

Challenges to women's livelihood strategies in a dry zone peasant colonization scheme in rural Sri Lanka.

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Abstract

Apart from their traditional and extensive involvement in household chores, women in rural Sri Lanka contribute to increase their household income as well as sustain families by working at home, farm or outside. At the same time rural livelihood strategies of households, individuals and especially women are shaped by several factors such as access to productive resources, structures and processes and vulnerability contexts. The problem of lack of access to productive resources, assets and opportunities is particularly critical for the increasing number of rural women in Sri Lanka. This study is conducted in one of the *purana* (ancient) villages in the Mahaweli Development Project (MDP) area, which is a dry zone peasant colonization scheme. The broad aim of this study was to understand the contribution of women in the household income and the limitation on their access to productive resources, assets and opportunities and the livelihood strategies they adopt in response to them. In doing so it attempted to answer the following questions: Why women contribute to household income? What are the activities from which women earn incomes? What the constraints and future possibilities are? The techniques of qualitative methods, consultation and analytical study were used to collect data. An analytical model was developed to study the livelihood, assets, processes, strategies and outcomes.

The Mahaweli Development Project: Development ideology

The Mahaweli River Development scheme is located in the North Central and North Western parts of Sri Lanka. It is said to be one of the large river based, integrated multipurpose regional development project in South Asia. According to the plan, extensive parts of the dry zone land have to be irrigated with Mahaweli (which is the longest river in Sri Lanka) water, and to resettle the farmers who lost their land due to the project and the landless poor who lived in other parts of the country. The Master plan of the MDP was prepared between 1965-1968. It was launched in 1970 and for various reasons its implementation was not as in the plans (Nelson, 2002). The MDP was launched as a final resort to find solutions to the increasing problems of unemployment, landlessness, poverty,

increasing population density in the wet zone, lack of electricity in rural area, lack of irrigation and food shortages in the country. In 1977, due to the overwhelming need to transcend the major socio economic problems faced by the country, the government decided to accelerate MDP. Since then, the project was called as Accelerated Mahaweli Development Project (AMDP) and it became the main focus of public investment effort of the government. A considerable amount of foreign aid was also received for the implementation of the project. The concern of the project was a national one. The wider objectives of the AMDP are (a) to increase the income levels and living standard of people within the project area, (b) provide lands to landless peasant families primarily from the Central and Southern regions, (c) to increase agricultural productivity and to maintain traditional dry zone peasant agriculture, (d) to produce hydroelectric power, (e) to provide employment opportunities for the unemployed and under employed.

The areas under AMDP are divided into systems for administrative purposes. There are thirteen independent development areas in the AMDP identified as System-A, System-B, System-C System-L and System-M. Of the thirteen Systems, H, B, C, G and L have either been fully or partly developed up to now, having implemented the project in the year 1970. Each system is further subdivided into zones, blocks and units.

One of the main objectives of AMDP, aimed at providing a wider economic base in the rural agriculture sector into a more modern commercially oriented agriculture growing items which the markets can absorb, introducing non-traditional export oriented crops linking Mahaweli with external markets, reducing the import dependence on food which the country can grow, alleviate the chronic problems of rural-urban migration and unemployment, producing grid and creating the atmosphere for entrepreneurial development (Abeysinhge, 1989). In view of this, under AMDP, major and minor development schemes in the dry zone opened new areas for agricultural operations and human settlements. These schemes under its socio-economic development programmes, encouraged crop diversification as per land capability, enterprises and socio-economic development, assisted in income generation and infra-structure development of roads, electricity, housing, education and health facilities etc. The settlement programme which is an important aspect of the AMDP is basically viewed as a poverty alleviation programme.

Research Problem

Though the project aimed at achieving several national objectives and especially socio-economic development of the poor, at the end of the nineties it became clear the ambitious project has fallen far short of its goals. Instead, a majority of the 100,000 families lured to the area from the densely populated wet zone with promises of becoming rich farmers, became worse off. Although the settlers began their settlement life on an equal footing, within a period of a quarter century broad disparities exist in the whole project. The settlers, initially began their life as paddy farmers, however due to various contexts, conditions and structures and processes, they could not continue with a single livelihood. Their livelihood came under threat. They are compelled to find alternatives. Finding alternative has not always been easy and the possibilities for opportunities varied considerably among men and women. This research focused on women's livelihoods in a *purana* village, in the Mahaweli system 'H', draws attention on the following questions:

- Why women contribute to house hold income?
- What the constraints and future possibilities are?
- What are the activities from which women earn incomes?

Objective

The broad aim of this study was to understand the contribution of women in the household income and the limitation on their access to productive resources, assets and opportunities and the livelihood strategies they adopt in response to them. The goal is to contribute to further research and development work that will lead towards possible and sustainable livelihood options for the women, who are the vulnerable group in the village.

