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Social Development and Labour Productivity: The Problem and a Solution for the Tea Plantation Sector of Sri Lanka

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Abstract

The critical bi-directional causality between social development of tea estate workers and their productivity has created a chronic vicious cycle, requiring a sustainable solution incorporating all the beneficiaries of this sector. The objective of this study is to evaluate the suitability and applicability of small-scale contract farming (CF) system as a sustainable solution for the labour related problems in tea plantations in Sri Lanka. In achieving this objective, a conceptual justification to the solution has been established based on the empirical findings from the existing labour management system in tea plantations. Questionnaire based interviews were conducted with both the management and the estate workers in selected Regional Plantation Companies (RPCs). Study findings reveal that poor socio-economic condition of workers, traditional work norms, lack of cooperativeness between workers and management, and management responsibility towards stockholders have adversely affected the labour productivity. Conclusively, we suggest that small-scale CF system would be a sustainable solution for these problems as it is attributed with equity, efficiency and empowerment tools which are significant but lacking in the existing system.

Keywords: Contract farming, Labour productivity, Regional plantation companies, Social development, Tea estate workers

1. Introduction

Tea plantation sector of Sri Lanka has been in stakeholder dialogues in the recent past due to its economic and social importance. Economically, this sector makes a significant contribution to the economy of Sri Lanka in terms of employment generation and foreign exchange earnings. This sector is socially important as these resident workers have been geographically and socially isolated from the other sectors of the economy for over 150 years (Jayawardena, 1984). These resident workers emigrated from South India in the late nineteenth century and have been categorized as a separate social entity known as 'estate population' characterized by a unique set of attributes based on their

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culture and socio-economic conditions. According to Lahiri (2000), migrant nature of the labour, and social divisions have contributed to the economic and social exclusion of the plantation labourers.

The government of Sri Lanka privatized the management of state owned plantations in 1992 by clustering the estates into twenty three Regional Plantation Companies (RPCs) in order to overcome the prevailing inefficiencies in production and labour management. Although, the RPCs were fully privatized in 1995, the labour problem of the sector remained unresolved (Wickramasinghe & Cameron, 2003). The labour problem has been caused mainly due to the social obligations related to the social well-being of resident estate workers, not being sufficiently addressed by the labour policies and practices of RPCs. Wickramasinghe and Cameron (2003) state that the profitability of tea plantations can be raised through improved productivity and, labour productivity can be raised through superior management policies and practices. However, the management of RPCs repeatedly stressed concerns regarding high labour cost and low labour productivity in their tea plantations, which seem to be destructive to the future growth of the Sri Lankan tea industry. This situation indicates the need for an immediate solution to uplift the social well-being of tea estate workers and to improve their performance level. On the other hand, agricultural productivity is an important determinant of poverty, and it has the potential to lift a large number of individuals out of poverty (Irz, Lin, Thirtle, & Wiggins, 2001).

Since the early 1990s the contribution from the tea small holdings sector towards the national tea output has been increasing while the contribution from the plantation sector has been fluctuating with a downward trend. Comparative performance indicators of each sector clearly show that the productivity of the plantation sector is worse than that of the small holdings sector. Table 1 explains the variation of the performance of the tea industry from 2004 to 2012. This data undoubtedly indicate the poor performance of RPCs in the past nine years with 30 % average contribution to the total green leaf production.

There have been several reasons behind this poor productivity of RPCs within this period such as, adverse weather conditions and, low land and labour productivity. As revealed by the study, the land and labour productivity impacts have been considerable in this context since changes in weather changes have caused only minor damages. The reason for the low land productivity is the low replanting rate maintained by the RPCs. RPCs are reluctant to invest on replanting since there is a risk regarding future returns due to two main reasons. First is the prevailing problem of low labour productivity and high labour cost. Second is the probable low labour participation in tea estate sector in the future due to labour force out-migration. Hence, the present and future labour productivity issue of RPCs is of foremost importance. Unless RPCs or state authorities implement an immediate and effective modification in this sector, probably there will be an economic loss for the whole nation, since the Sri Lankan tea industry accounts for 16 % of the economy's foreign exchange earnings. Moreover, the collapse of the tea plantation sector will adversely affect the estate population of around one million who depend on the income earned by providing their labour.

