An Assessment of Female Participation in Minor Irrigation Systems of Sri Lanka

Ima van der Molen
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Irna van der Molen

The Technology and Development Group, University of Twente, Enschede, the Netherlands and International Water Management Institute
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/water resources / water scarcity/ rain / statistics / farmers’ associations / landownership / women / gender / households / farmer participation / leadership / decision making / rehabilitation / Sri Lanka/

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The data collection for this report and for a PhD research on traditional forms of water management in the dry zone of Sri Lanka took place simultaneously. By providing the necessary facilities and support, the International Water Management Institute (IWMI) enabled me—much more than I had considered possible at the start—to focus, in great detail, on gender and water management.

Therefore, I wish to thank Doug Merrey, Jacobijn van Etten and Barbara van Koppen of IWMI for their continuous support and valuable comments in the course of the study, and the financial support provided by the Ford Foundation New Delhi and the Netherlands Foundation for the Advancement of Tropical Research (WOTRO). Without this support the fieldwork could not have been conducted in the same way.

Further, the fieldwork with regard to gender aspects could not have been performed without the help of two research assistants, Priyanthi Chandrika Jalepole and Subhashini Senevirathne, who provided very valuable assistance for the research. The experiences and laughs we shared together, and the more peculiar situations, in which we found ourselves at times, were part of the past couple of years.

Irna van der Molen
Akkarawela: Extended or newer part of the command area.

Ande Tenancy: Sharecropping arrangement in which farmers cultivate someone else’s fields and in return retain half of the yield.

Aththam: Reciprocal exchange of labor between farmers, often in gender-based groups for particular farm activities.

Bethma: Cultivation of only part of the command area with temporary redistribution of land among the landowners to enable all to cultivate a small plot of land.

Binna Marriage: Marriage in which the couple moves in with the wife’s parents or settles near the parental house of the wife.

CEDAW: Convention for Elimination of all forms of Discrimination Against Women.

Chena: Slash-and-burn or shifting cultivation, usually on encroached crown lands.

Colonies: New settlements.

DAS: Department of Agrarian Services.

Diga Marriage: Marriage in which the couple moves in with the husband’s parents or settles near the parental house of the husband.

FFHCB: Freedom From Hunger Campaign Board.

FO: Farmer organization.

Govi Niyamaka: Farmer mobilizer.

Grama Niladhari: Village-level government officer, in charge of a thulana, which covers several villages.

Janasaviya: (People’s Strength) poverty alleviation program (initiated under the UNP government).

Kanna Meeting: Pre-cultivation meeting.

Kasippu: Illicit liquor (brewed from whatever ingredients available).

Kuluma: See “tank.”

Lekam: Secretary.

Maha Kanna: Main cultivation season, or northeast monsoon season (October – March).

Maha Wewa: Large tank.