Methodology

The study was done in one ancient village in the Mahaweli Development Project area aiming at understanding the changing livelihood patterns of women and constraining and enabling factors in the access to productive resources for women. Understanding survival strategies present an interesting case of integrating qualitative and quantitative methodologies. The research relied on various secondary data collected from various published and unpublished sources and also based on a field work carried out by the author. Qualitative tools such as in depth interviews, observation, discussions were used as a means to gather information about various livelihood strategies as some of these facts could be under reported in a quantitative

survey. Further, a check list based on the livelihood research model developed for this particular research was used to work with the households.

Theoretical frame work

Understanding of the livelihood, contributions, options and constraints of women in the study area needed a holistic approach. Various livelihood analytical models introduced adopted by individuals and different agencies were viewed. Many of the common definitions of livelihood which are currently in use derive from the work of Chambers and Conway (1992).

“A livelihood comprises the capabilities, assets (including both social and material resources) and activities required for a means of living: a livelihood is sustainable which can cope with and recover from stress and shocks and maintain or enhances its capabilities and assets and provide sustainable opportunities for the next generation; and which contributes net benefits to other livelihoods at local and global levels and in the long and short term” (Chambers and Conway, 1992).

Sustainable livelihoods (SL) approach emerged in the 1990s as a new approach to poverty alleviation. The SL approach is adopted by various agencies such as the Department of International Development (DFID), United Nations Development Programme (UNDP), OXFAM and CARE in their poverty alleviation programmes with modification. However, basic principles of the approaches implemented by these agencies have many key common features (DFID, 1999). Other frameworks to analyze livelihoods include, the Institute of Development Studies (IDS) framework developed by Scoones (1998), Oxfam (Carney 1999), and Ellis (2000).

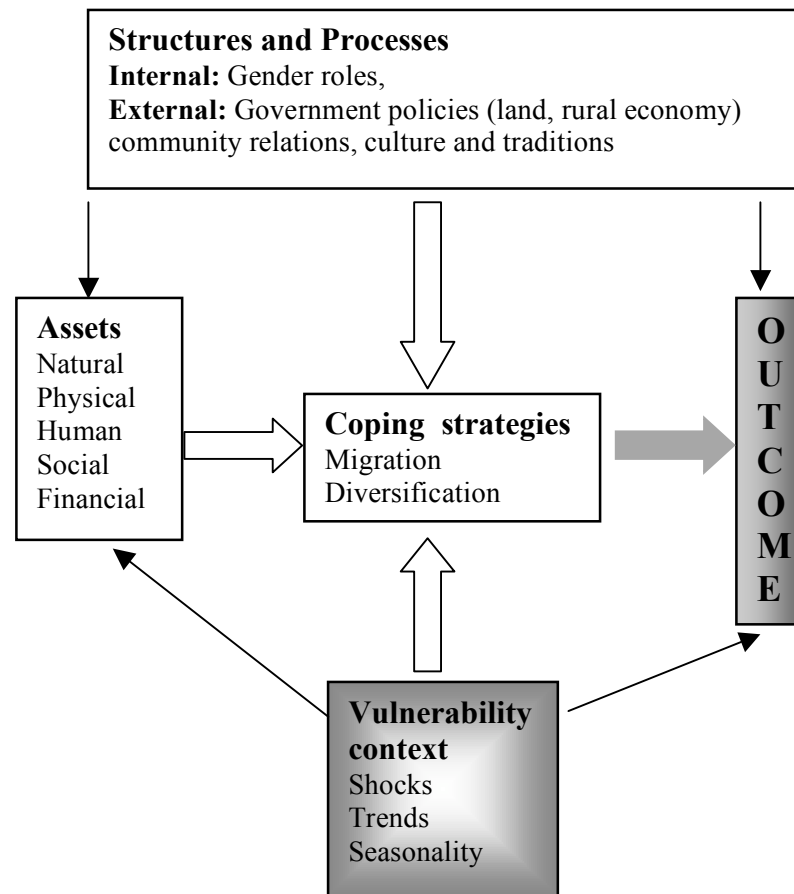
The SL approach which represent a holistic and realistic view of the livelihood system was found to be a useful analytical tool. Further the SL approach, which is people centered and designed to be participatory, has a vision of sustainability. The SL approach represents links between some selected factors in its analytical framework. It considers assets -natural, social, human, physical and financial- as fundamental to livelihood analysis. Further, it emphasis on *structures* (or organizations) and *processes* (societal norms, incentives, policies and laws) which influence the access, control and the use of assets. The structures and processes according to SL approach can restrict or enable the livelihood options open to people and decide the sustainability of such options. People’s livelihoods and their access and control to resources can be affected by *vulnerability contexts* too. *Livelihood strategies* are the next

important factor in the DFID model. People choose their livelihood strategies according to their asset possession, within the framework of structures and processes and the vulnerability context. *Livelihood outcomes* according to DFID leads to focus on achievements, indicators and progress which are the results of adopted strategies.

