Characteristics and Form of Accounting of Plantation Smallholdings in Sri Lanka

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I Introduction

The plantation industry of Sri Lanka is associated with commercial crops such as tea, rubber and coconut. The main characteristic of the plantation industry is that it produces a wide variety of perennial crops. The major plantation crops have occupied a considerable portion of the island’s land area (tea 7.2%, rubber 7.1% and coconut 10.8% in 1995 [Central Bank of Sri Lanka, 1995]). As a whole, the Plantation sector contributed over 25% of total agricultural production to the GDP of the country (Ministry of Finance and Planning, 1995). Further, the sector contributed significantly to total export income with the main crops, tea, rubber and coconut, having shares of 58.0%, 13.4% and 12.4%, respectively in agricultural export earnings (agricultural export income accounted for 22.4% of total export income) in 1995 (Ministry of Finance and Planning, 1995).

The plantation sector consists of smallholdings and estates. Land extent is the criterion that distinguishes smallholdings from the estates. Tea and rubber plantations with land extent of ten acres or below and coconut plantations of twenty acres or below are defined as smallholdings (Ministry of Plantation Industries, 1995). In 1992, tea smallholdings occupied 28% of total tea lands while rubber and coconut smallholdings occupied 67% and 75% from respective lands (Ministry of Plantation and Industries, 1995).

Plantation smallholdings manage to maintain a lower cost of production because they utilize own labour and part time workers at relatively lower wage rates. In 1992, the average cost of production of rubber in plantation smallholdings was 38% lower than the estates (Ministry of Plantation Industries, 1995).

II Problem of the Plantation Smallholding Sector

 Compared to the company managed estate sector, the management efficiency in the plantation smallholding sector was at a lower level (Note: The government owned portion of the estate sector was not included in the comparison because the objectives of government organizations are different). In the tea industry in particular, lower management efficiency is evidenced by lower yields per hectare. The average tea yield per hectare of company managed estate sector was 960 kilograms when it was 928 in plantation smallholding sector (Ministry of Plantation Industries, 1993).

The government of Sri Lanka assists smallholders by providing consulting, subsidy and marketing facilities. However, these supports have not been extended to improve the management skills. They manage the plantations without any learned or trained managerial skill. There is an urgent need for smallholdings to have this deficiency remedied in order to improve their profitability, productivity and efficiency. To improve the management skills in making decisions, accounting records can be extremely useful. The data retrieved through an accounting system informs a plantation smallholding or a family farm about its operational performances and contributes to make more effective decisions.

III Field Study

1. Objective

The objective of the field study was, to identify the characteristics that are unique to the plantation smallholdings in Sri Lanka for a better understanding of their farm management and accounting practices as a background to create a suitable accounting system for plantation smallholdings.
2. Location
The field survey was conducted in the Central Province, one of the nine provinces of Sri Lanka. In selecting the province for the sample, the distribution of plantation crops over the entire island was considered. Value added of tea by this province was 3,182 million rupees while it was 45 million rupees by rubber and 309 million rupees by coconut plantations to total value (Ministry of Finance and Planning, 1995).

3. Methodology
The sample was chosen based on the multiple stage sampling method and encompassed 70 plantation smallholdings. The plantation smallholding families do not concentrate production in only one crop as the estate sector. They may grow tea in one land parcel while rubber in another, or pepper with the same tea crop as a mixture. Land extent limits for a particular crop distinguishes smallholdings from the estate sector. Plantation smallholders may hold many crops at the same time but the extent limits are applied only for individual crops. Therefore, for the sample, data of plantation smallholdings was collected concentrating in one crop, tea.

In the first stage, the smallholdings were distributed proportionately among the three districts in the province (Table 1). In the second stage, there was a further proportional distribution among the Divisional Secretary Divisions. At this stage, whoever agreed to answer the questionnaire was selected for the sample considering the difficulty of making a smallholder to answer the questions.

Table 1 Outline of the smallholding respondents, 1995

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of smallholdings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample</td>
</tr>
<tr>
<td>Central Province</td>
<td>70</td>
</tr>
<tr>
<td>Kandy district</td>
<td>40,389</td>
</tr>
<tr>
<td>Nuwara Eliya district</td>
<td>13,032</td>
</tr>
<tr>
<td>Matale district</td>
<td>1,631</td>
</tr>
<tr>
<td>Average farm size (acres)</td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>18</td>
</tr>
<tr>
<td>2-4</td>
<td>14</td>
</tr>
<tr>
<td>4-6</td>
<td>16</td>
</tr>
<tr>
<td>6-8</td>
<td>5</td>
</tr>
<tr>
<td>8-10</td>
<td>6</td>
</tr>
<tr>
<td>10 or more</td>
<td>11</td>
</tr>
<tr>
<td>Labour use</td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>5</td>
</tr>
<tr>
<td>Hired</td>
<td>34</td>
</tr>
<tr>
<td>Both own and hired</td>
<td>31</td>
</tr>
<tr>
<td>Income sources</td>
<td></td>
</tr>
<tr>
<td>Plantation only</td>
<td>9</td>
</tr>
<tr>
<td>Others</td>
<td>61</td>
</tr>
</tbody>
</table>
Rk group: Record keeping group

However, in case of Kandy, to which district that, near 3/4 of plantation smallholdings in the province belonged, the number of plantation smallholdings was scattered between Grama Sevaka (village officer) sections before finding optional respondents on the number of smallholdings considering the large number of potential respondents in this district.