Mudalali: Trader or shopkeeper, in this context, usually selling fertilizer, agrochemicals, rice and purchasing paddy (or other crops) from farmers.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>NIRP</td>
<td>National Irrigation Rehabilitation Program.</td>
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<tr>
<td>PA</td>
<td>People’s Alliance.</td>
</tr>
<tr>
<td>Pangu</td>
<td>Share.</td>
</tr>
<tr>
<td>Pangu List</td>
<td>List names of shareholders.</td>
</tr>
<tr>
<td>Pradeshiya Sabha</td>
<td>Local elected council at divisional level.</td>
</tr>
<tr>
<td>Purana Gama</td>
<td>Old village.</td>
</tr>
<tr>
<td>Puranawela</td>
<td>The oldest part of the command area.</td>
</tr>
<tr>
<td>Sabhapathi</td>
<td>Chairman.</td>
</tr>
<tr>
<td>Samurdhi</td>
<td>Rural development and poverty alleviation program (initiated under the PA government).</td>
</tr>
<tr>
<td>Samurdhi Niyamaka</td>
<td>Samurdhi mobilizer.</td>
</tr>
<tr>
<td>Shramadana</td>
<td>Participation in voluntary, collective maintenance activities.</td>
</tr>
<tr>
<td>Tank</td>
<td>Reservoir, storing water for irrigation, also used for bathing, and washing by human beings and for drinking by cattle.</td>
</tr>
<tr>
<td>UNP</td>
<td>United National Party.</td>
</tr>
<tr>
<td>Vel Vidane</td>
<td>Traditional Irrigation Headman.</td>
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<tr>
<td>Wewa</td>
<td>See “tank.”</td>
</tr>
<tr>
<td>WFP</td>
<td>World Food Program.</td>
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<tr>
<td>Yala Kanna</td>
<td>Dry season (April–September).</td>
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The purpose of this study is to assess the participation of female farmers in farmer organizations in minor irrigation systems in Sri Lanka and to identify the factors, which hamper the participation of women in decision-making processes with regard to land, cultivation and irrigation. It is generally assumed that female farmers will benefit from equal participation in the operation and maintenance (O&M), and in the management of the irrigation system. However, previous studies in Sri Lanka indicate that participation of female farmers is not that obvious in everyday life. Therefore, the research question is:

**What are the factors that hamper the participation of women in supra-household decision-making processes and structures with regard to cultivation and irrigation?**

The study on gender and water management is an integral part of a more comprehensive research on indigenous forms of water management in the dry zone of Sri Lanka. The research design for that research is based on qualitative research and triangulation, and encompasses a combination of literature study and multisite case study. The methodology included a variety of research techniques, such as unstructured interviews, semi-structured interviews, participant observation, documents, records, photographs and maps.

The paper demonstrates that equity within the farmer organization (FO) is a myth. It argues that participation does not necessarily result in equity, and that other forms of inequity interact with gender inequity in the FOs. In a situation where gender, landownership, kinship, control over means of production, and political preferences constrain the participation in and benefits from the FO, it is worthwhile to look beyond (but not leave out) gender as a source of inequity. It argues that any effort to improve the position of women in FOs should first be targeted at the most disadvantaged among them, with particular attention to female-headed households.

This paper also highlights some of the approaches of project-implementing organizations, some of which seemed to engender positive impacts with regard to the participation of women in FOs. In doing so, the study emphasized that—without an understanding of the prevailing rules, allocation procedures and practices and without a proper understanding of the gender-relations and patterns of subordination among families—good intentions may get lost in the participatory approaches resulting in a few getting the benefits.
The vocabulary of donor organizations covers a wide range of words related to participation, equity, and community-based organizations. Participation of “beneficiaries” is considered a prerequisite for sustainable management of water resources. Initially, this resulted in the promotion of participation of (male) farmers in FOs or in water user organizations responsible for irrigated agriculture, and in the promotion of participation of women in water user committees for domestic water supply through dug wells and tube wells. All too often, women were considered as beneficiaries, mainly active in the domestic arena, and in need of extra care and attention because of their vulnerability and lack of autonomy. Gradually, an understanding has evolved that female farmers might also be key actors in irrigated and rain-fed agriculture, with their own interests and strategic actions.

After gender reached a more prominent place on the agenda of many donor organizations (see e.g., Beijing Platform for Action; CEDAW Convention) and governmental organizations, the growing awareness about persistent gender inequities has resulted in more serious research into causes and consequences of gender inequities. However, when looking at project design and implementation, there is still a wide gap between policy objectives and project realities.