Another important model influenced by the above definition is CARE's livelihood model. The idea of livelihood defined in the above definition, according to CARE's model reflects three basic attributes. (1) the possession of human capabilities (e.g. education, health, skills, psychological orientation); (2) Access to other tangible and intangible assets (social, natural, and economic capital) ; and (3) the existence of economic activities (Drinkwater and Rusinow, 1999). The interaction among these attributes decides what livelihood strategies (outcome) a household opt for. This model is a particularly useful analytical tool to understand the needs of vulnerable people and how those needs are met in order to improve their livelihoods. In CARE's model a difference is made between the resource base over which households have direct control (household assets), and that which is regulated through membership in a larger community (common property assets). Drinkwater and Frankenberger 1999, further shows the relationship between households, community institutions and other more immediate structures (local government, market organizations, civil society structures) and then, relations with more distant entities which are important in a livelihood analysis. While identifying household as the focal point of analysis, the model also emphasizes the need to examine intra-household gender and generational relations, and hence the explicit roles of men, women, elderly and children in a society.

The main focus of my research was to understand the contribution of women in the household income and the limitation on their access to productive resources, assets and opportunities and the livelihood strategies they adopt in response to them. To understand this situation, the importance of adopting a holistic approach was felt. However, both these models lack some elements which are very influential in the livelihoods of the women in the study area. We cannot consider models as blue prints when studying a complex system. The above models have strengths and weaknesses. However, the above models based on the definition of Chambers and Conway (1992) provided a way of thinking. In practice one has to use these models sensitively, inclusively and competently.

Figure: 1 A livelihood analytical model developed for the study



Source: Adapted from Carney 1998 and Drinkwater and Frankberger, 1999 and altered

Analytical model

Women's livelihoods in the study area exist within similar and some different contexts other than expressed in the above discussed models. I found, clearly, a framework for the study of women's livelihood in the research area must incorporate various aspects in the context of the selected village. I have developed the above analytical model (Figure: 1) to study livelihoods in the selected village based on the models of Carney 1998 and Drinkwater and Frankberger, 1999 and according to the objectives set. The assets (natural, physical, human, social and economic) will be analyzed in relations to structures and processes (gender roles, lack of mobility, government policies, community relations, market relations and international markets) which enable or constraint the livelihood options of the women and vulnerable contexts (shocks, trends and seasonality). Assets, structures and processes and

vulnerability contexts have an immense impact on the coping strategies and outcomes. The asset status of the poor is fundamental to understand the choices open to them. The strategies people adopt to attain livelihoods is highly influenced by their asset position. Next, structures and processes influence the use, access and control of assets. Coping strategies reflect how people combine their assets, within limits of their context in order to arrive at certain results. Livelihood outcomes shows, whether or not households are successful in pursuing their livelihood strategies. The outcomes may differ from what people were aiming at. Analysis of these outcomes shows the negative and positive results of the pursued coping strategies of different people.

Findings of the livelihoods fieldwork

Local context: Solama

The study area is located in the system 'H' which lies within the Kala Oya river basin, of the AMDP, which was initiated in 1975. The villagers were settled from the 1970s under the project. At the end of 1990s in system 'H' 99 percent of the target population was settled. About 67% of the settlers had been living in the *purana* villages. Only 33% come from outside the area. At present system 'H' has a predominantly agricultural economy. Depending on the availability of water ¹ farming communities grow paddy and food crops for their survival. System 'H' is identified as the most productive (Nelson and Gunawardane, 1988) paddy cultivation area in the AMDP. However, considerable variation exist between the units of system 'H'. In the Mahaweli project, each farm family received 2.5 acres of irrigated low land for paddy cultivation and 0.5 acres for homestead garden. Altogether each family received approximately 1 hectare.

System 'H' area of the AMDP covers twelve administrative units containing both pre-Mahaweli and newly developed units. Among them *Thambuttegama* is an important township and an administrative unit. The study area, *Solama* is situated in close proximity to *Thambuttegama* township in system H. *Thambuttegama* was one of the pre-Mahaweli town which was absorbed into the new service center hierarchy. In the Mahaweli programme, in each system there are highest order urban centers, which have multiple functions. They serve lower village centers and hamlets. *Solama* is once such lowest order hamlet in the system 'H', which have links with *Thambuttegama* township. *Solama* is a *purana* village.

Subsistence farming, *chena* cultivation, extended family life, exchange of foods and materials and labour were the main activities of the settlers, until they were re-settled under the Mahaweli Project.

The total population of the *Solama* village in 2003 was 1389, which constituted of 728 females and 661 males. The total religious composition of the village revealed the population is 100% Buddhist. A majority of the community is considered to be poor, according to the income based poverty dimension. As a result, about 65% of them are beneficiaries of the government welfare and poverty alleviation programmes². The total land area of the village is about 282 hectares. This includes about 159 hectares of paddy land, 98 hectares of homestead, 13 hectares of uncultivated land and 12 hectares of state land. The village has a small tank. The village has a flat terrain. Land use in the study area is characterized by paddy cultivation, vegetables and fruits which are grown in a small extent of the plots adjoining the houses, which are referred as home gardens³. Most paddy land is owned by few rich families. Therefore, considerable percentage of paddy farming is carried out through tenant farming. Though *Solama* is in close proximity to *Thambuttegama* township, the roads are not developed in the village and people use, bicycles, small tractors and motor cycles to reach the town. However, majority of them do not own vehicles.

