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Research Workshop on Collective Action and Market Access for Smallholders,

2-5 October 2006, Cali, Colombia

A Farmers' Company for Better Price: The Case of Chandrika Wewa Farmer Company, Sri Lanka

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Low price for output and high input prices are common problems faced by agricultural producers. With ever increasing input prices, smallholder farmers find it hard to bear the cost of production with the little savings they have. Lack of access to formal credit facilities makes this situation worse as some informal money lenders exploit poor farmers. As part of a Sri Lankan government scheme to transfer management responsibilities of irrigation and revive the agricultural sector, paddy farmers in Chandrika Wewa Block of Uda Walawe Irrigation scheme setup a 'farmer company' as a collective action to help obtain better prices for their out put and acquire inputs at lower prices. The farmer company helps smallholder farmers to increase their bargaining power in the market and sell their output at a guaranteed price by capitalizing on agreements and forward contracts it has established with other commercial organizations. The farmers company also acts as an intermediary institution in the credit, allowing members to obtain agricultural credit with very low transaction cost and interest. Provision of part of the credit in kind as fertilizer, chemicals and seed increases the effective use of credit and provides inputs to farmers in low cost with bulk purchasing. It also provides some extension service for members. With the support of the government, this collective action effort has been operating in this area since the 1990's.
This paper critically analyzes major functions of this farmers company and examines their successes and failures, and possibilities for further improvement. It discusses the way this group has organized, how they are operating, benefits it creates to members, opportunities and constraints they have in their way forward and possibility of implementing more improved similar collective actions elsewhere.

Keywords: smallholder farmers, farmers company, institutions, collective action, transaction costs, market, credit, price

1. INTRODUCTION

AGRICULTURE, IRRIGATION, MARKETS AND DEVELOPMENT

Around 2.4 billion people in developing countries depend directly on agriculture for their livelihoods, the majority being rural smallholder farmers. Agriculture has an important role to play in the development agenda to reduce poverty. Since water is the key ingredient in agricultural production processes, institutional responses to agricultural productivity have largely focused on developing irrigation management. However, despite these achievements, there remain vast areas in established irrigation systems where productivity and incomes of farmers remain low and highly variable (Hussain et al. 2001). Experience shows that even though irrigated agriculture could result in massive agricultural output in Asia and broadly benefit society, it has not yet fully succeeded in banishing poverty. Many studies have emphasized the fact that though irrigation is a necessary condition to improve rural agricultural production, it is not sufficient. To capitalize on the full development potential of irrigation, access to other complementary inputs also need to be ensured, particularly in the wake of global

economic trends and undeveloped and inefficient markets in developing countries that cause endless cost price squeezing, and low output prices, high input prices and poor access to markets.

As in many other developing countries Sri Lanka has made a number of attempts to develop the agricultural sector of the country. Since independence in 1948, food and employment goals have largely determined the basic trends and tenets of development policies which were focused on improving the domestic sector in the dry zone, through the acceleration of investments in irrigated agriculture and associated human settlements. These investments contributed significantly to the dual objectives of food self-sufficiency and increasing employment. Many people, who would have been otherwise unemployed, benefited from these investments, especially in the irrigated agricultural settlements. However, the performance of most existing irrigated agricultural production systems in Sri Lanka, despite very high costs of construction, has fallen short of expectations and a considerable number of farm households in both minor and major irrigation settlement schemes are still under either transient or chronic poverty. A recent study identified the major problems faced by farmers in the Uda Walawe region as: shortage of irrigation water; increasing cost of inputs; problems in marketing and obtaining credit facilities; and crop damages (Hussain et al 2004). While the first problem is related to the overall availability of water resource and distribution the second and third problems are associated with the available supporting services and institutional mechanisms.

In 1996, a committee called the National Development Council (NDC) was appointed by the Sri Lankan government to setout a new development-oriented policy framework that would emphasize the importance of commercialized farming for smallholder farmers. The document proposed the idea of setting up 'farmers companies' as an innovative institutional mechanism that would serve as "a strategy to transform volunteer farmer organizations into business firms" (Senanayake 2003). The NDC expected farmer companies to commercially organize as bodies managed by competent paid managers. The primary function of the companies is to identify the potential markets, local and foreign for products that have comparative advantage in respective areas (NDC 1996). The companies were to live up to the theme "Produce for the Market" and would be engaged in scheduling and making organizational arrangements related to the production process, collection, sorting and grading, storing, processing and other activities related to value addition and marketing through forward contracts. The companies will operate in partnership with the organized private sector by means of shared ventures, contractual agreements, etc. The overall government objective in pilot testing of the concept is to learn lessons for implementing the new policy on commercialization of small holder agriculture (Perera et al 2002).

It is argued that the integration of the small farmer production process with the process of (value addition and) marketing can be done in a cost-effective and an efficient way if the small farmers are organized into companies. If the production units/farms are sufficiently large, then directly buying from producers for retail chains and processing could reduce losses, improve market efficiency, increase farm profits and serve the consumers effectively. However, in countries such as Sri Lanka where a large number of small farmers are operating in tiny holdings dispersed over a large geographical area, the condition is different. Such a condition poses difficulties even to the middlemen in capturing economies of scale or the benefits of specialization. Inadequacies in knowledge and information on competitive markets, higher transportation and handling costs, inadequate access to credit, and lack of organization (that are a precondition for achieving economies of scale in collection, handling, storage, transportation, etc.) have compelled small farmers to sell their products in local markets or to middlemen, immediately after harvest. The marketing margin or the difference between the price received by the farmer and the

consumer price at distant central markets far exceeds the transfer costs and justifiable profits. Moreover, the existing process contributes significantly to post-harvest losses. It is argued that farmer companies, as a facilitating organization can guide through forward contracting, maintaining collection/ bargaining centers and warehouses and participate effectively in the procedures of trading so that competitive pricing results.

Institutional mechanisms that coordinate exchange mechanisms can contribute to poverty reduction in many different ways at different levels. Fundamentally they allow different players to exchange resources, goods and services so that they can be utilized according to different suppliers' comparative advantages and consumers' relative preferences. Production and consumption benefits can arise from bilateral exchanges, but benefits are multiplied with networks of exchanges involving multiple players and multiple commodities or services, and with spatial and temporal expansion. The collective action of smallholder farmers is seen to be able to use networks to distribute benefits and overcome the problem of economies of scale by carrying out purchasing of inputs and selling of products as a group. The facilitative role provided by the farmer company is expected to provide chief and easy access to credit for its members by flattening in transaction cost of credit for both borrower and lender.

This study uses the transaction cost approach to collective action to analyze the viability of the farmers company and the feasibility of supporting similar institutions to help address some of the issues faced by poor farmers. The paper will use the Chandrika Wewa farmers company as a practical test of the relevance and sustainability of this collective action in accessing better input, out put and credit market institutions. The study analyzes the activities adopted by the farmer company mostly with data collected from operational records of the farmer company. Interviews with office bearers and members of the company, relevant officers of the Mahaweli authority and selected farmers were also used in better understanding the quantitative findings.

Section two of the paper discusses the evolution of the farmer organizations and concept of farmer organizations and their roles. The third section analyses the importance of Farmer Company in overcoming prevailing marketing problems of small holder farmers. It also analyzes possible economic welfare for producers. Fourth section provides a detailed description on Chandrika Wewa farmer company and analyzes its operations activates with quantitative data. Fifth section provides some discussion on findings and last section draw some conclusions based on analysis.

2. BACKGROUND

FARMER COMPANIES IN SRI LANKA

The history of farmer organizations in Sri Lanka goes back to ancient times and since the post-independence era, there have been several different avatars of farmer organizations established to manage irrigation systems and agricultural functions. In the late 1980's the Sri Lankan government made many changes to its agricultural and irrigation policies in order to encourage participation of farmers in the development process. In 1988, the government accepted participatory irrigation management as a policy and promoted the formation and development of farmer organizations (FOs), with the intent to hand over operation and maintenance responsibilities to FOs at the tertiary level.

Under this policy it was expected that full responsibility of tertiary level operation and maintenance and resource mobilization would be handed over to farmers (Vermillion 1991).