In relation to irrigation management and water resources management “gender” is often translated by focusing on the gender-based division of labor, property rights, water rights, and the numerical representation of women in FOs or water user organizations. Women’s access to resources and their participation in decision making are not only related to, and affect, the well-being of themselves but also interwoven with the choices and actions of their families.\(^1\) It seems obvious to assume that female farmers as well as men will benefit from equal participation in O&M, and in the management of the irrigation system, e.g., membership of the FO provides them not only with the opportunity to participate in decision making but also with access to the benefits of the FO, such as access to the FO’s “credit” system. Their participation would also provide more flexibility in the division of tasks on household level, with opportunities for mutual representation and joint responsibilities. However, previous studies in Sri Lanka indicate that participation of female farmers is not that obvious in everyday life. The purpose of this paper is to identify the factors, which hamper the participation of women in decision-making processes with regard to land, cultivation and irrigation. Therefore, the research question is:

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\(^1\)See also Sen 1990 and Dasgupta 1993 on a permissible set of actions, options, choices and strategies.
What are the factors that hamper the participation of women in supra-household decision-making processes and structures with regard to cultivation and irrigation?

To identify the factors hampering women’s participation in all these activities, one should make an analytical distinction between the rights and opportunities to participate and the choice not to participate. The paper will provide background information of the case study areas, all located in the North Central Province of Sri Lanka. This paper will highlight some of the approaches of project-implementing organizations, some of which seemed to engender positive impacts with regard to the participation of women in rehabilitation works and in FOs. Looking at the priorities of women and men in the case study areas, it seems that the empowerment objectives are sometimes overambitious and based on incomplete information.

The paper will demonstrate that equity within the FO is a myth. Notwithstanding more positive experiences in new settlements (colonies), it will argue that participation does not necessarily result in equity, and that other forms of inequity interact with gender inequity in the FOs. People’s access to FO membership, their rights to attend, their active participation in discussion, their participation in decision making and their entitlement to FO benefits are not allocated strictly according to formal rules and criteria. One of the most eye-catching appearances of inequity is related to men’s and women’s entitlement to (inherit) paddy land. The ownership of paddy land also results in other inequities among farmers in the FO. Sections 4 and 5 will look beyond gender as a source of inequity, by examining other potential factors, which might constrain the participation in FOs, such as kinship, control over means of production, and political preferences.

Based on the earlier findings, some areas for recommendations are formulated. The study is first and foremost aiming at an analysis of the actual situation and the expressed needs and problems as experienced by female and male farmers themselves. Although formulated from a gender-perspective, the proposed changes are likely to benefit other farmers as well, and can be expected to contribute to a more effective functioning of the FO.

The study on gender and water management is an integral part of a more comprehensive research on indigenous forms of water management in the dry zone of Sri Lanka. The research design for that research is based on qualitative research and triangulation, and encompasses a combination of a literature study and a multisite case study at the field, including historical records, literature and ethnography. Eight case study sites covering altogether 29 tanks (both private and common tanks) were selected on a number of characteristics. The case study areas are “old settlements” in the sense that they are not located in the Mahaweli area. The study areas are all located in the North Central Province, and cultivation in the selected areas is based on a combination of minor irrigation and rain-fed agriculture. Furthermore, some traditional forms of water management are still present in the selected areas.
The methodology included a variety of research techniques, such as unstructured interviews; semi-structured interviews; participant observation; documents; records; photographs; and maps. In total, spread out over a period of 2 years, approximately 120 structured interviews were conducted, with another 30 in-depth interviews, whereas gender-related questions were incorporated in at least 60 other interviews with men and women at the village level. The respondents for the structured interviews were selected at random. The respondents for the in-depth interviews and for the interviews for the broader research were selected, based on a selection of respondents, on previous meetings or interviews, or on their position and role in the FO or the farming community. This was supplemented by interviews with decision makers and engineers of governmental organizations at the divisional or district level and with politicians, commissioners and staff of governmental organizations at the national level.

In addition to the interviews, participatory observation and direct observation proved to be another powerful method for obtaining information. Participatory observation was realized through participation in the collection of water for domestic purposes, through *shramadana* (voluntary participation in collective maintenance activities [photo 1]) and through participation in a group of women at work with both harvesting paddy and transplanting onion. Furthermore, more than 20 interviews were actually carried out in the paddy fields, which facilitated close observation of all other cultivation activities.