Table 1: Tea Industry Performance (2004 – 2012)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
RPC production (Mn. kg) & contribution	99.9 32.3%	106.0 33.4%	93.7 30.1%	94.1 30.9%	98.3 30.8%	84.7 29.1%	96.9 29.2%	94.4 28.8%	90.2 27.5%
Estate sector land extent	49.9%	45%	45.3%	43.2%	43.5%	42.5%	41.1%	41.5%	40.4%
Smallholders' production (Mn. kg) & contribution	203.0 65.6%	205.8 64.9%	212.4 68.3%	205.7 67.5%	214.8 67.4%	201.9 69.4%	230.1 69.4%	229.0 69.9%	234.2 71.3%
Smallholdings sector land extent	50.1%	55.0%	54.7%	56.8%	56.5%	57.5%	58.9%	58.5%	59.6%

Source: Adapted from the Statistical Information on Plantation Crops – 2012, Ministry of Plantation Industries, Sri Lanka.

Notes: 1) Remaining contribution to the output is by state owned plantations which is 1% - 2%

2) Tea lands of state plantations are included in the land extent of estate sector.

Table 2 highlights the prevailing socio-economic conditions of the estate sector population compared to the other two sectors (urban and rural) of the economy. This data proves that the living conditions of the estate population are well-below the conditions attained even by the rural population. Further, the low household income of the estate population has resulted in low level of education, health and nutrition, and housing which in turn affect the workers' productivity level adversely.

Table 2: Selected Socio-Economic Indicators of Sri Lanka

	Sri Lanka	Estate	Rural	Urban
Population (Mn)	19.9	0.9	15.4	3.6
Household size	3.9	4.3	3.8	4.0
No. of income receivers per household	1.8	2.1	1.7	1.8
Mean household income / month (USD)	358.4	236.1	324.0	545.9
Education (No schooling %)	3.7	12.2	3.5	2.2
Level of education of head of household (% up to Grade 5)	23.2	47.8	24.1	12.9
Housing % (Floor area 100 – 250 sq. ft.)	11.1	33.0	10.7	7.8
Gini coefficient	0.48	0.39	0.45	0.51
Poverty (Head Count Index)	6.7%	10.9%	7.6%	2.1%

Source: Adapted from Household Income and Expenditure Survey – 2012/2013, Department of Census and Statistics, Sri Lanka.

Notes: 1) The mean house hold income is calculated at Average exchange rate for 2012, USD 1 = LKR 128

Estate sector performs the worst in terms of all the selected socio-economic indicators such as mean household income, housing and educational attainment except for income inequality which is represented by the Gini coefficient. Being the community with the least income inequality among all the sectors cannot be considered as an indication of good living standards, because the equalization of income distribution does not necessarily indicate an improvement in living conditions of the poor (Ikemoto, 1992). Although, more income earners (2.1 per household) are there in estate sector households, unequal and unfair distribution is apparent when comparing the mean household income and household size with other sectors. This has become an obstacle for estate workers to access quality education, health and nutrition, and housing facilities. With 47.8% of heads of estate households having only five years of school education and with 12.2% of the estate population being categorized as having 'no education', creates complications in domestic well-being. Low quality housing with inadequate space has been another indicator of unfair distribution of assets towards the estate community. This also creates health problems, and social and psychological unrest which ultimately affects their level of participation and performance.

Grounded on this context of the requirement of improving socio-economic conditions and labour productivity of tea estate workers, the objective of this study is to provide a conceptual justification for small-scale contract farming (CF) system as a sustainable solution to the overwhelming problems in social development and labour productivity in the tea plantation sector in Sri Lanka. In achieving this objective, we initially identified the problem areas in the existing tea plantation management system through an empirical investigation. The findings of this investigation paved way for the conceptual justification of the proposed solution.

Accordingly, the paper begins with an extensive comparison of the recent performance of RPCs with the tea smallholdings sector and, the prevailing socio-economic condition of resident estate workers of RPCs as compared to other sectors. The succeeding section reveals the methods used in this study. This section is followed by the findings of the study undertaken and the discussion in which the contract farming (CF) system is evaluated as a solution to the problems in the tea plantation sector. In this discussion we have theoretically explained whether the CF system is a viable and a sustainable solution for the issues identified in the empirical study.

