A Comparative Study of Farmers-Agribusiness Linkages in Sri Lanka

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Abstract: In developing countries, such as Sri Lanka, small farmers form an important part of the agricultural sector, particularly in non-plantation agriculture. In the context of improving the economic viability of small farmers along with the currently declining role of the State in providing agricultural support services, Sri Lankan government has encouraged the private sector to make investments in the agricultural sector. As a significant development in this direction, farmers-agribusiness linkages have received special attention as a means to link small farmers into the mainstream of agribusiness industry. The objectives of this study are to identify types of farmer-agribusiness linkages, carry out a comparison among the linkages and discuss the conditions necessary for strengthening and evolution of the linkages. This study is based on extensive field surveys and case studies of farmers-agribusiness linkages found in the non-plantation sector of Sri Lanka. Based on the relationship between the farmers and the agribusiness industry as well as the characteristics of the linkages four distinct linkage types: direct linkage with agribusiness company (Type I); linkage through farmer organization/group with agribusiness company (Type II); linkage through shares with agribusiness company (Type III); and linkage through the farmer company with agribusiness company (Type IV) were identified. From the perspective of three major stakeholders, the common and specific characteristics and factors contributing to the success of the linkages and the internal and external conditions necessary for strengthening and evolution of the linkages were identified. Based on the findings, a farmers-agribusiness linkage system for non-plantation agriculture is proposed. The distinct features of this system are: (1) farmer group/organization/company to reduce contract management cost and improve farmer bargaining power; (2) arbitration and conciliation bodies to overcome problems in implementing contract agreements such as contract default and disagreements; (3) government and non-governmental organizations to facilitate farmers-agribusiness linkages; and (4) financial institutions to provide credit to agribusiness companies and micro credit to farmers.

Key words: Farmers-agribusiness linkages · Farmer groups/organizations · Farmer company · Contract farming · Sri Lanka

INTRODUCTION

Like in other developing countries, rural poverty is a chronic issue in Sri Lanka. In the context of improving the economic viability of small farmers along with the currently declining role of the State in providing agricultural support services, Sri Lankan government has encouraged the private sector to make investments in the agricultural sector. The private sector was expected to be involved in commercializing non-plantation agriculture by alleviating constraints faced by small farmers. As a significant development in this direction, farmers-agribusiness linkages have received special attention as a means to link small farmers into the mainstream of agribusiness industry.

Majority of the farmers-agribusiness linkages found in Sri Lanka are centered on the concept of contract farming. Although contract farming was not new to Sri Lanka, it received special attention as a rural development strategy after economic liberalization in 1977 [1]. Initially, tobacco and sugar were the major crops produced under contract farming in Sri Lanka. However, with the drive to increasing horticultural exports, contract farming became an important production arrangement in production of cut flowers, foliage, fruits and vegetables in Sri Lanka.

In contrast to the results from several case studies in other countries, our studies in Sri Lanka revealed that contract farming as an institution did favor small farmers rather than larger wealthier farmers [2, 3]. Moreover,
the characteristics of participant farmers, the economic characteristics and issues of existing linkages and the roles of institutional arrangements were examined, revealing a promising potential of these linkages [4, 5]. Given the growing competitiveness in the international market, it is utmost important that the farmers-agribusiness linkages in Sri Lanka should further develop through strengthening and replication.

Therefore, the present study aims at discussing the conditions necessary for the evolution of farmers-agribusiness linkages as a system in non-plantation sector in Sri Lanka, taking into account the factors having contributed to the success of the linkages. Prior to proceeding to the main discussion, a typology of linkages is summarized and compared based on the structure and characteristics of the relationship between the farmers and the agribusiness industry found by Esham et al. [3], Esham et al. [4] and Esham and Usami [5].

What Are Farmers-agribusiness Linkages?: Farmers-agribusiness linkages can be described as mutually beneficial long-term relationships between the agribusiness industry and farmers formed for the purpose of production, value addition, marketing, input supply and service provision. It enables resource-constrained small farmers to access inputs, technology and extension services hitherto not available thus enabling farmers to switch from subsistence crops to marketable crops. Further, it ensures an uninterrupted production and a reliable high quality raw material supply to the agribusiness industry to meet market demand.

Contract farming has been variously defined by different authors, basically being a form of vertical integration between the growers of an agricultural product and buyers or processors of that product. Glover [6] perceives contract farming as having the potential to bring a wide variety of economic benefits to farmers and their communities. Contract farming has been discussed as having the potential to incorporate low-income farmers into the modern sector [7]. Contract farming has been proposed as one avenue for the private sector to take over the roles previously served by the State in the provision of information, inputs and credit [8]. Although contracts can be classified into three, not mutually exclusive categories: market-specification, resource-providing and production management [9], the literature review enables to identify three basic types of farmers-agribusiness linkages as follows:

Direct Linkage with Agribusiness Company or Typical Contract Farming Arrangement Type a: This contract farming is the most widely practiced simple form of farmers-agribusiness linkage. Linked vertically to an agribusiness company, independent farmers are able to have access to technology, technical advice, credit and a guaranteed market. However, due to the high transaction costs of dealing with a large number of small farmers this contract arrangement has favored larger farmers at the expense of smaller farmers. Moreover, the unequal power relationship between the agribusiness company and the farmers has resulted in that agribusiness companies exploit the farmers.