Photo 1. Removing weeds and bushes from the tank bund through shramadana.
Documentation from government agencies provided more information on the “official” gender policies and strategies. Also in the gender study, records such as land registration lists and lists of names of shareholders proved to contain valuable information. Finally, photographs were taken to demonstrate the actual involvement of women in cultivation activities such as leveling or constructing small bunds.
The North Central Province, part of the Dry Zone of Sri Lanka, is characterized by a large number of water reservoirs, also referred to as “tanks,” which have been used for centuries for irrigation and domestic purposes, and have also served as the main source for drinking water until a few decades ago. Some of these tanks can be dated back to “ancient kings’ times” (between the start of the Christian era and the twelfth century A.D.). The livelihood of farmers in this area is closely linked with the village tanks, small water reservoirs for the collection of rainwater to be used for irrigation as well as for washing (photo 2) and bathing purposes. Under these tanks, farmers preferably cultivate paddy; all land in the command areas is consequently referred to as paddy land. Rainfall is not reliable enough for regular paddy cultivation and, therefore, the population also depends on chena (shifting) cultivation of other field crops (OFCs). Chena fields are cleared by “slash-and-burn;” these areas are usually encroached lands in jungle area, which belong to the State (lands under the Crown Lands Ordinance). The area is relatively poor, due to unreliable rainfall, low cropping intensities and lack of alternative employment opportunities nearby. In times of drought, families depend on food supply and income from chena cultivation, income from day labor, earnings from their children and from grants given under Janasaviya or Samurdhi (poverty alleviation programs).

Photo 2. Women laundering at a village tank.
The case study areas can be found in the North Central Province, and include Nallamudawa, Rotawewa and Indigehawewa, Wellamudawa and Punchikuluma (south of Anuradhapura), Walpola and Kulikkada (southwest of Medawachchiya) and Paddikaramaduwa (just northeast of Huruluwewa). (fig. 1). These villages shared the same distinct characteristics as described above; the cultivation patterns in these areas are mainly based on paddy and OFCs in chenas, supplemented by cultivation of home gardens. Most of the tanks within the boundaries of case study areas are categorized as “minor” tanks, each with a command area of less than 80 hectares. The two main water sources for these tanks are rainwater and runoff water from the catchment area. In most villages, the water level in the tank is not sufficient for cultivation during maha (the main cultivation season) each year. Therefore, many villagers look for the opportunity to work as day laborers in the Mahaweli area located about 12–40 km away.

Figure 1. Location map of the minor irrigation scheme.
The average annual rainfall in the Dry Zone is 890–1,900 mm indicating that this is a
semiarid area; the rainfall is highly variable, and severe water shortages occur successively
in certain years. Furthermore, a recent study and data from the Department of Meteorology
show a decline of 9 percent rainfall in Anuradhapura compared to the rainfall from 1931 to
1960 and from 1961 to 1990 (Chandrapala 1999?). These values confirm the statements of
farmers that since their childhood there has been a gradual change in the rainfall pattern, in
terms of quantity, alterations in the periods and predictability of rainfall.

Drought periods occur frequently, sometimes several years in succession. During these
periods and during yala kanna (the dry season) water in the tanks is either scarce or not
found at all. When the water level in the tank is too scarce for cultivation of the entire
command area, some FOs respond by temporary redistribution of land, and cultivating part
of the command area. This process is referred to as bethma, and during the application of
bethma, the opportunity for water intake is more restricted, for bethma is applied in
combination with rotational distribution. Depending on both the water level in the tank at the
start of the cultivation season and the water requirements of the crops at a particular stage, a
system of rotational distribution is applied.