Assets situation of *Solama* women

In the study area natural, human, economic, social (political) and physical capitals are considered as important resources in generating the livelihoods of many rural families like elsewhere in the world.

Natural capital

The degree of security of land use rights and resource endowments has a fundamental bearing on the livelihood options of households, especially on women in their planning horizons and investment decisions. Natural capital in the area includes mainly land other common property resources.

¹ Rice production in Sri Lanka is acutely dependent on rainfall. There are two cultivation seasons in Sri Lanka. The principal cultivation season is known as *Maha* from October to March and the subsidiary cultivation season is known as *Yala* from April to September.

² Number of "Samurdhi" beneficiaries are high in the area.

³ slash and burn agriculture (which is called as *chena* cultivation) was the predominant agricultural activity in the study area prior to the AMDP.

Land is used for many agricultural purposes in the study area varying from paddy cultivation to crops and vegetables. With the introduction of irrigation, under Mahaweli project, more land has been cleared and brought under cultivation. However, very few women in the study area had access to and control over land. Women's access to land, in terms of tenure is a major issue in the whole AMDP (Lund, 1978; Schrijvers, 1988). The only women who have been give legal titles to land are widows and young women who have received land lieu of properties previously owned by their parents in the areas of their origin. In *Solama* 85% of land is allocated to males. Women in the area revealed that they applied for land only if there was a minimal chance of the male members of the family to obtain a plot. A vast majority of the women in the village are refused of the main means of production.

In Sri Lanka, common property resources have played an important role in expenditure saving functions of the poor households. Since the pre- Mahaweli project period women in the area have collected fuel and fodder, house building materials, fruits, vegetables and medicinal plants from the neighboring forests. At present, access to natural capital such as common property water resources and forest resources are becoming more scarce for the women in the study area. In qualitative discussions, this was largely attributed to legal title, encroachment and increasing population. Earlier, women in the village used to cultivate *chenas* of their own. They got variety of food for the family from *chenas*. They claim, now they have to buy most of the food items from butikis or in periodic markets, due to the depletion of forests.

Human capital, which is another livelihood input, consists of education, skills, health and ability to labour. Education is essential to the improvement of women's living standards and to allow them to take a more active part in the decision-making process within the family, the community, the place of paid work and the political arena. In terms of educational resources, there is only one primary school in *Solama*. For secondary school education, students have to travel to the nearest urban center. The Divisional Secretariat (DS) data revealed that the majority of female student do not proceed beyond eighth standard and a large majority drops out, even beyond reaching this level. The number of female students reaching the junior secondary level of education (year 11) in 2003 was around 13 percent. Generally, most men in the village have an education level of eighth grade. However, in the case of women very few had education only up to eighth standard. But, compared to the previous generation, situation of women has changed in the area.

Health is a vital capital to pursue different livelihood strategies. However, system 'H' is recorded as having higher percentage of chronic undernourishment. Women and children are most vulnerable to this problem. According to a health ministry survey, pre school children have very high rate of malnutrition in system 'H'. In Mahaweli settlement schemes, each area has its own health services. But health facilities in the study area are very poor. The village does not have a health center. Women in the area had to take their children in for periodical checkups to the neighboring health center. It was interesting note during the discussions, the fact that, women in the area do not wait until they are ill. At the same time most settler women have shown interest in obtaining information on matters of family planning, ante-natal and pre-natal care, immunization and hygiene and family welfare in general.

Physical capital includes, basic infrastructure such as transport, shelter, water, energy and communications and the production equipments and other means which enable people to pursue their livelihoods. Initial Mahaweli Development plan lays a great deal of emphasis on the provision of infrastructure to the settlers. The main infrastructure provided included, networks of roads, irrigation, power supplies and telecommunication. However, in *Solama* only 58 out of 306 families have electricity and only one house had the telephone facility.

Though *Solama* is located in an irrigation land settlement, it faces the problem of water for cultivation and for daily household purposes. In order grow crops, farmers use water from irrigation channels. The availability of water differs from household to household depending mainly on the location of land and the household in relation to irrigation channels. Some women said that the shortage of water is a constant problem to them. The shortage of water, according to the village women led to many effects, such as drying up of crops, lack of water for cooking, cleaning and drinking purposes. For the drinking purposes, women in the village, had to fetch water from wells, which are situated faraway from their homes. This takes time and labour. Among the 306 families, only 12 families had wells. Among them only four were protected. The village had six common wells, located at different distances. However, they were not well maintained. Generally, housing facilities and standard of the village seems to be good. Most of the houses were made of permanent materials.

Financial assets available to people provide them with different livelihood options. In the study area women are deprived of credit facilities which are tied to land, house or jewellery as a mean of security. Loan providing societies also limit their memberships to land owners

and heads of the households. As most of the women do not belong to either of these capacities they are deprived of credit facilities. The ability to obtain credit is essential for the women in the area to pursue different coping strategies. Most of the unemployed women in the area showed an interest to engage in self employment activities. But they lack financial capital to pursue such activities.

