LABOUR FORCE IN THE SMALL TEA HOLDINGS:  
A CASE STUDY OF RATNAPURA AND KOTAPOLA  
DIVISIONAL SECTARIATS IN SRI LANKA

A.S. Chandrabose  
Department of Social Studies

The small tea holdings sectors are playing a major role in the economy of Sri Lanka. The sectors constitute roughly 44 per cent of the total tea land and contribute around 45 per cent of the total tea production in the country. The large quantity tea from the smallholdings is exporting to the Middles East countries and fetching the highest the highest price in the international market in recent years. The yield rate of the small tea holdings is comparatively higher and indicated 2056 kilograms per hectare and it is the all time national record in 2000 in Sri Lanka.

However, shortage of labour for small tea holdings is a serious problem that particularly exists in the tea-producing region of low elevation in Sri Lanka. The previous annual reports of Tea Small Holdings Development Authority and the authors (C.S.Weeratne, 1987:7 and J.B. Kelegama, 1995:75) also reveal the critical nature of this issue. This paper examines the level of labour requirement and confers a comprehensive picture of accessibility of labour force in the small tea holdings in Sri Lanka. The Divisional Secretariats of Ratnapura and Kotapola in the tea region of low elevation (TRLE) have been especially selected for the study. Using stratified sampling techniques selected a total of 42 households representing 24 from Ratnapura and 18 from Kotapola. The total population covered in this study is 192.

The paper is organised into two parts. Part I deals a broad aspect of small tea holdings and availability and utilisation of labour are discussed with empirical evidence in part II.
Small tea holdings are privately owned tea estates in Sri Lanka. It has the total land area of around 39,152 hectares, and it is 16 per cent of the total tea land in Sri Lanka in 1965. It has increased into 43,239 hectares within a span of three decades, recording a rate of increase of 110 per cent between 1960s and 1990s. The number of holdings also increased from a total number of 76,000 in 1965 to around 200,000 in 2000. It should be noted that currently, the small tea holding sector has become the prime economic activity in the southern region of Sri Lanka. At present, the small tea holdings in TRLE alone account for 159,664.

Around 54 per cent of small tea holdings are in the TRLE in Sri Lanka. The tea region of high elevation (TRHE) and the tea region of mid elevation (TRME) consists about 14 per cent and 32 per cent respectively. Approximately, 65 per cent of privately owned small tea holdings in the TRLE are less than 1-acre in size. The expansion of small tea holdings accelerated particularly after the nationalization of tea Plantation Company under the land reform during 1972-75. Currently marginal rubber lands are also converting into small tea holdings in this area. There are quite number of institutions such as the establishment of Tea Small Holding Development Authority (TSHDA) and Tea Shakthi are engaged in the development of the small tea holdings. These institutes offer subsidies for fertilisers, replanting with high yielding varieties, transport of green leaf, appropriate price for the green leaf etc. with the financial support from ADB in recent years.

The 'Tea Shakthi' scheme, which covers insurance, savings and investment and pension benefits for the small tea holders. The 1998 budgetary allocation of Rs. 200 million for the scheme was completely utilised for upgrading the transport network and for purchasing machines for the factories. The target was to establish 21 tea factories in selected locations for the benefit of the growers. The small tea growers were also provided with credit facilities to purchase necessary inputs under the "Development Fund". A productivity improvement programme was also implemented in order to increase the average yield per hectare to 2,300 kilograms in the year of 2002 in Sri Lanka.
Earlier policy makers and researchers assumed that tea could be grown economically and efficiently only on large-scale plantations, whereas later studies tend to suggest that no obvious economies of scale exist to give superiority to large estates over smaller ones. This analysis further implies that the location factor along with other inputs would be significant parameters in determining optimum size of an estate and its productivity level. Economists (Ben Crow and Mary Thorpe, 1988) suggest that small estate can be more efficient if given proper institutional support. The Kenya Tea Development Authority (KTDA), which was established as a parasol agency in the early 1960s, assists in producing, processing, marketing and financing the tea small holders. The KTDA is recognised internationally as one doing the most successful smallholder operation. The TSHDA of Sri Lanka is modelled after the KTDA.