The handing over of operation and maintenance responsibilities to FOs has taken place in all the irrigation schemes managed by the government after the adoption of this policy. Certain farmer organizations emerged as forceful pressure groups and managed to organize water distribution, input supply, and, in a limited way, sale of production. However, the policies did not produce a major breakthrough that ensured small farmer's economic and social well-being through profitable economic ventures. There still remained absence of a combined set of interventions to promote year-round cropping, crop scheduling, value-added production and other agro-industries, market links in the form of forward contracts of sufficient scale as profitable business for farmer organizations, absence of procedures for decision making in the implementation of trade policy sensitive to farmers that promoted partnerships between farmer organizations and the organized private sector as well as between state and farmer organizations.

The Sri Lankan government first pilot tested the farmer company concept in two irrigated agricultural settlement schemes in the country; one in Ridibendi Ela where there is a minor irrigation scheme controlled by department of irrigation and another at Chandrikawewa Irrigation settlement scheme which was initially controlled by Mahaweli authority in 1998. At the time, the concept of farmer companies was already being used by the Shared Control of Natural resources (SCOR) project which was undertaken in two watersheds in Sri Lanka, during the period 1993 to 1998. SCOR project was an action research project led by the International Water Management Institute and was conducted in collaboration with a number of Sri Lankan (governmental and non governmental) organizations (IIMI 1995, 1999). It had established two farmer companies in Huruluwewa and Nilwala watersheds, with the idea of monitoring participatory natural resource management. Experiences gained from the models developed and tested by SCOR evolved was used to develop an organizational structure for newly developed farmer companies along with the active participation of small farmers involved the market economy (Senanayake 2003).

Since it was a relative new concept amongst the smallholder farming sector in the country, challenges were recorded in the initial establishment of the farmer companies. The SCOR pilot project identified five major stages that are to be followed to establish a Farmer Company (Wijayaratna, 1997):

1. Venture seeking stage
2. Company formalizing stage
3. Market link building /expanding stage
4. (Strategic) Planning for long-term sustainability
5. Sustainable business operations (high degree of autonomy and self-reliance)

The structure of the farmer companies consisted of three partners: shareholders; a board of directors; and a management body. The number of shareholders depended on the shares issued and the board of directors is selected from and by the shareholder group and functions as the chief executive body of the company. The management body consists of professionals recruited by the company.

Under new agricultural policies introduced in 1996, farmers companies were considered as the main institutional strategy of agriculture and irrigation development. Thus, FCs were established in major and

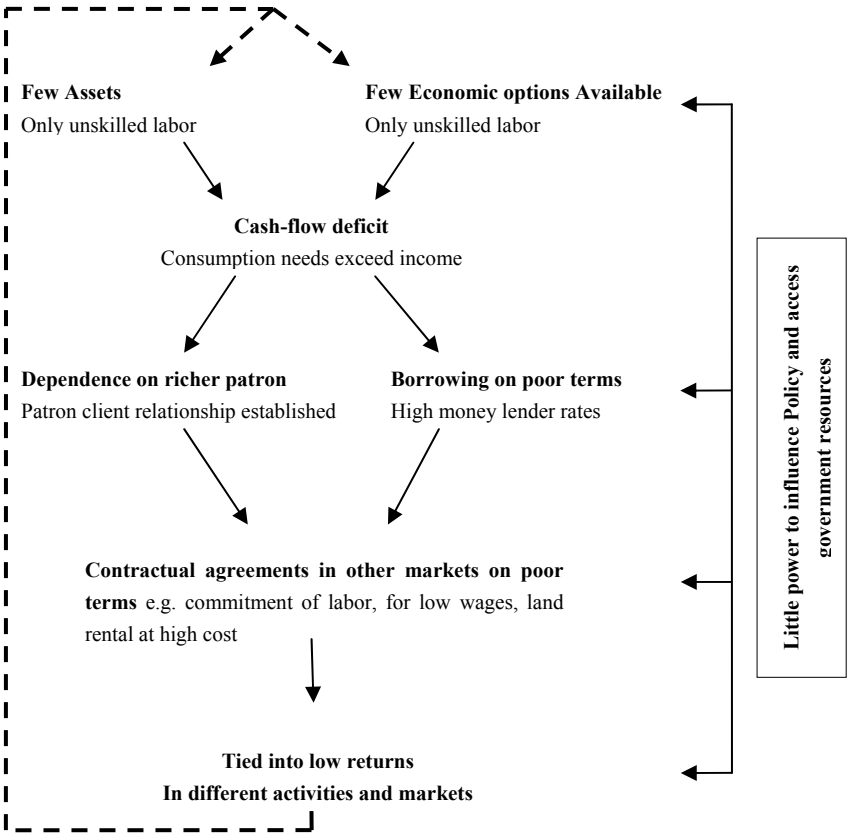
some minor irrigation schemes by the Irrigation Management Division (IMD), Department of Agrarian Service, Agricultural Development Authority and Mahaweli Development Board. By 2003 there were about 85 farmer companies are functioning throughout the country (Senanayake 2003). But there is little information on their performance. IWMI has supported one farmer company at Ridibendi Ela, monitored its activities for some time and reported that the concept can be practiced successfully (Perera et al 2002). The Ridibendi Ela farmers company currently competes with other private firms who provide agricultural products like packaged rice to market. They also use their internet website to advertise their products (http://www.ridibendi.com).

3. INSTITUTIONS FOR MARKETS

TRANSACTION COST AND THE MARKET TRAP

Weak institutional mechanisms in rural economies trap poor people into interlocking markets.

Figure 1 – How Poor get trapped in interlocking markets



Source: Ashley et al 2003

Resource poor rural farm households often enter into arrangements where they borrow from, work for, hire land from and sell harvests to a single landlord / moneylender when they are excluded from entering into alternative and more remunerative transactions with other parties. Such arrangements normally arise in the context of transaction failures in one market, for example poor access to credit markets force poor

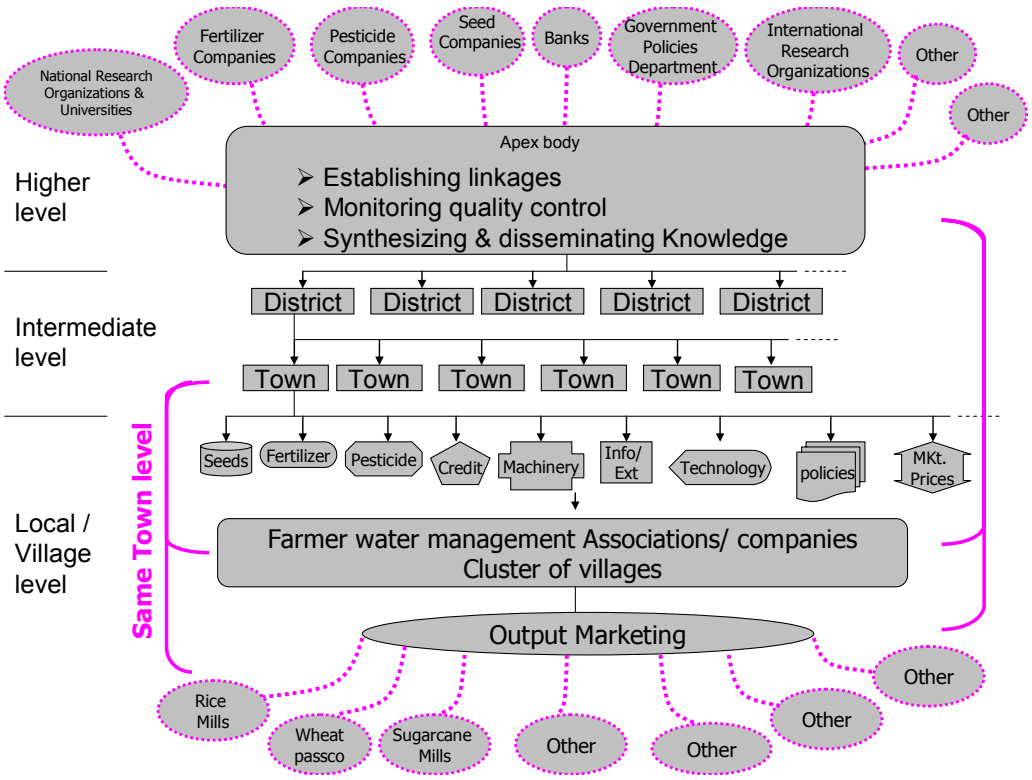
households to seek access to this market through an interlocking arrangement which allows an intermediate party to reduce their transaction costs and risks. The balance of power between creditor and debtor is such that creditors are able to set adverse conditions in markets for finance, labor, products, rental and sharecropping then interlocking can impede entrepreneurial capacity and trap the poor in low-return activities (Figure 1). It is said that, 'interlocking markets are particularly open to abuse because the terms of all transactions are inter-related and the low returns offered are much easier to conceal from the moral and competitive scrutiny of others in society'(Dorward et al 2005).