2. Literature Review

According to the International Labour Organization (2002), worker productivity and efficiency in tea plantations are crucial in the determination of output per worker per day, cost of production, profitability, quality of tea, and volume of production. Economic variables such as investment in new technology and innovation alone do not fully explain differences in the levels of productivity (Sharpe, 2004) pointing out that education, health and social divergence as social determinants of productivity. Ability of getting these satisfied would probably motivate any kind of worker and thus improve his or her productive capacity (Khan, Shaw, & Hussain, 1991; Gopaldas & Gujral, 2002). Therefore, the firm's investment on developing employees' skills and welfare is essential as it enhances their abilities and satisfaction level and creates a productive workforce (Koch & McGrath, 1996; Patterson, Warr, & West, 2004).

Unlike the changes within the agriculture sector in developed countries, the Sri Lankan tea sector has changed from one dominated by vertically integrated plantations to one where independent processors of black tea purchase their input (green leaf tea) from small, independent growers. The shift towards increased participation by small farmers in the supply chain can be explained by changes in transaction, production and management costs that have altered the relative benefits of the, 'make

versus buy' decision for green leaf tea. These efficiency outcomes of small farmers' participation have motivated the large scale planters to shift toward an out-grower system thereby minimizing their participation in growing activities (Herath & Weersink, 2009).

Contract farming is one of the most debated institutional arrangement of out-grower systems for production and marketing of agricultural commodities in developing countries (Oya, 2012). Contract farming refers to a system where the processing firm purchases the harvest of individual farmers and the terms of purchase are pre-arranged through contracts. The exact nature of these terms vary considerably from case to case (Glover, 1984). In this system local farmers supply the harvest while the firm retains the responsibility for technical assistance and marketing. According to Food and Agriculture Organization [FAO] (2001), the intensity of the contractual arrangement varies according to the depth and complexity of the provisions in three areas;

- i. Market provision (grower and buyer agree on terms and conditions for the future sale and purchase of the harvest),
- ii. Resource provision (in conjunction with the marketing arrangements, the buyer agrees to supply selected inputs, including, on occasion land preparation and technical advice) and ,
- iii. Management specifications (grower agrees to follow recommended production methods, input regimes, and cultivation and harvesting specifications).

Contract farming has been a component of most successful income-generating projects for smallholders (Glover, 1987; Kirsten & Sartorius, 2002; Singh, 2002; Barrett et al., 2012; Bellemare, 2012). Warning and Key (2002) have concluded based on their study on contract farming in Senegal that, this system significantly increases the incomes of contract farmers. They have found that the higher income not only raises the standard of living of growers, but may also create positive multiplier effects for employment, infrastructure, and economic growth in the region. Miyata, Minot and Hu. (2009) have concluded in their study in China that three-quarters of contract farmers have experienced an increase in their income since they began contract farming. As a successful case, small-scale tea growers in Kenya have achieved incomes above the Kenyan average through contract farming (Glover, 1984). Morrison, Murray and Ngidang (2006) have identified in their study on contract farming in Malaysia that the productivity of the contract farmers, on average, is improving each year. Moreover, Glover and Kusterer (1990) find that contract farming is as likely to prevent social differentiation as it is to promote it. Importantly, it can contribute to smallholder empowerment and collective action (Baumann, 2000). However, a smallholder's participation in CF does not imply that he perceives the contract as fair. It merely implies that the smallholder expects to be better off with than without the contract (Barrett et al., 2012).

3. Methods

To achieve the objective of the study, primary data were gathered through interviews and observation based fieldwork carried out in six RPCs and ten selected tea estates from high-grown tea areas in Nuwara Eliya and Badulla districts during March - April and July - August in 2012. Key interviews were conducted with managers at different levels of the RPC management hierarchy. The sample of managers included two General Managers, four Human Resource Managers, two Financial Managers and five Estate Managers. Supplementary interviews were conducted with a stratified random sample of 105 tea estate workers (Table 3).