Linkage Through Farmer Based Organizations/groups Type b: The presence of farmer-based organizations like farmer groups, farmer organizations and companies is very useful in the process of developing farmers-agribusiness linkages. Farmer collective action through the formation of groups is useful not only in increasing farmer bargaining power but also in organizing its members for training, extension service, technology acquisition and coordinating harvesting and delivery schedules. Moreover, the agribusiness company can negotiate with farmer-based organization instead of dealing with a large number of individual farmers, thus considerably reducing transaction costs. This linkage type can be categorized into two groups based on who initiates and facilitates the farmer based groups and organizations, namely agribusiness company or NGO.

Linkage Facilitated by Direct Government Interventions Type c: Under this linkage, the main objective of government intervention is to initiate linkages between poor small farmers and the industry. The government acts as a catalyst between the agribusiness industry and the farmers. Once relationships are established, the private companies provide inputs, credit and extension service and undertake to purchase the farmers’ crop. Furthermore, the government focuses on three major activities like market information dissemination, market matching and capacity building. In another variant of this linkage type, the government arranges for the farmers high yielding varieties of seeds from reputed companies, technical supervision and follow-up on agronomic practices and buys back the entire produce or facilitates marketing. In these arrangements the interests of the contracting parties are secured by mediating between parties when disputes arise.
Types of Farmers-agribusiness Linkages in Sri Lanka:
In the context of Sri Lanka it is possible to identify three basic types of farmers-agribusiness linkages. There are two types of linkages with the similar structure and characteristics identical to the above-mentioned Type A and Type B. These two linkages are termed as Type I and Type II linkages. However, the above-mentioned Type C linkage is not found but instead there are other types of linkages in Sri Lanka not found hitherto in the literature. Based on structure and characteristics of the relationship these linkages are termed as Type III and Type IV. Therefore, farmers-agribusiness linkages found in Sri Lanka can be categorized into four types as follows:

- Direct linkage with agribusiness company (Type I)
- Linkage through farmer organization/group with agribusiness company (Type II)
- Linkage through shares with agribusiness company (Type III)
- Linkage through farmer company with agribusiness company (Type IV)

Direct Linkage with Agribusiness Company Type I:
A Type I linkage can be described as a direct relationship between the farmers and the agribusiness industry through a contract farming agreement (Figure 1). Moreover, Type I linkage also could be described as a typical contract farming arrangement. More often, the agribusiness company provides inputs and extension service to the farmers and the farmers undertake to sell the produce to the agribusiness company or the agribusiness company undertakes to buy the produce without providing any inputs or services to the farmers. Hence, the contract arrangement between the farmer and the agribusiness company can take any of the three types of contracts; market specification, resource providing or production management. This is the most prevalent type of farmers-agribusiness linkage that can be found mainly in tobacco, sugarcane and horticultural crop production in Sri Lanka.

Linkage Through Farmer Organization/group with Agribusiness Company: Type II: A Type II linkage involves a farmer organization as an intermediary in facilitating the interaction between farmers and agribusiness company. The farmer organization is established with the support of the agribusiness company, State or an NGO (Figure 2). The farmer organization plays an active role in facilitating the management of the linkage. The farmer organizations' role could take several forms such as farmer selection and training, input provision, input distribution, credit monitoring, provision of extension, collection of harvest and marketing. This type of linkage is useful in both reducing transaction cost in managing the linkage and in increasing farmer bargaining power.

Linkage Through Shares with Agribusiness Company: Type III: A Type III linkage is the export processing company (EPC) model introduced by the Export Development Board (EDB) in Sri Lanka. In this arrangement, export-processing companies are set up as joint venture companies by bringing together agribusiness companies and export production villages (EPVs). Export production villages are people's companies established to organize production at village level for the export market. To improve the efficiency of EPVs, the new concept of export processing company was introduced to bring in agribusiness industry investment and expertise. In this linkage arrangement, the agribusiness industry has the controlling interest by owning 51 per cent of shareholdings while the farmer members of the EPV own 28 per cent shares and the balance 21 per cent shares are
Linkage Through Farmer Company with Agribusiness Company Type iv: In this linkage a farmer company acts either as a facilitator in linking farmers and the agribusiness industry or provides assistance to farmers to produce and market their produce. The farmer company is a registered company established under the companies act as a people’s company. Shareholders are exclusively farmers living in the area. The farmer company assists the agribusiness company to provide inputs, extension services and to collect the produce. Alternatively the farmer company may organize and provide inputs and extension services to the shareholder farmers and facilitate marketing of the produce (Figure 4). Moreover, the farmer company involves in value addition to the primary agricultural products produced by the shareholders by processing and packaging.