Social capital refers to the social resources, such as networks, memberships of groups, social relations and association. These networks reduce risks, access services, protect from deprivation and provide necessary information. The quality of the networks depends on the level of trust and norms exist among the members. Though Sri Lanka has a very good social welfare net work at a state level, benefits are not equally distributed among the population. Rural poor women are especially vulnerable to such situations. Therefore, the informal network between people, (relatives, neighbors and friends) plays a crucial role when coping with difficulties. The most important social net for women in the area is their own families. Support by the family is considered as an insurance against ill health, old age and personal disaster (Farmer, 1956). In the study area there are no women's associations or groups. There are two youth associations and a death donation society. Though women do not have an active role, they attend these societies. Some of the interviewed women said, that they do not have time to participate in these societies because of their heavy work loads, economic and political hierarchies in the village and due to some cultural barriers. As a result, most of the women in the study area do not have access to information or they do not even know their rights. Women's membership is restricted in most of the societies.

Structures and Processes

Structures and processes and vulnerable context form a base for analyzing the enabling and constraining environment . They are critical in determining who gain access to which assets and the livelihood outcomes. In this study structures and processes are grouped in to two categories, as internal and external.

Internal

Gender roles

Though the social structure of traditional societies all over the country has undergone changes, gender roles in the area remains unchanged. The ideology of the male breadwinner and female housewife is proclaimed by the planners responsible for implementation of the

project (Schrijvers, 1988). As in the other areas of the country agricultural activities in this village too mainly depend on family labour. Men and women in the village engage in farming during both seasons. Hence, female participation in agriculture is almost equal to those of men. The works performed by women in paddy fields and homestead gardens are not remunerated, women's contribution is not highlighted in studies or surveys. Many women in the study area were involved with shared agricultural work with men in the fields. But, there was no sharing of child care and domestic works by men. Compared to men, the women in the study area have heavier work load and less free time, which is a threat to their health. Further, though there is a demand for female labour in the village most women cannot take up employment due to their heavy work loads and lack of time. Women's work loads should be reduced, if they are to secure their livelihood.

External: Government policies

Land

Land in Sri Lankan society has traditionally been the basis of political power and social status. Lack of land, especially of paddy land was and still considered as social and economic disability in Sri Lanka (Farmer, 1956). However, at the household level, the importance of land, specifically for women has received little attention (Agarwal, 2002). In the present study, under external factors, government policies highly influence the livelihood options open to women in the AMDP. In irrigation and settlement projects, constructed after the Land Development Ordinance of 1935, farmers hold individual use rights in paddy lands and home gardens. The only transfer right is to the next heir. This regulation lead to a clear stratification of the rural households in those comparatively large parcels of paddy land and those without paddy land. At the same time it has also lead to inequality between the sexes within the household and larger community. In the Mahaweli project unequal property relations were created between men and women (Schrijvers, 1988) contrary to the Sinhalese traditional property inheritance law. As paddy cultivation is considered as a male's responsibility usually men get the legal title to paddy lands. At the same time to avoid complication between children, in the case of more than one son, the wife's name is mentioned as the next heir. But this did not have any impacts on women's land ownership right. The male owner had the right to change the next heir any time and if the marriage is not legally registered (as is often the case) the wife cannot be the legal heir (Farmer, 1956). A women's access to land is due to her relationship with a male. Therefore, she stands to

loose even this right, as well as other means of subsistence, in case of divorce or abandonment.

In the legal context of Sri Lanka, constitutional reform has included non discrimination on the ground of “gender, marital status, maternity and parental status” in addition to sex. However, the Land Development Ordinance (LDO) of 1935 discriminates against rural women in new settlement areas. The succession law denies women in new settlement the right to family land if they have no land in locations of origin (FAO, 2000).⁴

At present the government is convinced of the need to implement a land titling programme, from the experience of previous studies, which highlighted land tenure as a major constraint to the agricultural sector. The World Bank, in 1996 wanted the government to intervene immediately to grant " freehold titles" to all those who had land grants and to immediately initiate a process of regularizing individual land ownership in the case of land where such restrictions to selling of land existed. The government is implementing a pilot land titling project in different areas. The pilot project is implemented in the study area too. Giving people the legal right to have ownership of land seems to be a progressive measure. All farmers' movements have been demanding that farmers should be given land, and ownership and control over land is a right. It is argued that the people will improve their land and make them more productive when they have an assurance of ownership. It is also argued that the possibility that these farmers will now have to lease out their land when necessary, to improve their economy.

Through this the WB and the government are expecting to develop a rural land market. So that subsistence farmers who wish to give up agriculture could exit from it. They should also be assisted to obtain full market value for their land. However, the way it is done and the circumstances would lead to very different results, namely many, many farmers will be compelled to voluntarily lose them. The impacts of this programme on women in the area will be much more sever. At present, though many of the women do not have the legal titles to land, they use the family land to earn a small income and they grow food for daily household consumption. Selling or leasing of such land will put women into more vulnerable situations.

⁴ It should be kept in mind that most of the Mahaweli women have previously been from land less families.