In general, the FO is the key organization responsible for management and decision making
concerning cultivation and irrigation within and around the village. According to the
Agrarian Services Amendment Act (1991, no. 4, section 33) the FO is responsible for:

a. formulating and implementing the agricultural program for the area
b. carrying out village-level construction work and repairs to irrigation works
c. marketing of produce and distribution of seed, fertilizer and agrochemicals
d. cooperating and coordinating agricultural activities of government organizations and the
farmers
e. any other activity approved by the Commissioner as being beneficial to the farming
community

Most FOs have a small subcommittee, which discusses daily matters. There are four
types of meetings: committee meetings; general meetings (maximum of two per year);
kanna (pre-cultivation) meetings (maximum of two per year) and ad hoc meetings for tank
rehabilitation projects. Pre-cultivation meetings are organized at the start of the cultivation
season, succeeding the first rains of the cultivation season.

In four villages, the Vel Vidane (traditional Irrigation Headman) and an FO managed the
operational tasks of the irrigation system. In two of these villages, the Vel Vidane was also
responsible for other tasks such as mobilization of funds and resources, decision making and
the organization of pre-cultivation meetings. Section 5.7 of this paper will deal, in more
detail, with the characteristics of this type of organization.
Farming incorporates a wide range of activities: cultivation on paddy in the command area under one of the tanks, cultivation of OFCs in chena or highland, or cultivation of crops in home gardens. Similarly, the word “farmers” means landowners, as well as tenants and day laborers, and men and women. To avoid confusion, a brief explanation of frequently used words, which might be useful, is given at this stage. A more detailed subdivision of “farmers” is used in section 5.

? Farmers: men and women whose livelihood is primarily based on farming. Besides farming, they may also be involved in off-farm employment or other income-generating activities.

? Cultivators: family members, cultivating the land of their spouse, brother, sister or parents.

? Landowners: owners of paddy lands, but not owners of home gardens, unless mentioned otherwise.

? Shareholders: owners of paddy lands, registered and included in the list of names of shareholders.

? De jure female heads of household: widows and divorced women.

? De facto female heads of household whose husbands are employed or living elsewhere, disabled or ill.

? Tenants: tenants in the ande (temporary sharecropping) system and registered tenants.

All estimates are based on a composition of primary data from the respondents themselves, secondary information from the respondents about the composition of the population, lists of names of shareholders, and from office bearers and local Grama Niladharis (village-level government officers) and observations during all seasons. The range provides variations across villages.

Approximately 75–85 percent of the women in the eight case-study areas are actively involved in paddy and chena cultivation. Approximately 10–15 percent of the women are not involved in agricultural activities at all, either because of their age and physical condition or because, at the relevant period, they were mothers of young infants or toddlers. Another 5–10 percent are involved in employment activities other than farming, such as in garment factories, shops, in the government service, as teachers and Samurdhi mobilizers or in countries of the Middle-East. Women in a small group (4–8%) are responsible for most of the cultivation themselves, as their husbands are employed (almost) full-time nearby and thus most of the time not available for farming activities. These women can still ask for their assistance for particular activities (e.g., to purchase agricultural inputs, 

2It has to be emphasized that neither the statistics provided by various government officials (e.g., by the Grama Niladharies, Divisional Officers) nor the estimates from the farmers themselves were found to be reliable as they often provided conflicting information.

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to contact officials, etc.). Their income is likely to be more secure and regular than that of those female heads of households who depend entirely on farming for their food and income.

The percentage of men and women working as day laborers varies over the seasons and over the years and is highest during longer periods of droughts, and in areas with chronic low cropping intensities. Furthermore, participation of men in day labor is higher than that of women, depending on the family-composition (babies and young children), the distance from home to the place of day labor, and caste (as it is less appropriate for women and men from higher castes to work as day laborer for those from lower castes). Furthermore, more men are involved in day labor and spend more time there due to the wider range of activities available to them.

