmers (17%) had replanted a part of their land using own money as they are not willing to keep the land a long period for soil rehabilitation. Also, 20% of the small holders were having less than 1/2 acre while about 50% were having less than one acre. The Chi-square analysis proved that there is a significant association between the holding size and the tendency for replanting. Small holder who having other reliable income sources such as government jobs showed more tendencies for replanting. Also Chi-square analysis showed a negative relationship between the desire of replanting and the age of the owner. It can be concluded that loss of income during the fallow period and consequent uncertainty were the main reason for low replanting rate. Therefore, the study suggests the importance of alternative economic creating crops for soil rehabilitation.

Key words: Tea small holdings, Rehabilitation, Replanting *Corresponding author: ggbandula@gmail.com

Introduction

Tea industry played an important role and still continues to occupy an important place in the economy of Sri Lanka even though relative contribution has declined in recent years. Tea utilizes large quantity of resources and provides relatively high return to the country. Tea uses larger area of wet zone arable land available for the agriculture. Sri Lanka produced 338 million kg of black tea in 2014, account about 6.5 percent of total world black tea production. Sri Lanka exports more than 90 percent of its production annually. Foreign export earnings amount about 15 percent of total export earnings that comprised 58 percent of agricultural export (Central Bank of Sri Lanka, 2014). Contribution of the tea sector to the GDP was 0.9 percent in 2014. Therefore tea sector in Sri Lanka is very important economically, socially and politically.

Tea small holdings sector owns 60 % of the total tea extent, mainly locate in the low grown areas in the island. About 62.1% of tea production comes from low grown areas, and almost 50 percent of total tea lands situated in that area. Districts of Galle, Matara, Ratnapura, Kalutara,

Kegalle and Hambantota belong to the Low Grown category.

Out of the total tea lands, over 75 % of the lands is less than 1 acre and over 95 % lands are less than two acres (THSDA, 2010, Palihakkara *et.al* 2015). Therefore it is necessary to pay much attention to small size tea lands in developing tea sector.

In the late 1950s Sri Lanka's national tea yield was the highest in the world (ADB, 2005). During 1960's too Sri Lanka's productivity remained at an attractive level with world standards. Other producing countries have acquired reasonable increase in their productivity compared to stagnated or slow growth of the production in Sri Lanka. Poor land productivity of Sri Lanka tea is attributed to both old vegetative stock and low agricultural standards. Land productivity among different tea growing areas and different producer groups are not similar due to many reasons. It is estimated that the economical harvest can be obtained up to 20 years of the plantation. When the tea plant reached to that age, bushes may die and some bushes tend to become weak and stagnant and reducing vegetative growth and that condition reduce the yield regularly.

The average yield of the small holding in Matara District also low compared to the potential and it is further declining due to several reasons. Therefore, the TSHDA has taken steps to increase the productivity of tea lands in the small holding sector by (A) Replanting ((B) Filling of vacancies, (C) Adapting good agricultural practices, (D) Improving the knowledge and skill and (E) Soft loan schemes for the farmers.

Therefore, this study focuses to identify the causes and reasons for the tea small holders reluctance or have less interest for replanting of their unproductive tea lands. Specific objectives were (1) to identify the factors influencing low interest for replanting (2) to identify the problems related to existing subsidy and (3) to give recommendations to the policy makers in order to develop mechanisms to promote the farmers for replanting.

Methodology

Matara District is purposively selected for the study as it contributes 43 million kg of made tea annually for the total tea production that is more than 13 % of the total tea production of the island. The District itself have more than 17% of the total tea small holdings. Matara District has about 19 % of the total tea extent in the tea small holdings sector in Sri Lanka (Palihakkara at al 2015-2).

Out of the 13 DS divisions, Pitabeddara, Kotapola, Akuressa, Athuraliya, Mulatiyana and Pasgoda are the main tea growing areas which contribute more than 90% of the total production and the extent. Also in other DS division's tea plantations in the small holding sector are comparatively new. Therefore, 30 farmers from each DS division were selected randomly, based on the list of tea small holders at the THSDA regional office to be the total sample size is 180 assuming that different categories of farmers may include in sample to represent the diversity of the population.

Personal interviews were conducted visiting the farmers' fields/homes using the structured questionnaire schedule for primary data. In addition to the sample survey, direct observations at the fields, and focus group discussions to verify some of the information were conducted. Secondary information were collected from the compiled sources of THSDA

and publications of Ministry of Agriculture, Department of Census and Statistics and the Central bank of Sri Lanka.