Rural economy

Livelihood strategies of the rural poor are changing dramatically in response to changes in the national and international economy. The United National Party (UNP) introduced a radical policy reforms to establish a liberalized and export oriented economy in Sri Lanka, which had a major impact on many aspects of local agriculture (Abeyratne, 1997). The agricultural policies of the government elected to power in 1994, aimed at removing the institutional and policy obstacles which have reduced agricultural profitability and investment (Nakamura et al., 1997). During this period, according to World Bank's (WB) recommendations for agriculture and rural development, government decided to create a free land market in order to improve rural economy. In 1996, the WB made its policy recommendations in the "Non Plantation Sector Policy Alternatives Report" which said that there was no "growth" in this sector since much of the rural agriculture is producing "low value crops" such as rice, vegetables etc. There for they recommended a shift from low value domestic food crop production to "high value (export) crop production. Free land market was considered as an essential immediate measure to achieve "fast growth on the non plantation sector". The WB made this recommendation, based on the assumption that markets work generally well in Sri Lanka. These recommendations have come under serious criticisms. Nakamura (1997) criticizes that WB recommended these policies without carrying out a thorough study about the structure, conduct and performance of these markets, especially in rural areas. This has an immense impact on rural women who are already deprived of land resources and mostly limited to subsistence agriculture.

Markets

Upgrading the agricultural marketing system was one among the several priorities to develop rural sector of Sri Lanka in the Development Forum held in Colombo in 2002. Most of the existing agricultural marketing infrastructure are in poor condition in rural areas. The government has felt the need to rehabilitate and improve the existing systems. Under this, Dedicated Economic Centers (DEC) were set up (modern agricultural whole sale markets) in some parts of the country. *Dambulla* is such a marketing place located in the Mahaweli system. The government is planning to expand the *Dambulla* (DEC) through private public partnership.

As the profit margin for paddy is low in the area it has become a low income crop. Farmers in the area produce subsidiary crops. These crops are for home consumption as well as for

sale. At present in the Mahaweli area, fruits and vegetables are produced to serve the foreign markets too. From the system 'H', green chilies, drumstick, ash pumpkins, red pumpkins, egg plant, snake gourd, bitter gourd, cassava, lemon, tomatoes, gherkins, sweet corns, mangoes, banana, papaw are some of the vegetables and fruits, that are exported to Middle East and Maldives through some of the Colombo- based exporters through DECs. However, due to lack knowledge, training and financial capacity, these items are marketed in an unprocessed way, by the local producers. Because of this the farmers get low prices for their products. Direct access to DECs is a dream for many poor *Solama* women, due to its location and the male dominant marketing channels. According to interviewed women, private and state marketing channels buy the products mainly from male household heads in the village.

Periodic market: Pola

Pola in rural Sri Lanka, not only serves as an economic center, but also as cultural, social and recreational center. In the Mahaweli project too they play an important role in the assembly or daily markets of products. In the settlement areas, where proper marketing channels are absent, *pola* fulfills the needs of the farmers. In the Mahaweli project, the business operators in a *pola* includes (a) settlers and farmers from farming communities (b) the retail traders from outside and (c) the collector-traders from other urban areas (Nelson, 2002). According to a Mahaweli survey there are 22 *polas* in System H, where each serves an average of 3071 families. The average distance between *polas* is 7.1 miles in system H. At present many of the *pola* traders operate in groups to share, store and transport their products to the *polas*. *Polas* earlier were primarily reached by foot or bullock carts. However, now two wheelers and three wheelers are used. But the opportunities for women to join such groups are limited due to gender and culture in the study area. During the discussions, it was revealed that, as the new townships are difficult to access due to poor public and private transport systems, trade and commercial activities are seriously affected. During the study it became apparent *pola* represented an important channel of marketing activity for women in the village. Some of the women claimed that it is only in the *pola* they can sell some of their products. In *pola*, prices of agricultural products are normally determined by bargaining. Women seller lack the knowledge about prices in the whole sale markets. Hence, most of them are ignorant of the prevailing whole sale market prices.

Marketing development in the area should focus on education and training of participants of the participants (both men and women) and improving the efficiency of economic activities.

Community relations

Though the social structures of the traditional societies has undergone sever changes, caste system remain unchanged. Technically Sinhalese society is stratified according to caste which is not so rigid and caste identities are not spoken openly (Farmer, 1956 and Sorenson, 1996). In the dry zone in all most all villages consist of people of a single caste. Farmers take precedence over all other castes. During the ancient times, each low-caste groups was given land next to a farmer village in return for the performance of services. The study area *Solama* is consisted of a low, sub caste named tom-tom beaters. Though, generally the caste distinction is becoming blurred, it still cause troubles in the settlement areas at various realms (Farmer, 1956). Some men in the area told, that they face the difficulty to find jobs because of their caste identity and their women are compelled to seek employment as their own income sources are not reliable. Some men said, they loose the bargaining power in competitive markets and cannot negotiate for opportunities, due to their caste orientation. Young males in the area are deviating from the traditional caste based occupation of their ancestors. This situation has compelled women in the village to engage in income generating activities.