Table 3: Structure of the Sample of Estate Workers

	Married	Unmarried
Male	21	35
Female	27	22

The rationale behind the selection of strata for the sample of estate workers is; a) the nature of the male dominant culture within the estate community, b) female workers as the major determinant of labour productivity, and c) Estate youth population as the source of future labour supply and productivity in tea plantations.

In order to secure the value of the study, interview responses and observational findings of the fieldwork were discussed interpretatively. Managers' and workers' responses have been embedded in the findings. The latter stage of the discussion has focused on linking a conceptual solution to the problems identified in the empirical study.

4. Findings and Discussion

The level of motivation, skills, knowledge, training and health are the main contributory factors in determining the level of efficiency of the workforce. Therefore, it is firmly believed that labour policies and practices of organizations do matter and are important in improving labour productivity of those organizations (Dishanka & Amaratunge, 2011; Koch & McGrath, 1996). Moreover, these policies and practices should be designed, focusing on the organizational objectives such as employee satisfaction and motivation, cost efficiency and profitability.

Accordingly, this section reveals the major findings of this study under seven broad areas related to the level of social development of tea estate workers and, responsive labour practices of RPCs in addressing labour related issues in order to improve the living conditions and labour productivity of the tea plantation sector in Sri Lanka.

1. *Low level of income of tea estate workers has limited their access to a wider range of economic choices which in turn adversely impact the workers' performance.*

Since 1996, changes to the wage structure of tea estate workers in Sri Lanka are determined by a Collective Agreement (CA) which is revised in every two years through negotiations between trade unions of estate workers and Employers' Federation of Ceylon (EFC) which represents RPCs. The current wage income of tea estate workers from estate employment is not sufficient for them to achieve a higher consumption level which enhances their production possibility by achieving an improved level of living standards. However, the management of RPCs still believe that the CA to revise (generally, increase) wages in every two years is a burden for them, as such increases in the past have not been reflected in workers performance. RPCs and their representatives repeatedly stressed that there is no further requirement of revising the wages introduced in 2009 since workers gain LKR 10,000 to LKR 12,000 per month and the poverty level of the estate sector has declined to the national average. Further, they claimed that there is a negative productivity impact from the new wage revision as the wage-productivity link has been removed in the new scheme. Nevertheless, estate workers' trade unions demanded a wage revision on the grounds of rising cost of living and RPCs had to accept it due to the strong bargaining power of estate workers' unions with relatively high political affiliations. Although, the minimum wage was revised, seemingly there is no

considerable improvement in estate workers' living conditions and the level of poverty. Devereux (2005) has emphasized that the minimum wages should have poverty-reducing effects among a highly vulnerable group of workers and it should be with limited negative consequences in the form of dis-employment or displacement of retrenched workers into the informal sector.

2. Poor human development indicators of the tea estate community have caused a negative impact on their productivity.

High human development factors such as quality education and training, proper health and nutrition, safety and security, and quality housing, are considered to be the elements of a high living condition. However, socio-economic statistics on estate sector and empirical findings of the study present evidence that the prevailing living conditions of the tea estate community are not up to standard. Low quality houses with poor sanitary facilities and insufficient space have created adverse health effects on estate workers. Low income level of workers prevents them getting the daily required nutritional intake. Although, the Plantation Human Development Trust (PHDT - the RPCs body for estate workers' human development) has initiated and implemented various programmes to satisfy these human development requirements, the success rate is very low. Especially, PHDT has introduced new model houses for estate workers which can be acquired on monthly instalment basis. But, the estate workers response rate is around 12 % and they stressed that their income is not sufficient for them to meet these monthly instalments.

3. Future labour supply of tea plantations is at risk due to low worker income and low recognition of the job.

Almost all the activities up to harvesting, such as land preparation, holing, planting, weeding, and pruning, in the tea production are done manually. In the last few decades, labour resource in estates was in abundance for all those activities. However, the younger generations now in tea estate worker families are very reluctant to follow their predecessors. The two main identified reasons for this are; existing wages are not sufficient for them to enjoy a life similar to their counterparts in other sectors and secondly, the poor job recognition given to the estate workers by society. As they realize that more income opportunities and better livelihoods are available in urban areas and overseas, migration occurs. Hence, unless the RPCs refine their existing practices in tea growing and processing systems in order to give the workers an opportunity to earn a better income with a proper recognition; probably the future of tea plantations would be worse than the present situation.