Descriptive statistical tools were used to present the data while Chi-square test was used to find the associations between demographic variables and the interest of replanting.

Results and Discussions

The study revealed that about 75% of the small holders were mainly dependent on the income from tea although about 55% of them had some other agricultural crops which are secondary. Also 75% of farmers mainly used their family labour while occasionally using hired labour for some of the activities such as pruning and fertilizing. Only a quarter of the growers depend on hired labour. About 84% of the farmers had contacts with the officers of the THSDA and Tea Board for the information and technical support. Rest of the sample (16%) obtained the technical know-how and the information from their colleagues and green leaf collectors of the villages.

It was revealed that 54% of the farmers in the sample had received subsidies in the past at least once. Majority of the farmers stated that although the subsidy scheme is accessible and convenient, the subsidy is not sufficient to motivate them with the increasing prices of labour, tea plants of recommended varieties, and other inputs. Table 1 gives the reasons stated by the farmers for not going for replanting although their plantations are old and not productive.

It was revealed that some of the farmers (17%) had replanted a part of their land using own money without applying for subsidy or willing to apply for the subsidy as they do not wish to keep the land a long period for soil rehabilitation.

Next question was why the farmer does not go to replant at least a part of the land while maintaining a part of the old plantation for income. It was revealed that 20% of the small holder were having less than ½ acre while about 50% owned less than one acre. Therefore a part of the small block was not sufficient to cater their requirement for a long period of about three years. The Chi-square analysis proved that there is a significant association between the holding size and the tendency for replanting. At the same time, the Chi-square analysis proved that the small holder having other reliable income sources such as government jobs were had more tendency for replanting compared

Table 1: Views of the farmers about the reasons for not going to apply for subsidy scheme for replanting

| Reasons for not replanting through subsidy | | Suggestions proposed by the farmers | |
|-----------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------|--------------|
| Reasons | % of farmers | Suggestions | % of farmers |
| Difficult to get subsidy | 12 | Increasing the subsidy rate | 78 |
| It takes long procedure for subsidy | 46 | Providing easy and low interest soft loans to recover the loss during the transition | 67 |
| Subsidy amount is not sufficient | 57 | Reducing the soil rehabilitation period or finding other alternatives | 56 |
| Soil rehabilitation period is too long | 54 | Increasing the awareness about the importance of rehabilitation and consequent problems | 71% |
| Inefficiency of the staff and officers of the subsidy scheme | 17. | Introducing economic crop for soil rehabilitation | 62 |

to the full time tea growers. Also Chi-square analysis shows a negative relationship between the desire of replanting and the age of the owner of the plantation, implying old people were not willing to spend a difficult period without having income as they have no alternatives compared to young generation. However, there were no significant association between the tendency for replanting and the education level of the growers or experience of the small holders about tea cultivation.

Conclusions

It can be concluded that out of the several reasons for low rate of replanting small holding sector, loss of income during the fallow period and consequent uncertainty were the most important. The issue was found to be critical, especially for the holdings having less than one acre and also for the people who are entirely depend on tea income. Therefore, the study suggests to find alternative economic generating soil rehabilitation instead of crops for uneconomical grasses. Some of the possible crops may be sugarcane, grasses such as CO3 which can be used for animal feedings. The findings of the study emphasized requirement of reviewing the rehabilitation mechanism of tea small holdings as the rate of rehabilitation is far below the required rate.

References

Asian Development Bank (2005), Census of Tea Small Holdings in Sri Lanka, Department of Census and Statistics in collaboration with tea Small Holdings Development Authority, Sri Lanka

Central Bank of Sri Lanka, (2014), Annual Reports, Colombo, Sri Lanka.

Tea Small Holdings Development Authority (2010) Annual report

Palihakkara, I.R., Mohammed, A.J., Inoue, M (20151), Current livelihood condition of and futurity of tea farming for Marginal Small Tea Farm Holders (MSTH) of Sri Lanka: Case study from Badulla and Matara Districts, Environment and Natural Resources Research V5 (1) 11-21. http://dx.doi.org/10.5539/enrr.v5n1p11

Palihakkara, I.R., Mohammed, A.J, Shivakoti,G.P,Inoue,M (2015-2), Prospect of Fuel wood plantations for marginal small tea farmers: A case study in Matara and Badulla Districts, Sri Lanka. Natural Resources, 6, 566 - 576. http://dx.doi.org/10.4236/nr.2015.612054