Culture and traditions

The Mahaweli Project plays a vital role in the construction of Sri Lankan national history and cultural identity. The past of these settlements, which was connected with Sinhalese culture, is perceived to be spiritual in contrast to the Western culture, which is materialistic (Sorenson, 1996). Even when the government offered various opportunities, most people in the Mahaweli project failed to gain access to these opportunities due to cultural and traditional structures surrounding them. They are excluded from the benefits of opportunities as a result of archaic tenuerial practices, traditional cultivation and harvesting methods. Though a larger number of modern, social and economic products had been introduced in the local community, the acceptability is always debated. A way of modern behaving or dressing was condemned or ridiculed (Sorensens, 1996). This attitude had lead many women to remain in the village. According to some men's view work in the public domain, for women, particularly in garment industry, means a loss of status for the whole family. Though the

prevailing conditions force the women to work outside the home, cultural barriers constraint. With extreme conditions, they have made a hard choice to leave the village for employment. Most villagers felt that rapid changes in society had weakened traditional social values and eroded communities' cohesion and social capital. From the information collected and analyzed through discussions and interviews, women were the group with the most limited array of livelihood options, particularly if their occupation was constrained cultural factors. In some cases cultural barriers have restricted women's mobility too. The study revealed that many women rarely get out of their house and fields, except for going to the temple, polas or to the health centers or hospitals. Due to lack of mobility, women are hardly exposed to outside information. The women in the area have had no training in the new technologies and they do not know much about agricultural diversification. As a result, their productivity and income decline, which put their livelihood options to a dangerous situation. Women's mobility in the public domain is restricted in the village. In the study area, women stated that they are not aware of the exact income they earn as men have become the intermediaries between the household and market institutions. One woman said only part of her income reaches her hand. Her husband use the money for his personal needs such as alcohol, gambling and tobacco and gives her the balance, which is hardly enough to meet the family needs.

Vulnerability context

The “vulnerability context” captures changes which have emerged in the community through the influence of shocks, trends and seasonal patterns that successively and unpredictably have affected and conditioned the survival strategies adopted by different groups as responses to these events. Under vulnerability context, shocks may come in the forms of human health (epidemics, hunger periods), Natural shocks (droughts, floods), Livestock disease and crop failures, economic shocks, (price hikes, unemployment) conflicts (disputes between land owners and landless, between authorities and farmers), other technical and social events.

Shocks: Environment

The dry zone of Sri Lanka is characterized by mean annual rainfall of less than 1750 mm, with a pronounced dry season. Historically, it has been the principle venue for economic, political, religious and cultural past of the country. The dry zone rural economy was more resilient to economic and environmental shocks compared to the wet zone market economies of the country (Farmer, 1956). Lack of irrigation water and cultivable land were considered as major barriers to development in the dry zone where 80 per cent of the irrigation land previously remained undeveloped. Farming in the dry zone of Sri Lanka is a difficult and challenging task. Harsh climatic conditions, characterized by long periods with little or no rain, make it difficult for the families to earn a decent living. Because of the continuous trials and errors the farmers understood that their income coming from non-seasonal or perennial crops are more stable than seasonal and they are gradually moving from paddy cultivation. During the discussions, drought was mentioned as an important natural shock. Options to pursue other livelihood means for the women in the area are limited as they mentioned during the droughts they have to spend lot of time and labour to fetch water for household and cultivation purposes.

Economic and other

Economic shocks (sudden increase in food prices resulting from reduced supply following natural shocks and crop failures) and technological shocks (introduction of agricultural mechanization) are the main unpredictable events which have had the largest negative effects on women, especially in female headed house holds and poor house holds in the study area next to drought. The introduction of agricultural mechanization has decreased the availability of local agricultural employment for women. This situation has forced the women in the study area to adapt to new labour market conditions. This is illustrated by the increasing number of young female workers migration to the Export Processing Zones (EPZ) of Sri Lanka. Some women, especially women from female headed house holds told that, they are engaged in short-term, non-farm income generating activities in nearby villages and town. At the same time many women accepted the positive changes, which shocks can bring in terms of technological development. The introduction of mechanization in agriculture has increased the productivity, though the benefits are not equally shared among sexes.

Seasonality

Seasonality also decide the livelihood options of the people. Livelihood opportunities are influenced by seasonal factors also. In some parts of the dry zone of Sri Lanka, employment opportunities are highly seasonal, in particular for agricultural laborers. Weather variations (dry months) are important in the study. These variations impacted directly on health, production of rain-fed food crops and their prices. Further, variations in canal water availability also impact directly on crop production patterns. Seasonal variations in the provision of canal water was found to have a more drastic impact on smaller farmers and women who did not have the capacity to mitigate decreases in water supply. Variations in the supply of canal water also directly affected employment opportunities for both male and female agricultural laborers. During the interviews, it was revealed that, the number of meals consumed per day also depended on the availability of work, fewer meals being consumed during periods of reduced employment opportunities.