Open economic policies spurred by globalization also pose challenges to small-scale agricultural producers. Even if the free market is supposed to allocate resources efficiently and provide the best price for products, prevailing problems like manipulation and corruption subject small-scale producers to exploitation by more powerful or monopolistic business intermediates. With limited resources there is very little opportunity to capitalize on competitive and comparative advantages encouraged by globalization. High transaction costs have affected the prices small-scale farmers receive in both input and output markets. The transaction costs that specifically emerge from dealing with large numbers of small farms can be identified as: the bureaucratic costs associated with managing and coordinating integrated production, processing, and marketing; the opportunity cost of time used to communicate with farmers and coordinate them; the costs involved in establishing and monitoring long-term contracts; the screening costs linked to uncertainties about the reliability of potential suppliers or buyers and the uncertainty about the actual quality of the goods; and the transfer costs associated with the legal or physical constraints on the movement and transfer of goods. While some transaction costs are related to physical costs of transportation and packaging, other costs are the outcome of informational asymmetries and contract enforcement problems that force agents to incur expenditures associated with search, supervision, and management (Hayes 2000).

Transaction costs are higher for small scale farmers in the capital market, when they want to acquire production oriented credit facilities (Wijerathna 2000). Capital is a key factor in increasing agricultural production, and is one of the major constraints for small farmers in adopting new technologies. Small-scale farmers in rural economies with limited assets have little access to credit which restricts their opportunities to add inputs and improve agricultural productivity. Most of the time these poor farmers with limited assets are unable to provide the collateral required by formal financial institutions and there is little interest to operate agricultural credit schemes for small loans due to the high transaction costs required to organize such programs.

Many studies aimed at reducing poverty among rural farmer groups have highlighted the importance of providing complimentary inputs, supporting services and markets. Hussain and Perera (2004) discuss the importance of providing all complimentary services and have developed an 'integrated service provision model' to address all the areas that require that can be adapted to the South Asian context. Figure 2 provide a integrated service provision model suggested by Hussain and Perera with special reference to Pakistan.

Figure 2 – A suggested frame work for integrated service provision in Agriculture in South Asia



Source: Hussain and Perera 2003

Innovative institutional arrangements are required to empower and protect small-scale agricultural producers from falling into these market traps. In the 1990s, global approaches to rural development started to promote the idea of participatory development (Ellies and Biggs 2001). The possibility of farmers acting collectively to take charge of their own economic interests became emphasized as a way to overcome problems of institutional access to information and credit. Other issues such as seed supply and provision related problems that arise out of government and private sector inefficiencies when corrected enable large scale adoption and results to have positive impact in terms of higher yields and incomes for farm households, in addition to other less tangible and indirect gains.

COLLECTIVE ACTION AND THE WELFARE EFFECT

Most of the economic welfare impacts created by farmer companies are associated with the reduction of transaction costs. This can easily be understood with the transaction cost approach. Transaction costs are monetary or non monetary costs associated with any transaction, other than the given price of that good or service. They include the costs of gathering and processing the information needed to carry out a transaction, of reaching decisions, of negotiating contracts, and of policing and enforcing those contracts. The transaction cost approach argues that the organizational form or "governance structure" that minimizes the sum of production and transaction costs for a given activity will have a competitive advantage and hence tend to dominate that activity.

Transaction cost approach developed by Coase, Williamson, and Ouchi analyze the structure of an organization with respect to four principles: the asset fixity principle, the uncertainty principle, the externality principle, and the hierarchical decomposition principle. Williamson (1991) argues that four principles for efficient organizational design determine the type of organizational structure that will tend to dominate a particular line of economic activity (where efficiency is defined as the ability to minimize transactions costs). Within this approach, the welfare impacts of a farmer company can be understand as the benefits it can provide to its members that are otherwise unavailable or more expensive.

The asset fixity principle involved in building countervailing power and preserving market access with farmer company. With collective action farmers are able to counterbalance the market power of their trading partners, leading to more equitable and efficient market outcomes (Galbraith). Collective bargaining power can increase efficiency by transforming the market relationship between farmers and their trading partners from one approaching simple monopoly or monopsony to one approaching bilateral monopoly. Collective action can also preserve some market options for small-scale farmers. The company can afford to operate marketing or farm supply facilities that private investors have abandoned in favor of more profitable investments elsewhere. The company can also encourage farmers to develop new crops and farming techniques, those are otherwise not provided to farmers by private investors.

The uncertainty principle states that the greater the uncertainty surrounding a transaction the less likely the transaction is to be efficiently mediated by autonomous market contracting (Williamson 1979). As uncertainty increases, so does the cost of renegotiating contracts; as unforeseen contingencies arise, so does the potential for opportunistic behavior. An increase in uncertainty therefore creates incentives to shift from institutions like the spot market to contingent contracts and vertical integration. Farmer companies combine elements of both vertical integration and contingency contracting and offer more ways of dealing with uncertainty than private business owners. Collective action in the form of a farmers company provides a sort of income insurance and reduce the risk for lenders in issuing production oriented credit for farmers.

The externality principle states that a firm has an incentive to integrate vertically when participants in adjacent market stages impose negative externalities on the firm (Williamson 1991). Many of the “competitive yardstick" activities of farmer company, such as their leadership in introducing new seed varieties, can be viewed as public goods. Farmers, faced with unsatisfactory performance by private businesses, may form a company whose purpose is to force the private business operators, through competition, to improve their service to farmers. If successful in enforcing competition, the cooperative generates benefits that it does not capture itself but which accrue to the farmer-stockholders, as well as to other farmers in the area.

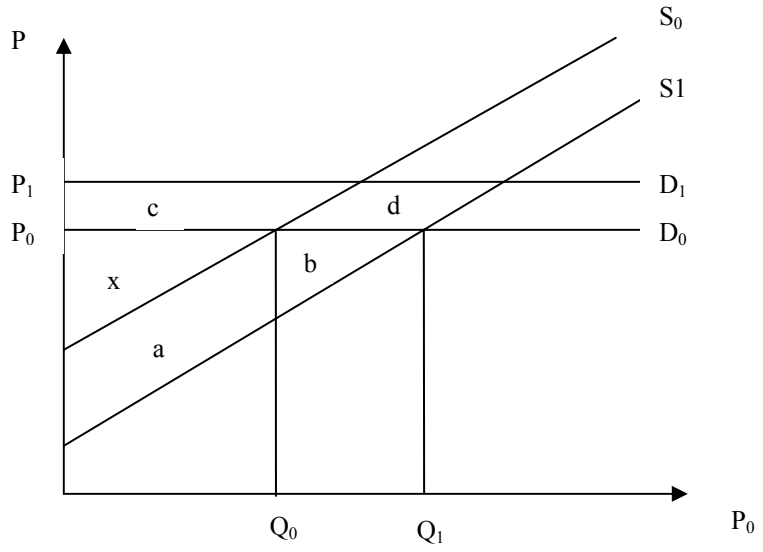
Commercial firms have an incentive to integrate vertically to avoid opportunistic behavior by their trading partners. Hierarchical decomposition principle explains why such integration is more likely to take the firm of farmers vertically integrating into other types of agribusinesses via collective action. A farmers company, represents a looser form of vertical integration than a vertically integrated private firm, resembling in many ways a contingency contract. Stockholders in the company agree to eschew competition among themselves in their marketing and input supply activities but continue to make the rest of their decisions independently. Hence the farmer company can allow their members to capture

many of the advantages of large-scale marketing, input production, and strategic planning while still permitting farmers to make the most of their farm-level decisions themselves.

Over all economic welfare resulted with reduced transaction cost can be understand with a partial equilibrium model. Suppose "n" number of farmers formed a company and collectively access the market. If the transaction cost of a individual farmer before affiliating into a company is "t_0" , and if transaction cost is cut down with the collective action to "t_1", net welfare change be illustrated as below (Figure 3).