The selected smallholders were questioned directly. The smallholdings that have kept any record that can be considered as accounting data were grouped as a ‘Record Keeping Group’. Those within this group who agreed to give details about their record keeping practices were interviewed in detailed.

4. Limitations
None of the plantation smallholdings wanted to reveal financial information. Even though, 21% of the sample had kept records, only 33% of this group consented to give details. These details, however, excluded figures on income, expenditure, assets and liabilities.

IV General Characteristics of Plantation Smallholdings

1. Ownership of Lands
The field survey indicated that all the smallholdings cultivated at least one land parcel that they owned themselves. There were some leased and encroached lands cultivated with plantation crops, but the number and the quantity were negligible.

2. Relationship of Labour use to Land Extent
According to the data gathered through the field survey, plantation smallholdings of Sri Lanka are not 'own labour oriented' but mostly depend on the hired labour (Table-1). However, there was no observed relationship between the land extent and hired labour. Hired labour dependency of the smallholdings that belonged to the smallest land extent category, was 14% while only 6% were depended on own labour.

3. Financing Sources
Most of the smallholders (71%) used off-farm income as one of the funding sources of plantation. 56% of them used subsidies and 13% used bank loans as funding sources.
4. Income Sources
The income sources of plantation smallholdings were varied. The percentage of the smallholdings that depend only on the plantation was 13% (Table-1).

5. Educational Level
The level of education of the plantation smallholdings is very important to infer whether they had an adequate level of knowledge to carry out record keeping. The field survey revealed the education level of the people that falls into the age range of 18 to 60 years was at a satisfactory level. 92% of smallholders graduated junior school while 80% of them graduated senior school or a higher level. All smallholders had enrolled in advisory training programmes but these were limited only to develop the technology.

6. Consumption of Own Products
The consumption rate of the crops produced by smallholdings was considerably low. However, it is caused by the type of crop they produce. Crops like tea cannot be consumed without being processed. The smallholding cannot consume the crops such as rubber because they are merely industrial raw materials. Coconut can be, and is consumed but the quantity is negligible when compared to the yield of coconut.

V Record Keeping Practices of Plantation Smallholdings

The characteristics and practices of record keeping in the smallholdings can be categorized into two groups considering their nature. These are motives for record keeping and record keeping practices.

1. Motives for Record Keeping
(1) Land Extent
There was a clear relationship between the land extent and record keeping (Fig-1). The larger the land extent, the higher the record keeping level. 47% of the smallholdings that kept accounting records were in the group cultivating ten or more acres of land area.

(2) Tax
The survey revealed that the taxpayers are more interested in keeping records than non-taxpayers (Fig-2). 33% of the record-keeping group (the smallholders who keep records) were taxpayers and this accounted for 9% of all smallholdings who paid tax.

(3) Education
There was an apparent relationship of education with record keeping at the lower educational levels. None of the smallholders educated below junior school kept records. When the education level increased up to junior school, 1% of them kept records. Maximum record keeping educational level, 11%, was at high school educational level.

(4) Others
The field survey analyzed the other factors that may motivate record keeping of plantation smallholdings. However, no relationship between bank loans, subsidies, hired labour or other business with record keeping was evident. Only 3% of bank loan receivers kept accounts. 55% of smallholdings obtained subsidies but only 11% kept records. The study revealed the absence of relationship between hired labour and record keeping.
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2. Record keeping practices

(1) Structure of the Record Keeping Group
Type of accounting used by record-keeping group was analyzed in order to categorize them among cash flow, single entry and double entry accounting (Fig-3). The study determined that a 33% of the record keeping group had kept records only of cash flows. 47% had kept single entry accounts while 20% of the record keeping group had managed to keep double entry accounts. However, none of the smallholders kept proper records of each accounting system according to accepted accounting practices.

(2) Tax and Accounting System
The study revealed that the taxpayers made an effort to keep double entry accounts (Fig-4). All of the smallholdings that kept double entry accounts were taxpayers.

VI Conclusions

Land extent and tax encourage the smallholdings to keep accounting records. This implies that the smallholdings with higher income tend to keep accounts more than those with lower income. Further, the information retrieved through the survey concluded that the educational level of smallholders was related with the tendency to keep accounting records. 82% of working people of smallholdings have graduated senior school or a higher level and this indicates that the level of education is adequate to adopt an accounting record keeping system in the smallholding sector.

The study revealed that the accepted practice of each accounting system was not followed by smallholding and records were incomplete. Incomplete records reduce their usefulness. However, according to the sample survey, smallholdings tend to use less complex accounting systems but not proper double entries based on the Generally Accepted Accounting Principles. Therefore, an accounting system that provides all the required data for decision making but easy to adopt is required in plantation smallholding sector.

References