The percentage of female owners of paddy lands, compared to the percentage of the corresponding males, shows considerable variation across the eight case-study areas, ranging from 7 percent for Rotawewa to 35 percent for Walpola. In Walpola, the percentage of female owners of paddy lands was related to the relatively large number of widows and the relatively high rate of marriages where the couple settled near the wife’s parental house after marriage (25 percent). This is referred to as binna marriage. Data analysis of the levels of education and the type of marriage of respondents in Walpola indicate a possible relation between the level of education of both spouses and binna marriages. Also the percentage of both male and female owners of paddy lands related to the total number of families shows this variation: ranging from 20–25 percent in Rotawewa, 45 percent in Nallamudawa, 62–88 percent in Indigehawewa, 72 percent in Kulikkada, 85 percent in Wellamudawa and Punchikuluma to 98 percent in Walpola.

The percentage of farmers who are members of the FO shows a wide, almost unlikely, variation (ranging from 30–35 percent in Rotawewa, 48 percent in Nallamudawa, to 95 percent in Indigehawewa). Surprisingly, in Rotawewa the number of members (estimated at 40–50) of the FO is higher than the number of shareholders (estimated at 25–33). This is explained by the fact that much land is officially still registered on the parents’ names, while it is already divided among and cultivated by several of their children. In Indigehawewa, the situation is very different. Membership recently increased from approximately 30 to 120 (out of 130 families) due to the implementation of rehabilitation works. These findings prove that one cannot easily draw conclusions on the number of legal landowners based on the number of members of the FO or the size of an FO

3These findings indicate that, with a few exceptions, the level of education of women in a binna marriage is similar to or higher than that of their spouses, and that both spouses have a comparatively high level of education (Grade 8 or higher). To make a more accurate statement on the relation between the level of education and binna marriages, quantitative methods (surveys) would be more appropriate, with data from several villages, allowing for a comparison between various villages (other characteristics being equal, such as caste, population, and farming community).
based on the number of landowners within a community. Similarly, the participants in meetings of the FO are not necessarily members or shareholders.

Membership among women in the FO was highest in the areas with a relative high rate of widows and bina marriages. The percentage of female members of the FOs in the study areas ranged, on average, between 15 and 30, with a peak for Walpola estimated at 25–40 women out of 80 to 90 members, and between 30 and 50 women out of 100 members estimated for Punchikuluma and Wellamudawa. The lowest rate of female members of the FO was found in Rotawewa (2 women out of 35 members, less than 6% of the members). Rotawewa is a village with Berawa caste (a relatively low caste) people and with a low rate of landowners among the population. The educational level of its population is rather low when compared to other villages nearby, and it faces problems such as low cropping intensities, a large consumption of kasippu among the male population, and overall poverty.
In the case study areas, 75 to 85 percent of the women are actively involved in the cultivation of crops in irrigated agriculture (paddy cultivation), or in rain-fed agriculture (chena cultivation). On their own fields as well as in their husbands’ or parents’ lands they are involved in all activities except ploughing and threshing, spraying, fencing, building watching huts and watching the fields at night. The table below provides a general overview of activities in which men and women are involved.

Table 1. Involvement in farm-level activities by men and women.