S_0 – aggregate supply curve of individual farmers before forming the company
S_1 – Supply curve of the farmer company
P_0 – market price received by individual farmers before forming the company
Q_0 – equilibrium quantity without the farmer company
Q – Equilibrium quantity with the farmer company
D – Demand curve (perfectly elastic)
t_0 -Transaction cost of individual farmer
their aggregate transaction cost - $\sum t_0$
t_1 – Transaction cost of farmer company

Figure 3 – Producer welfare created by farmer company – with a Partial equilibrium model



1. change of welfare with constant output price (if out put price remained unchanged even after forming the company)

Producer surplus (before the company) = x
Producer surplus with farmer company = x+a+b
Change of welfare = (x+a+b) – x
= a+b

2. if the company could gain a higher price of P_1 with the collective bargaining power,

Producer surplus (before the company) = x
Producer surplus with farmer company = x+a+b+c+d
Change of welfare = (x+a+b+c+d) – x
= a+b+c+d

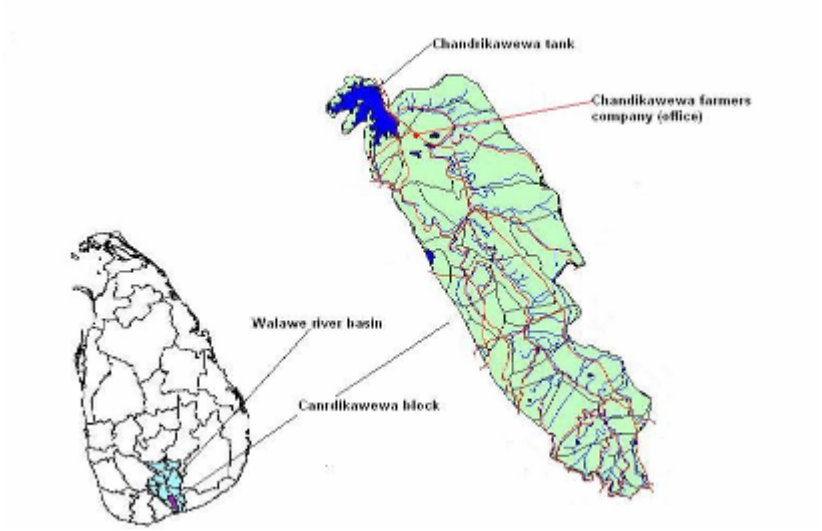
4. CHANDRIKA WEWA FARMERS COMPANY

CHANDRIKA WEWA IRRIGATION SETTLEMENT SCHEME

The Chandrika Wewa irrigation scheme is located in southern Sri Lanka, by the borders of Rathnapura and Hambanthota districts. It is considered a part of the Uda Walawe irrigation scheme, although it is part of a longer history of development in the region and was started in 1957 as the first step in Walawe basin development program. Under that program, 5000 acres of underutilized lands were develop for irrigated cultivations, and the tank that supports the system was constructed in 1958 by damming one of the tributaries of Walawe river, Hulanda Oya (CECB 1976).

Under the Chandrika Wewa settlement program 1800 families were settled in 2023 ha (5000 acres) of lands in down stream (Molle and Renwik 2005). Resettlement was carried out in different phases. During initial phases selected settler families were provided with three acres of irrigated lands and two acres of un-irrigated high lands. Support was also given to these families in constructing houses on their new lands. In the last phase of settlement, settlers were provided only two acres of irrigated lands and two acres of high lands (Amunugama 1965). Figure 5 shows the location of Chandrika Wewa irrigation settlement scheme and farmer company office.

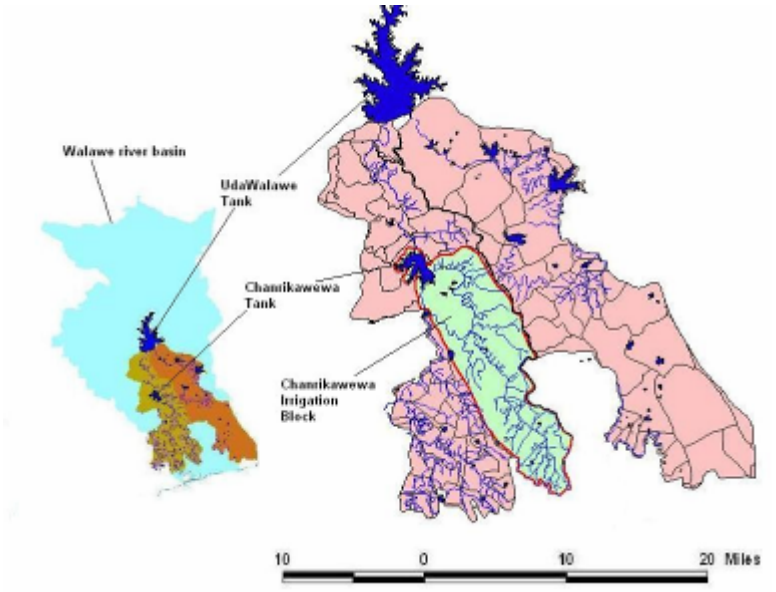
Figure 4 – Location Chandrika Wewa tank, irrigation block and Farmer Company



The Chandrika Wewa tank and command area lies within the command area of Uda Walawe tank. In addition to water it gathers from Hulanda Oya, now is also fed by the Uda Walawe irrigation system, through its right bank main canal. The system also takes some water to irrigate further downstream area with a newly constructed sluice at right bank of Chandrika Wewa tank. The Command area of Uda Walawe tank is divided into blocks and the area that includes Chandrika Wewa tank, its original command area and an additional area is called the Chandrika Wewa block.

Uda Walawe Multi purpose development project is one of the major development projects implemented by government of Sri Lanka after the independence. This reservoir is built across the Walawe river, which is the fifth largest river in Sri Lanka. The river is 136 Km long and has a catchments area of 1200 square kilometers. The Uda Walawe reservoir was constructed during the period 1963 – 1967, as part of a plan to develop irrigation infrastructure in 32,000 ha of land in the dry zone of southern Sri Lanka. It is an earth fill dam, with a live storage capacity of 240 MCM. There are two main canals, the Right Bank Main Canal (RBMC), and the Left Bank Main Canal (LBMC). The original plan was to develop 20,000 hectares of land for irrigation under the project. Command area is planed to irrigate with a net work of canals based on 42 km long RBMC and 31 km long LBMC. Even though the construction of tank was completed in 1967 development of down stream has taken place in step wise and it is still going on. Right bank was given the first priority in development agenda and left bank has given the second priority. The total area actually developed up to the end of 1997 was about 12,900 ha, comprising 8,500 ha under RBMC and 4,400 ha under LBMC. At present, the area irrigated has increased to 11,000 ha in the RBMC and 6400 ha in the LBMC. Both left and right bank canals flows in ridges of the valley identified for development and they provide water only to inside. Right and left bank command areas are separated with the original Walawe River, which is now considered as the main drainage canal of the irrigation system. (Wijerathna 2005). Figure 5 shows location of Chandrika Wewa and Uda Walawe irrigation schemes within Walawe River basin.

Figure 5: Uda Walawe Project area and Chandrika Wewa block



EVOLUTION OF FARMER COMPANY

The Chandrika Wewa farmer company was started in 1998 as an 'induced' collective action of group of active farmers in the Chandrika Wewa irrigation block area. Following the recommendations of the NDC, the Government of Sri Lanka supported the establishment of farmer companies in two selected irrigation settlement schemes, one of which is Chandrika Wewa. The model for each company was based on lessons derived from the companies established under the SCOR project and also supplied a model constitution for the farmers as a guide. The Mahaweli Authority, the managers of the area's irrigation program, were expected to support farmers in the in the initial establishing and running the company. To promote the concept government also decided to give financial support to the companies, including the initial capital required for registration.