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The sample represents different size of small tea holdings in the selected Divisional Sectariats (DSs) in the country. The small tea holders who have less than one acre under tea is (category 1) constitute 45.83 per cent in Ratnapura, while it is 50 per cent in Kotapola. Twenty perches is the lowest size of small tea land existing in these DSs and it has put it along with category of less than \(\frac{1}{4}\) acre (20 perches land is equivalent to 1/8 acre). The persons who posses above 1 acre to less than 3 acre (category 2) in the selected areas of Ratnapura and Kotapola have 33 per cent and 27 per cent respectively in the sample. The extension of land above 4 acres and less than 11 acres (category 3) have constitutes 22 per cent in Ratnapura and 23 per cent in Kotapola.

Existing of high yielding variety (HYV) of tea bushes, an important aspect of small tea holdings, is also one of the important characteristics, which guarantees not only considerable amount of yield and quality but also higher demand for labour force. It should be noted that the selected sample have both the verities of TRI 2023 is a kind of more yield but
vulnerable to drought and the TRI 2025 which is relatively low yield but drought resistant.

The sample small tea holders do not have facilities to convert plucked tea into consumable tea. The role of small holders ends with selling 'green leaves' to the private factories (known as bought leaf factories) for manufacturing and marketing. The middlemen play pivotal role in determining price and demand. In the sample, people who have one acre in size are able to produce around 900 kilograms of green leaf per month (it is equal to 225 kilograms of made tea) and have the net income of Rs.15, 000 per month. The categories of 2 and 3 are able to earn higher than the below categories. The small tea holders, however, earn more than Rs.15,000 as net income from tea are very few. In contrast, the net income of the people who have the extension of tea land less than ½ acre are producing an average of 160 kilograms of 'green leaf' and earning only around Rs.3, 750 per month and it is constitute 16.66 per cent (7 families) in the sample. Of course, they engage in a range of activities to supplement the income. The tree crops like coconut, arecanut, jack fruit and spices like pepper and cloves are grown in their field, and this gives substantial income to them.

The labour force was computed by excluding the children who were below 14 years of age and children who were above 14 years of age and still attending school. Adults who were over 55 years of age but were taking part in cultivation have been included in the labour force of this study.

A total labour force in the sample is 95, and they constitute roughly 49 per cent of the total population. One major observation that we found in this study is the role of employed category in the sample. The entire labour forces are not directly employed in the small tea holding sector. Only 65.25 per cent of the labour force (62) is participating in the tea estate work.

The distribution of land is also a major factor, which determines the utilisation of different categories of labour in the sector. For instance,
persons who (category 1) have less than 1 acre of land generally depend on family members who could work. The next category (category 2) has more than 1 acre employs hired labour along with their family labour. The third category with higher acreage wholly depends on hired labour.

The demand and supply of labour force is calculated here in order to analyse the situation of labour in the small tea holdings in these two countries. The total area under small tea holding in our sample is 85 acres. If we assume that standard requirement is 1:1 (land-man ratio) then the total number of labour required is 85. In the case of our sample, when the demand stands at 85 persons, the supply is only 54. Thus according to our assumption, the shortage is 31 labourers (the total acre of 85 is subtracted by the total number of employees) seem to prevail in the sample.

As we mentioned earlier, the size of the individual holdings of tea land is the determining factor in the choice of labour force. Nine families have fallen under this category. Their major operation is of plucking tea leaves and it will take place only four to five times in a month. Plucking of tea leaves is generally performed by adult family members. In some cases the elderly persons and children also participate. An average of 45-50 kilogram of tea leaves can be plucked from a well-maintained VP tea plot of ½ acre in a week (every six or seven days circle).

In general, though the plucking of tea leaves is done by the family members of most of the small tea holders, hired labour is widely used for the application of fertilisers and pruning, which is considered as a skilled job to be done by trained males. The requirement of hired labour is essential for the application of fertiliser, needed two or three times in a year. Pruning is done once in every four to five years. Moreover, the use of family labour for cultivation depends on a multitude of factors such as size of the family, its age structure, sex composition, opportunity cost of the family members, etc. The negative aspects of these factors affect the contribution of the small tea holdings, particularly observed in the sample.
The available data tends to reveal that most of the small tea holdings rely, to a significant extent, on hired labour. In general, the proportion of hired labour in total labour requirement increases along with the size of holdings. As mentioned already, the holdings with half to three acres rely on family labour and their labour is supplemented by hired labour, while those with more than 3 acre depend almost exclusively on hired labour in Sri Lanka.

The distribution of family labour supplemented by hired labour is influenced by a complex set of factors. Obviously, the primary factor affecting this distribution is the size of the tea land. Availability of jobs outside the tea sector, educational attainment and the wage rates for hired work are the other factors contributing to the involvement of hired labour in the small tea holding sector in both the countries.