4. Traditional work norms in tea estates have created inefficiency in utilization of labour resource.

RPCs have been unable to customize traditional work norms for male and female workers and continue to function with what evolved from the British colonial period. Out of the total estate workforce in the Sri Lankan tea plantation sector, 52.4 % are female workers and 95 % of whom provide labour as tea pluckers. Since, the processing productivity in factories mainly depends on the plucking productivity (plucking productivity mainly covers the quantity of quality green leaves harvested per work day); female workers' role is the core determinant of labour productivity. Female workers provide their labour throughout the working day whilst male workers engage in work only in the morning session. Although, male workers provide less contribution, both categories are paid equally. This proves that RPCs continue to practice traditional work norms due to several uncontrollable endogenous factors which lead to inefficient labour utilization. Philips (2003) stressed that women's workload and working hours have increased in recent years, due to the profit-maximizing goals of RPCs. Apart from the full day work in tea estates, female workers hold the burden of household chores as a requirement of the male dominant socio-cultural system of the

immigrant Tamil estate community. Samarasinghe (1993) explains this as estate women's double burden. This practice adversely affects the major labour productivity component (plucking productivity) and is inevitably a root cause for the adverse total factor productivity situation in tea plantations. Further, this traditional work norm is apparently against the United Nations' Millennium Development Goal of promoting gender equality and empowering women. Consequently, RPCs have been unsuccessful in maintaining equity in the process of manpower planning due to their inability to transform the embedded socio-cultural practices within the estate community.

5. RPCs responsibility towards stockholders hinders the worker orientation in its labour policy.

With the privatization of state owned plantations, stockholders' profit maximization has become the prime responsibility of the RPC management. Therefore, any management decision related to workers' welfare has to be taken after considering its impact on the profitability of the firm. Although the RPC management admits that the prevailing socio-economic conditions of estate workers are well below the social norms, they firmly express their inability to address those issues on profit grounds as they do not have the bargaining power to influence the price mechanism in the tea market. Further, these RPCs do not solely depend on producing and marketing tea. In addition to operating in the tea industry they also engage in the production of various other agricultural crops such as rubber and oil palm. Therefore, the management is focusing on the profitability of those crops in order to settle the loss from tea as they are responsible for stockholders' returns. But, this practice necessarily does not solve the labour problem in the tea estate sector though it provides a solution to the lack of profitability of RPCs and problems with addressing stockholders' interest.

6. Absence of RPC top management in estate level labour related issues proves ineffectiveness in labour-management relations and nature of high power distance in the organizational culture.

Twenty RPCs which are in operation are managing around 82,000 hectares of tea land and this area has been grouped into 286 estates. Each estate that belongs to an RPC is headed by an estate manager who is in charge of every operational aspect of that estate. The estate manager is responsible and accountable to the top management for production and labour related functions. The estate manager is usually supported by an assistant manager and an office staff. According to the RPC top management, the smooth functioning of the estate operations largely depends on the interpersonal skills of the estate manager. The close relationship maintained by the estate manager with estate workers creates a conducive operational atmosphere and the level of rigor of the manager determines the severity of labour problems and disputes. Estate workers also hold the same belief and state that some estate managers regularly look after their personal matters when there is a crisis situation. Hence, lack of top management intervention in labour-management relations at estate level proves the power distance maintained by top managers and results in creating a negative impression in workers' attitudes. Consequently, this has enlarged the span of control of the estate manager and it has made his job in labor management rather difficult and distasteful.

7. Informal labour contracts solution with workers at estate level to utilize the idle time of male workers is an effective practice of improving labour productivity.