As a first step the Mahaweli authority created an awareness program for farmers in the area to start institutional development. Initial reluctance from the farmers to buy into the farmer company concept came from fear that it would lead to privatization of services, particularly of water. Some farmer leaders emerged from the group has further discussed about the activity and prepared their own constitutions for the company by making some amendments to the model constitution provided by the government. They had their initial meeting in 3rd of July 1998. After approving the constitution they have appointed members for their directors' board and a secretary for the company. Selling of shares to raise the capital of the company was also initiated. With the directions of government, Mahaweli authority has nominated Deputy residential project manger for human resource and institutional development as the general manager for the company. A deputy general manager was also assigned by the Mahaweli authority. The two positions are expected to guide the farmer company in a right direction by providing some awareness about management of a company to farmers and to ensure proper use of resource provided by the government. The Chandrika Wewa Farmer Company was registered as a People's Company with limited liability under the Companies Act No 17 of 1982 on 10th of July 1998. The idea behind setting up of the farmer company as a people's company is to restrict the total private ownership and safeguard the existing employee rights. According to the Company Act a farmers' company formed as a People's Company, unlike other private companies, should have a membership not less than 50 members. Its shares cannot be freely traded except among farmers eligible for membership. It restricts a single farmer owning more than 10% of the share capital. Nonetheless, as a profit making company it follows rules, practices and procedures such as registering with the Registrar of Companies, appointing an audit firm and a registered corporate secretary, undertaking annual audits, keeping accounts, taxation, holding annual general meetings etc. as done by the other companies.

In their constitution they have stated main objectives of setting the company as

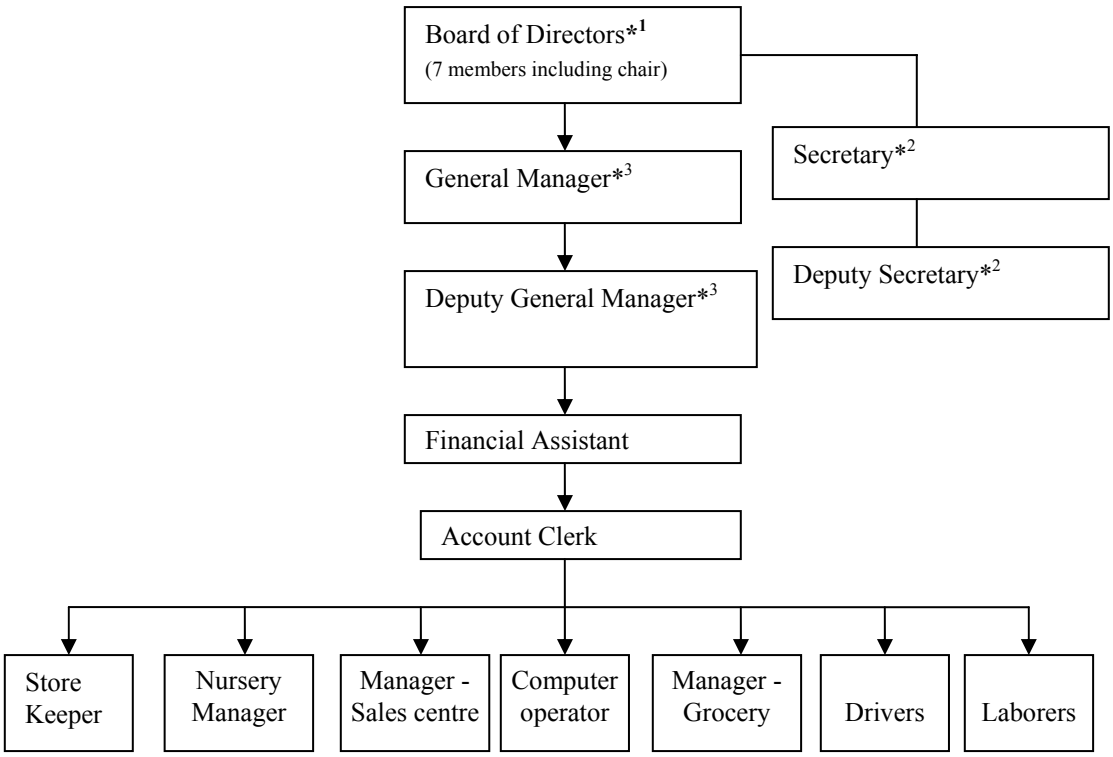
- Uplift the living standards of farmers and other agricultural workers in Chandrika Wewa settlement area by providing necessary technical support and other requirements,
- Timely provision or facilitation the of provision of agricultural inputs, wholesale or retail,
- Provision or facilitation of the provision of agricultural credits,
- Supply or inputs like fertilizer and chemicals in favorable prices,
- Provision of agricultural machineries own or rented by the company to share holder farmers in easy terms.
- Coming into agreement with relevant agencies for O&M of the irrigation system and for providing water for agriculture,

- Implement agriculture extension services and research for the development of agriculture and/or coming into agreement with relevant agencies for providing such services
- Introduce new agro-processing, packing and transporting methods and preserving techniques and agro-based industries.
- Wholesale purchasing, storing, selling or exporting the total agriculture productions in the area.
- Introduce new agricultural technologies and new seed varieties suitable for local or export markets and provide marketing facilities for these new products,
- Introduce some labor intensive home based and export oriented production activities and organize them with necessary support to eliminate prevailing unemployment problem among rural farmer communities of the area,
- Introduce animal product industries or encourage such industries by introducing investors to the project area in order to generate employment,
- Organize and implement a agricultural credit scheme which provide credit in cash or kind and adopt some innovative approaches in ensuring repayment,
- Provision of commodities required by the settler in the area in reasonable prices,
- Carry on some work contracts with labor and resources of the company to raise the capital.
- Carry on some good and passenger transport services,
- Carry on some fuel filling stations
- Carry on some thrift and savings activities.
- Solve all the production and marketing related problems of agriculture producers and coordinate with state and private agencies to provide the maximum price for the products,

Organization structure of the company

The basic structure of the company consists of board of directors appointed by share holders of the company, a chair person for directors selected by the board, a secretary and vise secretary. To run the operational activities a played staff was appointed. The general manger and deputy general manager appointed by the Mahaweli authority was suppose to help account assistant in controlling financial operations and managing other activities. Figure 6 shows the total structure of the company. Under the financial assistance there are some key people responsible to control each key business activity of the company. Those key persons are reported to financial Assistance trough account clerk.

Figure 6 – Organizational Structure of Chandrika Wewa Farmer Company



*1 Board of directors is appointed annually at the AGM. All share holders are eligible to attend AGM. Members who has a 50 or more shares has same voting power Current/ Former Heads of Distributary canal farmer organizations (if former should have at leas two years tenure) are eligible for directors. After the AGM, at the director board meeting, a chair for director board is appointed.

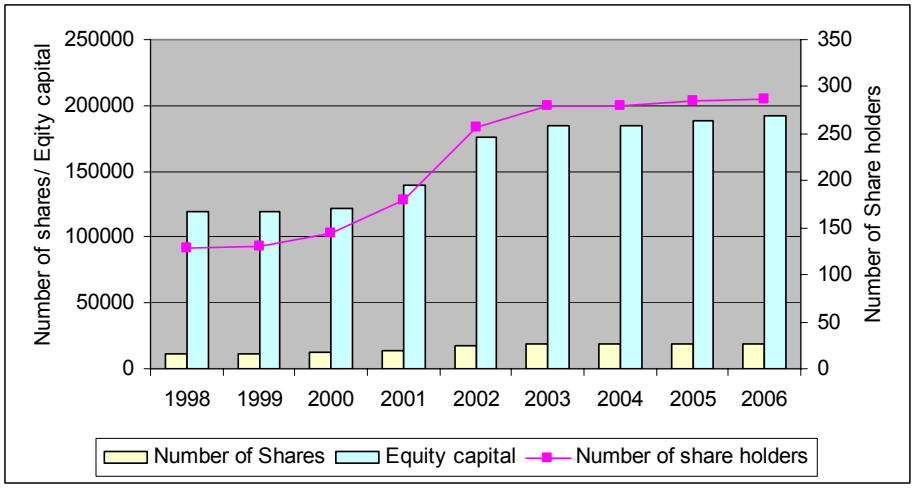
*2 Deputy Secretary is appointed at the AGM. According to the company act, secretary should be a lawyer. Company obtain the service of a lawyer, who volunteered to work as a secretary

*3 General and deputy general managers are officers of Mahaweli Authority. They are nominated those posts by Residential project manager of the Mahaweli

GROWTH OF SHARE HOLDERS AND EQUITY CAPITAL

The company is selling shares to raise its capital required for operational activities. Base value of the share is decided as ten rupees. Since it was originally decided to limit the operations of this body it Chandrika Wewa settlement scheme area, the first qualification to be a share holder of the company is decided as a settler farmer in the area. Secondly the person needs to be a member of d canal farmer organization of his own area. Originally the company was initiated with share capital collected from fifty members. By the end of the first year their capital has grown up to 11,8750 with the contribution of 129 members. By now they have 287 members and a share capital of Rs 192,200. Figure 7 shows the growth of their shareholders, and capital.