Comparison among Four Types of Linkages Found in Sri Lanka: Based on our previous studies Esham et al. [2], Esham et al. [3] and Esham and Usami [5], a comparison of the different farmers-agribusiness linkages is presented from two perspectives of the structure/management and the success factors in Table 1. The comparison enables to identify the similarity and the specificity among the four types of linkages.

In resource constrained rural environments typical of the rural areas surveyed in this study, the ability of the different linkages to facilitate farmer access to credit in the form of inputs/cash and know-how in the form of extension services and training can be considered as important in sustaining the linkages. All the linkages had legally enforceable contract agreements. However, the contract agreement in Type I linkage was biased as it only protected the agribusiness company but not farmers from all and even unforeseen obligations. There was a clear evidence of power imbalance because the agribusiness company unilaterally determined produce purchase prices and grading standards leading to farmer dissatisfaction with the contract production.

With regard to the intermediary facilitation, the Type I linkage did not have an intermediary to facilitate the linkage. However, the Type II and Type IV linkages had...
intermediaries. The absence of an intermediary to facilitate the Type I linkage compelled the agribusiness company to incur very high contract management cost. In contrast, in the Type II and Type IV linkages the agribusiness companies were able to reduce contract management cost by entrusting certain contract management functions to the intermediaries. However, there were significant differences in the managerial and resource capacity between farmer organizations in the Type II linkage and farmer company in the Type IV linkage. The farmer company had better physical and financial resources and was managed by a professionally qualified management team, while the farmer organizations lacked managerial capabilities as well as the other physical resources. Moreover, among the farmer organizations in the Type II linkage there were differences in managerial and resource capacity as the NGO-initiated farmer organization was better off than the company-initiated farmer organization.

The credit and cost recovery was satisfactory in all the linkages, even in the Type II linkage where the farmers failed to honor the contract. High rates of credit recovery can be considered as a common success factor by encouraging the agribusiness companies to remain in the linkages. Moreover, all the linkages have been able to meet farmer credit needs in credit-constrained environments. The agribusiness company’s ability to profit from seed and fertilizer supplies is a specific success factor for the Type II linkage since this is the only rationale for the agribusiness company to remain in the linkage despite its inability to enforce the contract.

The success of the Type IV linkage can be attributed to the initial support provided by the State. The initial support extended by the State until the farmer company had become financially stable was an important factor for the success of the farmer company. The management of the irrigation scheme, which is the functional base of the farmer company, has created a positive impression of the farmer company among the farmers in the irrigation scheme.

The relationship in the linkage through NGO-initiated farmer organization in the Type II linkage and Type IV linkage was wider in scope, particularly where the NGO-initiated farmer organization was involved in community affairs of the farmers, while the farmer company in the Type IV linkage was involved in many other farming related activities. These can be considered as specific success factors for the Type II and Type IV linkages.

Among the determinants to participation in farmers-agribusiness linkages, even though the members were small farmers, entrepreneurship was the only common
factor. Entrepreneurial farmers are more likely to be enthusiastic and ready to adopt new technologies enabling it easier for the agribusiness company to manage the linkage.

**Conditions Necessary for Strengthening or Evolution of the Linkages**: Herein, the conditions necessary for strengthening or evolving the farmers-agribusiness linkages from the viewpoint of the three major stakeholders: farmer, farmer organization/company and agribusiness company participating in the linkages are discussed as strategic efforts (Table 2).

To strengthen the Type I linkage, the two main issues of farmer dissatisfaction with contract terms and high contract management cost which affect the sustainability of the linkage need to be addressed. In the former issue, it is necessary for the agribusiness company to adopt a more transparent method of grading, for instance, involving farmer representatives. Moreover, the farmers can follow proper cultivation practices to improve quality of the produce to get a higher price. The latter issue can be resolved to some extent if the agribusiness company is able to cooperate with existing public extension agencies in providing extension services to farmers. In the long term, high contract management cost can be mitigated by organizing individual farmers into farmer groups as an intermediary organization, namely by a possible evolution of the Type I into the Type II, certain contract management functions can be delegated to farmer groups thereby reducing contract management cost and improving contract terms. For this evolution to take place certain internal conditions need to be fulfilled such as farmer attitudinal changes concerning collective action, agribusiness company willingness to involve farmers in contract management, adoption of a transparent grading system and cooperation with public extension agencies, while external conditions such as tax incentives for investment in the linkages or development of existing paddy-based farmer organizations. However, according to our case studies on the one hand, it was evident that the farmers had negative attitudes towards farmer organizations due to the poor performance of existing paddy farmer organizations. On the other hand, the agribusiness company was skeptical about the capacity of farmer-based organizations to undertake the responsibilities of managing a contract. Given this scenario, the evolution will be possible only if the agribusiness company can collaborate with the agrarian service centers in the area to improve the existing paddy farmer organizations in terms of resources and managerial
capacity building with the support of the government and NGOs. It is also necessary for the agribusiness company to facilitate other farming activities like paddy farming.