This seems to be an effective practice maintained by RPCs since it motivates the pluckers to earn an additional income and in turn improves productivity. Further, this practice allocates a responsibility to the contractor and he/ she has to satisfy the contractual requirement by employing a set of workers. Through this process, the idle labour of male workers can successfully be brought back into the production process. Further, this mechanism is practiced as a labour deployment model in tea estates where labour supply does not meet the demand requirement. However, this practice appears to be

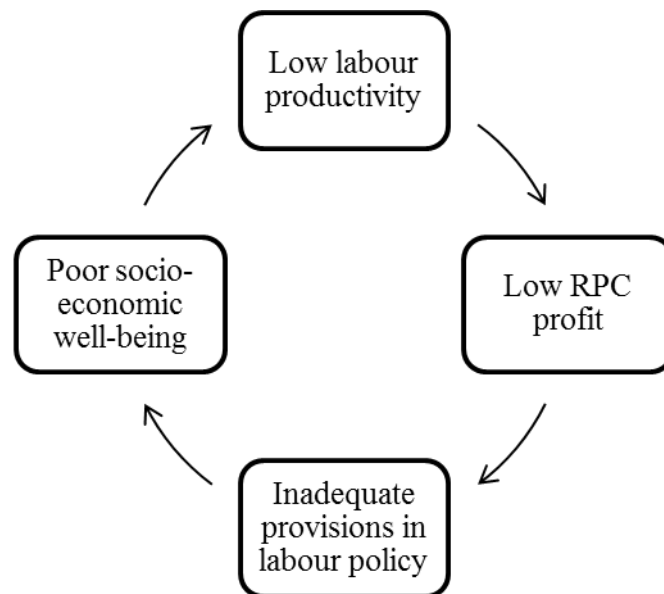
entrepreneurial in nature and successful in many aspects as it inevitably promotes empowerment and participation of underprivileged tea estate workers.

Towards a Sustainable Solution

According to above findings, a vicious cycle (Figure 1) has been formed with direct causal relationships between RPC labour policy and practices, socio-economic well-being of estate workers, labour productivity and company profit. This particular vicious cycle explicates that lack of tea estate workers' social development oriented provisions in RPC labour policy and practices which has resulted in low labour productivity and as a consequence RPCs are experiencing low profits. In turn, this low profitability of RPCs has obstructed them from providing more benefits for the social development of tea estate workers.

The first three findings of this study explained the problem prevailing in tea plantations and showing that the estate workers are considerably adversely affected regarding the socio-economic aspect of life. More precisely, the poor living condition has been caused by low income and the social status problem. Those findings imply that these labour problems affect not only current productivity but also the output and the productivity of the tea plantation sector in the foreseeable future. The second three findings discussed the practices of RPCs that inevitably obstruct the improvements in workforce conditions.