Figure 7 – share holders, shares sold and capital of the company (1998-2005)



KEY FUNCTION OF THE COMPANY

The company has started number of programs targeted to uplift economic status of its members. Mostly it attempt to provide better input and output market for agricultural producers. Activities of the company can be divided into two main groups as core business activities carried out to support its share holders in their production process and activities carried out to raise the capital of the company. From the number of core business activities they have carried out to support production process, agricultural credit scheme, fertilizer and agrochemical sales scheme for shareholders, seed paddy production and paddy purchasing can be identified as most effective and key activities of the company.

Cultivation Loans schemes for farmers

Inadequate capital to purchase cash inputs required in the production process is one of the main problem faced by small scale farmers. Obtaining a credit facilities also not easy for these poor due to the physical and psychological distance they have to formal financial institutions. Limitation in capital, constraints the possibility of improving the productivity with new technologies. Technological improvement is essential for increase the productivity and to achieve development in any sector of the economy. The technological revolution has brought about significant changes in the agricultural system by mechanization, use of improved varieties, increased use of new chemical fertilizer and pesticides, new production methods etc over the last few decades. But those new technologies can only be offered by the farmers who have adequate initial capital

Usually the cost of production of paddy farmer has three main components as labor cost, cost of farm power and cost of material inputs. To cultivate a acre of paddy land a farmer require about 20,000 rupees. Table 1 provides cost of production of a paddy farmer in Uda Walawe Area.

Table 1 – Cost of production of a paddy farmer in Uda Walawe project area (Rs/ acre based on 2002 data)

	Labour		Farm Power		Material		Total
	Value	%	Value	%	Value	%	
Irrigated farmers	9,804	52	3,941	21	4,993	27	18,738
Rainfed	8,756	53	3,471	21	4,213	26	16,440

Source – IWMI data

Though a considerable portion of labor cost can be covered with family labor, still the farmer has to bare about 10,000 rupees per acre for other cash inputs. Since the small Scale farmer who depend mainly on farming do not have considerable amount of savings or any other sources of income to cover up their cost of production in their own, a source of capital is a prerequisite for them.

Concerning the problem of members in accessing credit facilities for cultivation purposes, the company has initially started to provide cultivation loans with their own capital. Basically they allow farmers to purchase fertilizer and agrochemicals for credit. With the limited capital of the company it was able to provide this service only to limited number of farmers. Since there is a big demand for credit the company negotiate with a private bank and started a new credit scheme with them. Under this scheme bank provide money to individual farmer through the company and it act as the intermediate or granter. The private bank in the area able to operate this loan scheme with funds it receives from central bank under the new comprehensive rural credit scheme. Government has designed this scheme for distribute credit for farmers in low interest rate. While loans under other schemes charge interest rate of around 18% and informal lenders charge 30 to 50% per annum these loan schemes charge only about 12 % per annum.

The farmer company operated a cultivation loan scheme for its share holders from 2001 with Seylan bank, one private bank in the area. The Bank has introduced themselves to the farmers through the farmer company. The Bank receives enormous support from the farmer company in selecting the persons who are really suitable for lending. On the other hand, after the farmer company gives a recommendation, it encourages farmers to do their work properly and also to repay the loan in time. The obtaining of cross guarantee of other two farmers of the farmer company also encourages farmers to repay the loan in time. Table 2 provide summary of cultivation loan program.

Table 2 – Cultivation loans issued by the farmer company together with seylan bank

Season	Loan amount		# of farmers	Rate of recovery	
	From bank	From company		Bank	Company
2001 Yala	225000	454747	75	100%	100%
2001/02 Maha	180000	359021	60	100%	100%
2002 Yala	252000	502236	84	100%	98%
2002/03 Maha	422000	922171	154	100%	98%
2003 Yala	444000	884844	148	100%	99%
2003/04 Maha	648000	653880	108	100%	100%
2004 Yala	288000	434450	72	100%	95%

The bank able to record a 0% of default rate with some special characteristics associated with operations of Farmer Company. When credit is issued to farmers, instead of issuing it in cash, major part of the credit is issued in kind. Maximum amount of credit per farmer is decided based on acreage of the farmer and crop he is going to cultivate. After approving a certain amount of credit for a farmer only a potion of it is released to him in cash to cover cost of land preparation etc. Major part of it is released in kind as fertilizer and required agrochemicals. Provision of credit in this method increases the effective use of credit by cutting down the chances to use it for some other purposes. When the company purchase input for all farmers at once from wholesale dealers it can provide those inputs to farmers in whole sale price and can cut down the transaction cost for farmers since the company supply brought them to their own area in correct time. To ensure the repayment and as farmers can make sure about their market for out put the company also made some contract with the borrowing farmers to purchase their paddy yield. They decided a price for paddy concerning the prevailed price in last season.

Fertilizer and Agrochemicals Sales

Agrochemicals and fertilizer are most wanted input by all farmers in the area. Usually small scale farmers in the area have to purchase these from retails shops. With the margins kept by sales agent and re-sellers farmers had to pay considerably high prices for these. Hence the company stated to purchase those from agents of production companies at whole sale price and to carry on a retail sale by themselves. When the company provided those to members with a very little margin, which is to cover cost of handling. number of members of the company able to purchase fertilizer and chemicals for about 5% lower than the price of market price. Availability of required chemicals at required time in their own area cut down the transaction cost, by reducing the time, cost of transport etc they have to bare in acquiring required fertilizer and chemical in due time. The awareness created by the company help farmers, together with extension officers of the Mahaweli, to select most appropriate fertilizer and chemicals in optimum quantities. Thereby they could cut down the unnecessary expenses that some of them have made in irrelevant type or quantity of fertilizer and chemicals. Table 3 and 4 shows the number of farmers benefited with agrochemical and fertilizer selling of the company and financial benefit they had with price reduction.

Table 3 – Agro chemical sales by the company (1998-2004)

Season	Value of chemicals sold	# of farmers benefited	Profit to farmers	Profit to the company
1998 Yala	283350	130	14913	7083
1999 Yala	433970	165	22841	8679
1999/2000 Maha	286601	159	15084	5732
2001 Yala	147130	132	7744	2943
2002 Yala	107885	102	5678	2157
2002/03 Maha	125719	115	6617	2514
2003 Yala	296000	127	15579	7400
2003/04 Maha	103202	109	5432	2580

Table 4 – Fertilizer Supply

Season	Amount (Mt)	Value (rupees)	# of farmers benifited	Profit to farmers	Profit to the company
1998 Yala	512	191650	128	10087	7680
1999 Yala	168	63000	42	3316	2520
1999/2000 Maha	272	82438	68	4339	4080
2000/01 Maha	628	187840	157	9886	7850
2001 Yala	468	140350	117	7387	7025
2001/02 Maha	612	182500	153	9605	9180
2002 Yala	2428	1061090	607	55847	29136
2002/03 Maha	2808	2600639	702	136876	33696
2003 Yala	3240	3099189	810	163115	38880
2003/04 Maha	1316	576940	329	30365	28401
2004 Yala	408	307525	102	16186	4896

Fertilizer Subsidy scheme of the government

The government came to power in 2005 has decided to provided fertilizer for farmers in a subsidized price. This subsidy is provided only for small scale farmers who does cultivation as their way of living. When this system is put in to practice government had a big problem in providing this benefit to targeted recipients. In most of the areas in the country the government decided to operate this system through divisional secretaries. Condition imposed by the government to farmers in obtaining an approval from divisional secretary as a beneficiary has created a huge transaction cost on rural poor farmers. In Chandrika Wewa area, since the farmer company came up to as an intermediary in distributing subsidized fertilizer to targeted small farmers both farmers and government could cut down their cost of transaction.

Paddy purchasing, rice processing and selling

Provision of output market which ensure a reasonable price for product of farmers is one of the main objectives of the company. They have started to purchase of paddy by the company with some forward contracts with farmers. They set prices at the begging of the season considering the market prices prevailed in the area in previous season.