To strengthen the Type II linkage it is necessary to address the major issues such as contract enforcement, assured markets for produce and capacity building of farmer organizations. Proper enforcement of the contract itself will ensure a market for produce. Therefore, there is an urgent need to develop an arbitration and conciliation body with the cooperation of the three major stakeholders (farmers, farmer organization and agribusiness company), community based organizations and the government agricultural agencies. Community based organization such as NGOs, the government and the agribusiness company can assist in capacity building of farmer organizations. The agribusiness company can renegotiate contract price based on prevailing market prices to give a fair price to the farmers. Moreover, the agribusiness company can assist the farmers through the farmer organization to expand other farm enterprises.

The Type II linkage has potentials to evolve into the Type IV linkage, given internal conditions such as active farmer participation in farmer organizations, capacity building for farmer organizations and wider involvement of farmer organizations in farming and community affairs as well as an external condition like development of an arbitration conciliation body. The main advantages of evolving into the Type IV linkage is that the farmer organizations will be able to organize more efficiently the marketing of produce and other farming activities, particularly in reorganizing paddy production by improving farmer access to inputs, technology and marketing. However, from the perspective of agribusiness company, the company will take an active role in contributing to the development of the linkage only if it has benefits in terms of contract enforcement or profit from sale of inputs like seeds and fertilizer. The capacity building of farmer organizations is another very important condition as the farmer organizations lack resources and managerial capacity. Therefore, capacity building should focus on improving the resource base as well as the managerial capacity of the farmer organizations. Since it is highly unlikely that the agribusiness company will take all the responsibilities of such transforming farmer organizations, partnerships with the government agencies and NGOs become vital to farmer organizations. The agribusiness company can assist the farmer organizations to expand volume of activities sufficient to evolve into a farmer company by providing extension services, inputs and market facilities for other crop and livestock enterprises.

The Type IV linkage can be strengthened by encouraging the increased participation of the agribusiness industry by relaxing restrictions on share ownership, promoting the farmer company activities among farmers and the agribusiness industry and changing the farmers’ present perception of the farmer company as a service provider to profit making by expanding its commercial activities to pay higher returns for farmer investments. Farmer company activities can be promoted among farmers by increasing farmer awareness about the farmer company activities while promotion among the agribusiness companies can be done by forging linkages with organizations/associations representing the industry such as Chamber of Commerce and Industry and processors and exporters associations in the area.

CONCLUSION

It is of interest that the farmers-agribusiness linkages in the context of Sri Lanka have not favored the wealthier farmers at the expense of poorer farmers in contrast to the findings of previous case studies in developing countries [7, 10, 11]. Given the importance of farmers-agribusiness linkages as means to link small farmers to the mainstream of agribusiness industry in this study it was possible to identify success factors and conditions necessary for strengthening and evolution of the linkages. Based on these findings a general system for farmers-agribusiness linkage is proposed with four distinct functional features as shown in Figure 5.

The farmer organizations/groups and the farmer company are responsible for organizing their members and implement training, extension service, distribution of inputs and coordinating and monitoring the linkage. So, it enables to internalize a significant part of the contract management cost and thus reduces the burden on the agribusiness company. However, the high transaction cost in managing contracts is a major constraint for developing such linkages.

Contract enforcement and farmer satisfaction are most important issues from the aspect of the sustainability of linkages. In the Type I linkage, farmers were highly dissatisfied with contract terms. In the Type II linkage, the agribusiness company was unable to enforce the contract. To overcome such problems, a mechanism to improve contract enforcement is indispensable. This can be achieved through establishment of an arbitration and conciliation body.
This body should comprise agribusiness company representatives, farmer representatives, government representatives, representatives from community based organizations and religious leaders from the area.

Another important aspect of the system is the role of the government and the NGOs/community based organizations in facilitating farmers-agribusiness linkages. They can help in initiating the formation of new farmer groups and organizations, revitalizing the existing farmer groups and organizations, providing information, market matching and most importantly entrepreneurship development.

Finally the contribution of financial institutions is a very vital component of this system, particularly in assisting small and medium scale agribusiness companies and farmer companies. The financial institutions can facilitate the linkages by providing credit for investment and inputs purchase.

REFERENCES