Figure 1: Vicious Cycle of Labour Productivity

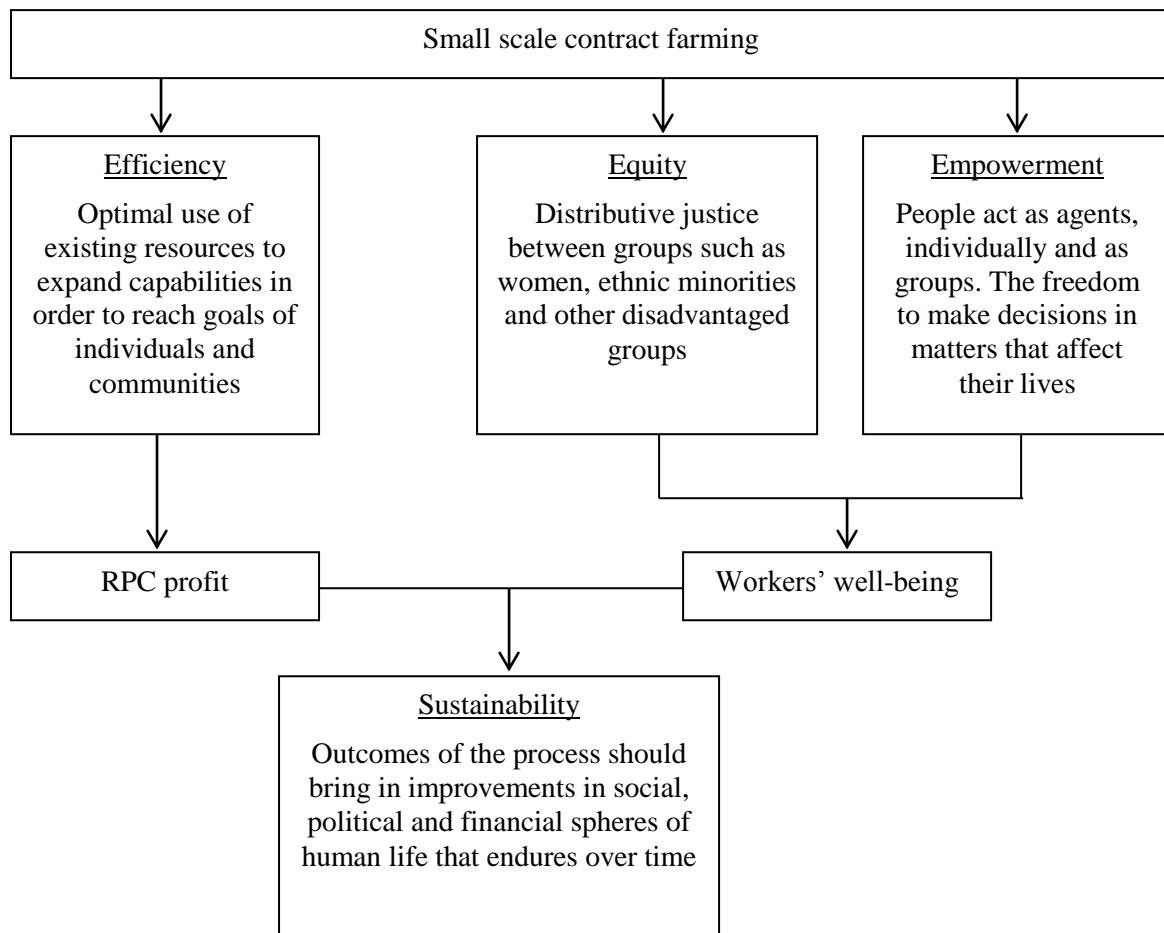


The last finding relates to the remedial action taken by RPCs as a solution to the labour productivity problem. Although, this scheme of informal labour contracts has been successful to a greater extent as far as the cost reduction objective of RPCs is concerned, the overall effectiveness is quite low since this practice so far has been unable to address the fundamental problem of human and social development of estate workers. However, this practice has provided a positive indication for Sri Lankan tea estate sector and its social development. Therefore, based on the above findings, the latter part of this discussion is centered on the suitability and applicability of formal contract farming system to the tea plantation sector of Sri Lanka. The major motive of evaluating this practice as a viable solution to the labour problem of this sector is twofold. First, the tea estate and its workers' community have attributes which are significant for the adoption of contract farming practice. Second,

formal contract farming practice is characterized with many positive socio-economic outcomes which are absent (or omitted) in the present.

In developing a solution for the socio-economic and performance problems in the estate sector, it is very important to take the human development aspect into consideration. This section of the study focuses on the process aspect of improving the socio-economic condition and it discusses the mechanism through which, the well-being of estate workers can be improved for better performance in their personal and work life. The evaluation of small scale contract farming for tea estate sector is done on the four key principles of equity, empowerment, efficiency and sustainability advocated by Mahbub Ul Haq (2003) which should be satisfied in any process intended to improve human development (Figure 2). He claims that the purpose of development is to enlarge all human choices, not just income. Hence, development must put people at the centre of its concerns.

Figure 2: Conceptual Model of the Solution



Small-Scale Contract Farming for Tea Estate Community in Sri Lanka

In the informal practice of contract farming adopted by RPCs (as detailed in the findings), few tea bushes are assigned to one person to maintain and provide the harvest at a verbally agreed rate. In order to complete the assignment, this particular worker employs his family labour or other co-workers. However, this practice is applied by RPCs only in high crop periods and the main purpose being to reduce the cost of labour. A positive attribute of this approach is that it provides an additional income for estate workers and brings the underutilized male labour back into the production process. This has reduced worker absenteeism considerably which was out of the control of estate management.

Hence, improvement in the productivity level of estate workers is an apparent positive marginal effect of contract farming.