Company purchases the harvest of members who agreed to sell their product with forward contract in agreed price. Company stores this paddy for some time for better market price. Usually the company does the production of rice with purchased paddy in off season when there is high market demand for rice.

The company has developed and practice their own method of buying, storing and selling of rice for couple times. In those attempts they sold stored paddy to some private business men in off season for higher price. During last year, the government had a scheme to purchase paddy in guaranteed price. The company was also joined with the government and purchase paddy from farmers with the money they borrowed from the government. They have had some forward contract with the government to sell processes rice to cooperative and food department of the government.

Buying and selling of banana

Banana is one of a major agricultural product in the area, which needs to be send to out side markets. At the begging of the company govt. officers have highlighted banana resale as a good business for farmers' company. With that guidance, they have started a business to purchase banana from farmers in the area, transport them to Colombo and to ell them to shopping centers of Cooperative wholesale establishment.

This business was not successful as they expected. Since about 50% of the banana they brought to Colombo were not in the quality expected by the sales centers in Colombo, FC able to sell only about 50% f the banana they brought to Colombo. Hence the company had to experience some losses in their very first business and to give it up.

Packaging and selling of grains

Grains like mung been, cowpea, mazes, kurakan, meneri, gingerly are some of the common non paddy crops produced by the farmers in the area. Farmer Company has identified a new business to buy, package and selling of these grains. Mostly they sold packed grains by them selves at markets they identified in some places in Colombo.

Agricultural extension service

Company has identified agricultural extension as one of the most important thing for farmers in the area. They found that due to lack of awareness farmers were misallocate their valuable resources and experience losses from their production process. The company started to provide some extension services to member farmers with the support of Mahaweli Officers, to correct this situation.

Vocational training for some youth

The company had to have some skilled staff to maintain their office activities. Since they want to have a low cost service, they decide to recruit some apprentice; some Scholl leavers from framer families for positions like clerk. Company provided some short term training with some trainers. With the experience they collect those who come to work here as apprentice able find some better positions with time and company could provide opportunities for another set of youth.

Promoting Bee keeping as a self employment.

As additional sources of income for farmer families, the company started to promote self employments like bee keeping. Under this program some selected farmers were trained for the activities and input they require like bee nests were provided in subsidized priced. But they could achieve limited success with this activity

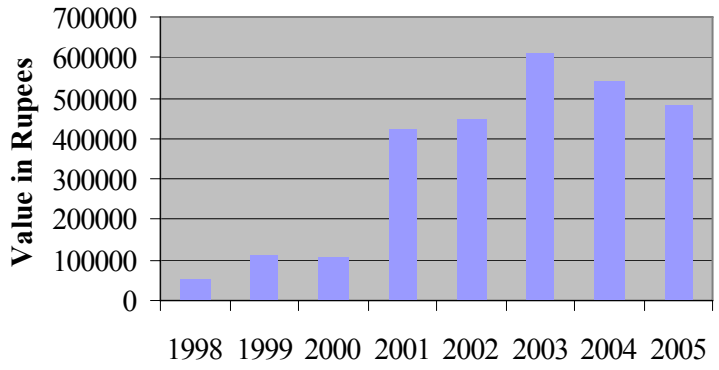
Handling of some service Contracts

Government usually higher private firms or individuals in obtaining some of the services that it provides to public. Since government doesn't have enough staffing in carrying on cleaning of main canals tank bund etc, this kind of service contracts are offer to private sector, the farmer company started to take some of these service contracts and to carry them with the participation of members. this created some financial benefits for the company and ultimately to its members. on the other hand since these services are targeted to farmers, the members of the company always try to do the service as best as possible. It led to better service to all people and government able to find reliable contractor with low transaction cost.

GROWTH OF FIXED ASSETS OF THE COMPANY

The office of the company was established in a small building provided by a Mahaweli authority of Sri Lanka. During first year the company acquired only limited amount of fixed assets such as office equipments. In proceeding years they have acquired more assets required in their new operational activities. By 2001 they have constructed small building to run their own agro chemical and fertilizer shop which provide cheaper inputs for farmers. Figure 8 indicate the accounted value of fixed assets of the company.

Figure 8 – Value of fixed assets (1998-2005)



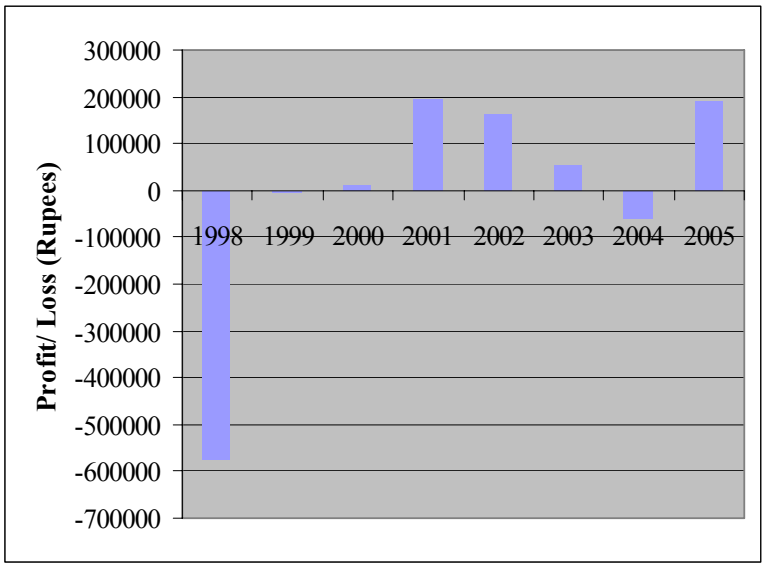
This includes only the vale of fixed assets completely own to the company. But currently it uses more fixed assets like their office building for which they have only user rights. Mahaweli authority has provided a small building for running their office. The company has to bear only the operational expenses like electricity, telephone bills. Mahaweli has also provided a tractor to facilitate transport activities of the company. A bouser for has also provided to carry on some drinking water supply to water short areas. In 2001 assets of the company has grown up with the nursery and two sales centers hey initiated. It is grown by 2003 with the increased operations. But in last too years they couldn't have new assets and value of available assets was also reduced with the depreciation.

PROFITS EARNED BY THE COMPANY

The company has two objectives. Firstly to provide some supporting services to share holder farmer in commercializing their production process and secondly to earn some profits and raise assets of the company so that all share holders ultimately get benefits with expanded operations.

At the very first year the chandika wewa farmers company had experience a huge loss after failing their very first activity that they have started even with some external guidance. Their lack of experience in market structure and handling a business can be one of the main reasons for this loss. Even with this loss the company has not given up their objective and has gone ahead with alternative business activities. In second year they have experienced a marginal loss and in third year they could recover a marginal profit. In 2001 2002 and 2003 they have received considerable profits with increased operations. Again in 2004 they had a loss with the price fluctuations in paddy market. But in 2005 they could increase their profit again and reported it as 185,000 rupees. Figure 9 shows changes in profit that they earned from the beginning of the company

Figure 9 – Profits earned by the farmer company (1998-2005)



SUCCESS OR FAILURE? ACTIVITIES CARRIED OUT BY THE FARMER COMPANY

The company has developed and implemented number of programs that they identified as possible ways of supporting its share holders. While most of those programs are targeted to improve economic status of the agricultural producers some other programs expected to provide some welfare impact to the society while it generate some income to the company. in succeeding current market economy. Programs like a sale centre, Nursery, Drinking water distribution with bouser expected to create some profits for the company while it provide some important and good quality service.