Trends

Trends also set the parameter within which livelihood strategies operate. The trend (high growth) in the growth of population has become a serious threat to the survival of the settlements (Nelson, 2002). Most of the families in the area are large, with an average of 4 to 6 children. This has a tremendous impact on per capita land availability. As new opportunities for employments are not much created in the settlement area-like industrial activities- as planned, the possibility to divide the land into small divisions are high, which may in turn lead to low productivity. In the Mahaweli area, a declining trend in *Maha* rainfall has also contributed to the declining production trends of paddy (Zubair, 2002). This has made many households, especially women to buy rice from village shops or shops in town.

Livelihood strategies

In a recent paper, Ellis (1996) defines livelihood diversification as 'the process by which rural families construct a diverse portfolio of activities and social support capabilities in their struggle for survival and in order to improve their standards of living' Livelihood diversification includes both on- and off-farm activities which are undertaken to generate income additional to that from the main household agricultural activities. Diversification and

Migration are the main strategies adopted by the women in the study area for their future survival.

Migration

The female population of *Solama* comprises of 728. Among this 142 are listed as unemployed and 94 are listed as employed among the working age females. The majority of the working age women are in agriculture related works. More recently, policy changes accelerated by, market liberalization, have made many poor especially women were forced to seek for new, more remunerative activities outside agriculture. In the study area, men are moving to armed forces and women are moving to garment industries. Migration forms a central component of livelihood diversification in the study area among young females. The migration targets has both been local and international. There has been an increase in female migration into towns in recent years, in response to the pull exercised by the rise in export oriented garment manufacturing. In *Solama* about 15% of the employed women were garment factory workers. In Sri Lanka Free Trade Zones (FTZ) are of growing significance as employers of women. Here in a situation of persistently high unemployment with, with limited alternative job openings for women with low skills and educational attainments, the workers typically under 25 years of age, singly mostly from rural areas migrating for a first job, brought up in a relatively protected and conservative social milieu, face a much harsher social and economic environment. The garment industries pays higher wages than most of the economic activities available to *Solama* women back in their villages. Further, another 4% of women have migrated to Middle East countries in order to expand their income horizons. Some of the interviewed women stated that they started to work either because their, husband's or other male family members income was not sufficient or else because of divorce or abandonment. Such women contributed to a significant percent of their households income.

Diversification

People in the village have shown interest in diversifying than intensifying. It must be underlined that many livelihood diversification strategies are frequently gender specific. Livelihood diversification may take place when rural producers change the composition of

agricultural products they produce. This is a natural starting point for poor rural producers with low levels of capital, who may be able to restructure their production mix more easily than to invest in other non-agricultural areas. Livelihood diversification via non-agricultural means. Pursuing non-agricultural activities therefore represents a risk minimization strategy to achieve basic household subsistence needs. An individual's level of involvement in this process is affected by location, wealth and gender, and it does not seem that many rural people are totally excluded from it. Although the Mahaweli farmers began with paddy specialization, they are today producing a variety of commodities and are diversifying their rural and crop economy linked to market demand, both locally and internationally. But they face number of problems. In *Solama*, while men diversify cash crops, women tend to diversify food crops. Women grow food for family subsistence. Home gardens are the major avenue to women engaged in agriculture in the village. Women in the study area grow, fruits like papaya, banana and mango. After meeting the family's needs, the surplus is sold in village markets or on small road side stalls. With increased range of high value economically important plants being grown in a home garden it has become a source of regular income to the owner, besides meeting the needs of the family. The composite home garden cum paddy cultivation has already improved the financial prospects of some women. There is a regular inflow of income from the sale of home garden produce. The gender role, however, has shifted into the hands of male members, who manage the marketing.

Outcome

Rural women in *Solama* are forced to expand their income horizons due to number of complex factors that have already pushed them in to the vicious circle of poverty. They cannot rely on a single option. They have to find alternative strategies in order to survive. At the same time livelihood strategies of the majority of the rural poor are changing dramatically in response to changes in asset position, structures and processes and vulnerability contexts.

The research revealed a number of useful insights about the different, assets, structures and processes and vulnerability contexts within which women and households attempt to construct viable livelihood strategies. Land access for women was found to be a acute problem hindering different livelihood options of the women. This should be changed with implications for the future livelihood security of women, who already are considered as 'unfortunates' in the poorest category in the settlement areas. Women in the village,

generally seems to have interested in pursuing off-farm employments. Avenues should be made to cater the needs of such women. The women who are already engaged in off-farm activities are in a better position compared to women in agriculture. In the country the growth avenues of employment opportunities in the urban areas to absorb people who leave agriculture is slow. Policies related to urban- rural linkages should consider the rural human resources too.

The research suggests, that the external and internal environments facing the women in the village does not actively foster the diverse activities that several actors have identified as a potential way forward for improving the livelihoods of them. Opportunities to generate extra income are discouraged by various blockages, making it difficult to generate means that could be used for investment in new livelihood activities. Institutional linkages must be strengthened among various stake holders in the process of livelihood enhancement.

Conclusion

The research discussed in this paper reveals, that the majority of women in the study area confront with multiple constraints and have little room to maneuver. The creation of a facilitating environment is necessary to increase the livelihood options of the women in the area. For this to happen, future planning process and development interventions need to consider carefully the scope, nature and burden of different livelihood options open to women.

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