In order to improve productivity, more hard qualities of labour such as flexibility, physical and mental capacity, and willingness to learn new technological skills are more important, and comparative advantage of younger workers lies primarily in their hard qualities (Van Dalen, Henkens & Schippers, 2010). Unfortunately, the migration of young productive labour from tea estates in Sri Lanka has resulted in low labour productivity due to high dependence on aged population in estate work. Mostly, younger generation is reluctant to become merely farmers on someone else's land but, prefers to become independent farmers (White, 2012). However, Ikemoto (1992) explained that the migrants can be attracted back to their origins through pulling factors, such as the recovery of agriculture. The entrepreneurial nature of contract farming system appears to be an effective mechanism which satisfies the expectations of youth and retains them within the farming community. Therefore, CF system probably could be a 'back-to-the-land' scheme for the already migrated youth. Given these characteristics, the CF system has the potential to resolve the risk of future labour supply shortage in the plantation sector as it could retain the prospective youth to a greater extent.

Among the five types of contract farming systems (Centralized model, Nucleus Estate model, Multipartite model, Informal model, and Intermediary model), the Nucleus Estate model is a specifically designed model which is highly suitable for tea plantations in Sri Lanka due to its intrinsic attributes. In the nucleus estate model the plant owner has an estate plantation, which is usually close to the processing plant or factory. Farmers in the surrounding area of the estate produce crops on estate land and sell their crops to the estate for further processing. Beneficial aspects of CF for farmers are that the estate is providing inputs, training, transport and social and medical benefits (FAO, 2001). Accordingly, the estate management can easily assign a certain extent from the tea land to each estate household living in the same estate based on their resourcefulness. They can manage it independently as their own business, based on the provisions of the pre-arranged contract. The workers, who are not willing to be contract farmers under this system, can either provide their labour to contract farmers or remain with the existing employment under the RPC management.

Many of the major labour disputes occurring in tea plantations in Sri Lanka in the recent past have been grounded in wage related issues. However, in the recent past adverse after effects were resulted due to the lack of cooperation between the two parties in the collective agreement. High bargaining power of one party dominated the conditions of the agreement and hence, the other party got adversely affected as a result. Therefore, an adequate involvement of the government through well-defined policies is highly important to ensure the proper functioning of any agreement between employees and private sector. Especially, as small-scale estate farmers are involved in this contract farming system, public policy should support the establishment and maintenance of this system (Miyata et al, 2009). It will work as a shield which protects contract farmers from ill-effects of contracting (Singh, 2002). Specially, the government should attend to this matter since; the estate community in Sri Lanka is socially and economically deprived. Absence of such policies might result in transferring the total risk of contract farming system to small-scale farmers and manipulating the system solely as a tool for reducing the cost of production of the private firm. Porter and Howard (1997) in their study of CF in Africa have specifically emphasized the power relationship between big business and small growers (including women) and the need to strengthen the position of small growers and labourers. Moreover, these contracts should stimulate women's participation to empower women. It is a common practice in contract farming that men sign the contracts, but rely on the labour of their female partners in fulfilling contract obligations (Glover and Kusterer, 1990; Raynolds, 2002).

To overcome this situation and maintain gender equity, it is apt to sign the contract with both men and women. Probably, this would be an important condition as the estate community in Sri Lanka is characterized by male domination with lack of female empowerment and participation.

5. Conclusion

The overall effort of this paper was to explain the causes behind the low labour productivity in the tea plantation sector of Sri Lanka and to evaluate the appropriateness of small-scale contract farming in improving such conditions. In this process, we clearly identified that the main cause behind this low labour productivity is lower level of social development of the tea estate community which apparently impacted on their abilities and, eventually created negative effects on their productivity. Conversely, RPCs claim that low labour productivity has resulted in considerable financial constraints. This proves the bi-directional causality between social development and labour productivity has created a vicious cycle. In order to address this situation, the estate workers should be motivated for higher performance by satisfying their physical human requirements and, by providing social status and recognition. It is evident that the existing labour management system essentially does not have an endogenous variable which is capable of counteracting this cyclical effect. Absence of such has necessitated the incorporation of an external intervention.

Therefore, in this study we discuss the importance of converting tea estate workers and their families into tea small-farmers and adopting small-scale farming practice within the plantation sector through the contract farming system. The literature and responses from estate workers suggest that it will be a successful and a sustainable solution to the socio-economic problems faced by the estate community. Further, it reduces the burden of labour and production management of RPCs to a greater extent as contract farmers employ their own labour. Importantly, with the introduction of this new system, estate workers will have the freedom of choice either to get engaged in contract farming or to remain in regular RPC employment.

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