Table 5 – Key Activities of Farmer Company

Activity	**commenced**	**# of times/ years repeated**	**Degree of Success**	**Present status**
Seed paddy production	2002	15 times	Limited success	continuing
Agricultural extension service	1998	8 years	successful	continuing
Paddy purchasing/ processing and resale	2000	10 times	successful	continuing
Banana purchasing and resale	1998	3 times	failed	stopped
Packaging and selling of grains	1998	Many times/ occasionally	Limited success	restricted
Cultivation loan scheme – with bank	2001	8 times	successful	continuing
Assist Bee keeping	1998	2 years		stopped
Agrochemical sale	1998	8 years	successful	continuing
Nursery (fruit and flowers)	2001	5 years	successful	continuing
Sales centre	2000	5 years	successful	continuing
Contracts	2000	8 years	successful	continuing
Project loans	2000	8 years	Limited success	continuing
Vocational training	1998	8 years	successful	continuing
Drinking water supply	2001	6 years	successful	continuing
Selling fertilizer under government subsidy scheme	2005	2 times	successful	continuing
Transport service	2002	8 years	successful	continuing

While some of these activities could yield the expected benefits for the members some activities were failed mostly due to some external factors which are beyond their control. Due to changes in political interests, they have not received all pledged support from government. Responsibilities in water management has also not transferred to the company as it was initially expected. With limited external support the company has grown and completed 8 years with number of activities beneficial to its members

With their little experience and understanding on business the company had to identify some viable economies actives that can be practiced by the company in trial and error method. With their experienced they decided to continue certain actives and discontinue some of those. Table 5 provide a summary of key actives they have carried out so far from the being of the company.

FUTURE PLANS OF THE COMPANY

The company is having many plans to expand their operations in future so that it can provide more economic benefits farmers in the area. While some of thee actives are going to undertake with their own resources for some they are looking for external support. Proposal to establish a seed paddy processing unit, a rice processing unit and to purchase a combined harvester are three key activities that they have in their main agenda. They also have a plan to increase number of share holders of the company at least up to 750 by the end of this year.

Proposed seed paddy processing unit

The company is carrying on a seed paddy production for number of years with some selected farmers. Seed paddy produced by the company is not up to the standard of seed paddy in the market since these seed paddy do not processing with a processing machine. Normally to professional seed producers use processing machine in remove weed seeds, seeds of some other verities, sand dust or any other particles and to maintain optimum level of humidity in seeds professional seed. The farmer company has prepared a project proposal to established a seed processing unit to improve the quality of seed paddy produced by them and with the idea of providing best quality seed paddy mainly to its share holders in low cost.

Proposed rice processing unit

Currently the farmer company is processing rice with purchased paddy in some rice processing mills that they temporarily rent out for some time. They have to provide considerable amount of money to out side sources in completing this operation. Most of the time, they have problems in finding a good quality mill in required time. It loses the opportunity in tackling price peeks in the market and target to achieve best price with high quality. Wit the idea of over coming these problems the company has prepared a proposal to establish a rice processing unit.

Proposal to purchase a combine harvester

Usually small scale paddy farmers in Sri Lanka re doing the harvesting manually and use some machinery like tractor in threshing. With increasing demand for labor for expanding economic activities now farmers in the area face some difficulties in finding enough labor in required time. So many farmers in the area are now looking for some mechanical devices which can be operated with little labor and

which can ensure quality product. Though some combined harvesters own to some private companies are available for renting those are very expensive. Hence the farmer company is planning to purchase a combine harvester for the company and provide the service of harvesting for share holders with a low cost.

5. DISCUSSION

Findings of the study shows that even though the suggested concept of farmer company is theoretically very sound concept and though it can be put it to practice, the Chandrika Wewa farmers company is running with marginal benefits. By now it has realized only a very small proportion of targeted benefits. This study mostly with secondary information from records of Farmer Company also has limitations in providing concrete conclusions. Some of the activities are really hard to analyze due to lack of information. Findings with available data show that the Chandrika Wewa farmers are not capitalizing some of the potential benefits due to weaknesses that they have in their management structure. External pressures like political influences are also suppressed some of their opportunities. The limited success that they had also suggests that the company need to better organization of its activities and management structure. They also need more training and knowledge in handling their business. The following areas can be identified as most important areas that need to be considered in designing this kind of improved collective action;

The business plan of the company is not very sound. They are practicing only limited number of activities out of the activities that they expected to carry on. A proper planning has to be done at the begging of the process. A strong management structure that provides them more autonomy is to be designed. The support government in initializing the company is very important. Identification of scope of the farmer company and practically possible activities and its core businesses is very important. It is important in prioritizing and targeting of resources of the company in core business activities that provide more benefits to its share holders. Starting with too many ambitions will complicate the process and create many disappointments.

Currently the only limited proportion of the population have become members of the company. To have more power in the market, Some way of promoting the concept among majority of the population and gathering more capital by selling more shares is important. Participation of more farmers is important in acquiring more attention and support from the government and business operators

Good understanding about managing a business, situations of external markets etc is quite important. To take some decisions like identification of good marketing avenues, possible prices at the harvesting season etc they need to have ways of obtaining more marketing and economic information.

To get the expected benefit with commercializing of smallholders more partnerships are needed to be established with private business entrepreneurs.

More detailed studies are important in understanding the potential they have in improving their collective action and practical feasibility of capitalizing these potentials. Opt unities as well as possible constraints needs to be identified in time and some alternative plans should be their to cope adverse impacts.

6. CONCLUSIONS

The concept of farmer companies can be used as alternative institutional arrangement in commercializing small scale farmers by assisting them in accessing better input markets, better organization of their production process, reaching better credit markets, finding a good output market etc. the company can increase welfare of producers with right word shifting supply curve with reduced input price and low cost credit and with the upward shifting demand curve with increased out put price.

The company can made significant role in cutting down transaction cost of number of transactions made by farmers. This may support share holder farmers, some other farmers, financial institutions, government bodies that control water management and agricultural programs etc in carrying out their activities in more cost effective way. Reduced cost will provide more incentive to service providers in providing improved and expanded service.

The company can also contribute in providing some vital services to people like supply of drinking water. Handling of some contracted services like cleaning of main irrigation canal by farmer company is important in ensuring some financial benefits for farmer company and better service for farmers

The Chandrikawewa farmer company is running with marginal benefits at present. It needs lots of improvements and room for improvement is also there. Management of he company is need to be improved with systematic record keeping, better resource allocation etc. some training program on management of a company may important in this. Number of the share holders of the company needs to be increased so that many farmers in the area can be benefited from the company. Expansion of the company with more share holders will increase their power in collective action. Increased power in the provide them more bargaining and countervailing power in the market.

External induced for forming a this kind of organized collective action is very important. Provision of some resources further encourage he process. Though the members of the company is unhappy about their not receiving of pledged support from the government, it has led them to strengthen their collective action and to develop their own mechanisms in raising capital and make their company a economically viable.

Removing of external pressures like political influences, are also important in ensuring expected benefits. Some government bodies like Mahaweli authority, agrarian services department etc also have to re-think about their bureaucratic organizational structures and take steps in providing more room for participation of people in development agenda with collective actions like Farmer Company.
This concept of farmer company can be used as a way of commercializing smallholder farmers. But it needs to be better organized to capitalize all possible benefits and to over come possible constrains.

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Constitution of Chandrika Wewa (Peoples) Farmer Company

Ridi Bendi Ela Farmer Company: http://www.ridibendi.com/index.htm

ACKNOWLEDGMENTS

This paper is generated as a part of the poverty assessment study carried out by International Water Management Institute (IWMI) with the support of Japan Bank for International Cooperation (JBIC). Data required for the study was collected from many stakeholders including office bearers of the farmer company. Authors whish to thank office bearers of the farmers company and farmers in the area who provided basic information required in this study. Thanks are also extended to Deputy Residential Project Manager and other officers of human resource and institutional development section of Mahaweli Authority office - Embilipitiya, Manager and credit officers of Seylan bank - Embilipitiya and Mr. Weerasekara from Nipon Koi for their contribution in this study with some important information. Support of Mr. W.W. Premachandra and IWMI field staff in collecting data is highly appreciated. Financial support from JBIC in carrying on a poverty assessment study at Uda Walawe project area is gratefully acknowledged.

Thanks are extended to many IWMI colleagues who provided support in this study both directly and indirectly. Authors are grateful to Dr. Mark Giordano, head institutions and policies research group for his valuable and constructive comments and suggestions during submission of abstract and in finalizing the paper. Contribution of Dr. Intizar Hussain as the leader of poverty assessment study carried out in Uda Walawe Project area is also appreciated. Finally, thanks are due to our Director General, Professor Frank Rijsberman, Director Global Research Division, Julie van der Bliek, and Head of Sri Lankan research Program, Dr. Sarath Abayawardana, Theme Leader Dr. Deborah Bossio for their continuous support and encouragement for the poverty-related studies at Walawe river Basin.

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