A tea holder who has around one acre of tea land is able to harvest 100-125 kilograms of 'green tea leaves' in a given round and it requires 3 persons for plucking and transporting the leaves. It has been generally observed that at least one family member and 2 hired workers are involved in this process.

It is often found in TRLE in Sri Lanka that the female labour is used for plucking, irrespective of whether it is family or hired labour. The males, both hired workers and family members, are reluctant to engage themselves in plucking tea leaves in TRLE. Therefore, those families whose labour force does not consist of adequate number of female labour resort to hired labour for plucking. Another reason for using hired labour for plucking is that it has to finish within a certain period of time before tea leaves become too matured for plucking. Thus, stretching the available family female labour over a number of days for plucking is not possible.

As far as hired male workers are concerned, they are widely used for weeding and manuring, in the sample area. It has been observed that small tea holders show a strong preference for males for this activity when labour is hired. The demand for hired labour for weeding is influenced to
a significant extent by the farm-gate price of green leaf. When farm-gate price is lower, the demand for hired labour for weeding tends to be low. It appears that when leaf prices drop, the first cut in their farm budget is made on hiring labour for weeding.

As we mentioned before, apart from the size of small tea holdings, the engagement of family members in out-side jobs is also a major reason to provide opportunity for hired labour. The family members of the small tea holding, who are engaged in out-side work are willing to act only as farm managers. None of our sample of small tea holders operate the ‘bought leaf’ factory in Sri Lanka. Out of the sample for Sri Lanka, 35 families depend partially on hired labour in TRLE in Sri Lanka while three families completely depend on hired labour. In the sample, 36.66 per cent are engaged in service sector, 30 per cent are work as agents of ‘green leaf’ and actively participate in the ‘Tea Shakthi’ programme. Around 23 per cent are merchants.

Another factor that influences the demand for hired labour is the wage rate. The daily wage of the small tea holdings is double the wage rates of the large-scale tea estates, which is very closer to the small tea holdings in the sample. As we mentioned before, the minimum daily wage for the tea workers in the large-scale tea estate is Rs.125 (including the allowances), while it is around Rs.225 per day along with one meal in the small tea holding sector in these area. However, a considerable number of large scale tea estates in the tea region of mid elevation allows the workers to move towards small tea holding in the country.

However, the small tea holders like to get labourers with experience from the large-scale estates to do the jobs at their gardens. Therefore, the small tea holders are prepared to pay more than the daily wage rate, paid by the large-scale tea estates to attract the labour from the estates. Therefore, the small tea holders in TRLE are able to get sufficient number of workers for their task. It should be noted that the source of hired labour for small tea holdings are not only from the large-scale tea estates, but also the resident workers of the small tea holders who have an average holding of more than 10 acres. The small tea holders who have
more than 10 acres keep 3 to 5 families as permanent labourers for their
tasks and also allow them to work in other estates. Some private tea
estates in TRLE engage 80 to 100 families of workers for the operations of
tea and rubber cultivation. Of course, the rubber estate workers are
largely migrating to small tea holdings, because they do not obtain regular
work in the rubber plantations. The demand for hired labour is also
linked to the availability of credit facilities and the access of the small tea
holders to such facilities.

In terms of educational attainment, the only significant difference
that could be observed was about the percentage of illiterates. The
illiterates constituted 18.91 per cent in the sample. The persons who are
in the category of illiterates are largely the family labour and particularly
the females. The persons who obtained secondary education constitute
around 40 per cent of the total sample. Despite low literacy, the education
facilities for the children of workers are better in the sample. The strength
of post secondary educated (tertiary educated) is also high among the
sample. The number of persons who acquired tertiary education is
recorded at a high level i.e., 13.53 per cent, and it is highest in the
sample. The turn-out of educated persons in the family of small tea
holders in both the countries is to go outside the tea sector and to opt for
better employment. This is also true in case of the educated in the
families of hired workers in these countries. Therefore, the reluctance of
younger generation for the manual work or petty jobs in small tea
holdings will be major obstacle faced in these countries. It is obvious that
the educated children of tea workers are aware of their future prospects
and are able to make their choice.

The availability of family labour does not match with the availability
of job opportunities in the sample. Moreover, factors like the engagement
in out side jobs, the educational attainment, etc, determine the supply of
hired labour for the small tea holdings in the sample. Therefore, the
hypothesis that the availability of opportunities for hired labour are
greater than family labour in the sample tea holdings of Sri Lanka holds
ture and it is affirmed by the present study.