<table>
<thead>
<tr>
<th>Activities (p = paddy, c = chena)</th>
<th>Paddy cultivation</th>
<th>Chena cultivation</th>
<th>Day labor (p, c)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Slash-and-burn (c)</td>
<td></td>
<td>v</td>
<td></td>
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<tr>
<td>Land preparation (p, c)</td>
<td>v</td>
<td>v</td>
<td>v</td>
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<tr>
<td>Ploughing by tractor (p)</td>
<td>v</td>
<td></td>
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<tr>
<td>Cleaning, constructing field bunds (p)</td>
<td>v</td>
<td>v</td>
<td></td>
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<tr>
<td>Cleaning canals (p)</td>
<td>v</td>
<td>v</td>
<td></td>
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<tr>
<td>Leveling (manually) (p, c)</td>
<td>v</td>
<td>v</td>
<td>v</td>
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<tr>
<td>Leveling (tractor) (p)</td>
<td>v</td>
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<tr>
<td>Sowing (p, c)</td>
<td>v</td>
<td>v</td>
<td>v</td>
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<tr>
<td>Diverting water to fields (p)</td>
<td>v</td>
<td>v</td>
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<tr>
<td>Applying fertilizer or spraying pesticides/weedicides (p, c)</td>
<td>v</td>
<td>v</td>
<td>v</td>
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<td>Weeding (p, c)</td>
<td>v</td>
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<td>v</td>
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<tr>
<td>Planting or transplanting (p, c)</td>
<td>v</td>
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<tr>
<td>Fencing (p, c)</td>
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<tr>
<td>Building watching huts (p, c)</td>
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<tr>
<td>Watching fields at night (p, c)</td>
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<td>Harvesting or plucking (p, c)</td>
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<td>Threshing (p)</td>
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<td>Transporting (p, c)</td>
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<td>Selling products in town (p, c)</td>
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<tr>
<td>Selling products at home (c)</td>
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Households with relatively much land tend to work with family labor assisted by one or more laborers; households with small plots of land prefer to do as much work as possible by family labor. Those families cultivating paddy and OFCs simultaneously during the same season tend to divide the work among themselves, men for paddy cultivation and women for chena cultivation, as both male and female farmers state that chena cultivation is easier, and as they perceive it to be less strenuous. Widows, divorced women and women whose husbands are temporarily absent (or disabled) are clearly more involved in farm-level activities than female farmers who assist their husbands in cultivating paddy. The study revealed that, in general, the active involvement of women (and adult children) in cultivation of paddy or of other cash crops provides them with a more powerful voice in decisions at household level. However, this relation cannot simply be reversed. Some women, who were only involved in cultivation of OFCs for domestic use, were found to be in charge of the household budget and responsible for decisions on the day-to-day expenditure.

During the time of land preparation, one can observe many male and a few female farmers in the field constructing small field bunds, cleaning canals, and irrigating their fields. These activities are thus not restricted to the men’s domain of activities. The range of productive activities, in which women are involved in their own (household) fields, is determined by the prevailing perceptions of male and female tasks, their respective skills (including the skill to operate equipment and machinery) and the required physical strength. Their perceived lack of skills to operate equipment and machinery seems to provide a clear reason for their noninvolvement in ploughing and threshing. Several male respondents referred to the “sacred” character of the threshing floor as reason, why they do not allow women on the threshing floor (photo 3).

Photo 3. Men preparing milk-rice as an offering to god Pulliyar.
“There is a myth about the threshing floor explaining why women are not participating on the threshing floor. The farmers have an agreement with god Pulliyar not to allow women on the threshing floor. Pulliyar did not have a female partner and therefore he did not like women. The threshing floor is thus considered to be a sacred area and women are afraid that if something happens to their family (e.g., death, illnesses, private problems) and they have been on the threshing floor, men will blame them for that reason (that they caused the anger of god Pulliyar)” (field notes, Punchikuluma, 1999).

A large majority of the widows and divorced women (de jure heads of household) in the case study areas earn their living by farming. Their dependency on assistance from relatives has increased considerably after the death of, or separation from, their husbands. Paddy cultivation involves activities, which cannot be performed independently by women and which are not appropriate for them to do (e.g., watching the fields at night [photo 4]). Free riding is not allowed with regard to cleaning their part of the irrigation canal, fencing, building watching huts, or in the rotational watching of the paddy fields at night. However, it is not always sanctioned. If they cannot find relatives to assist them, they are supposed to hire laborers for these activities. The transaction costs of finding assistance are likely to be highest for women who do not have close relatives in the village. The study did not reveal whether assistance from relatives is compensated for with food, services or part of the yield.

Photo 4. A watching hut. A farmer can watch the approach of wild elephants (or other wild animals) from this vantage point and frighten them away with gunshots, etc.
As mentioned earlier, women in a small group cultivate paddy on their own, their husbands’ or their parents’ lands when their husbands are employed elsewhere, temporarily absent, or not capable of cultivation (e.g., when physically handicapped). They can be considered to be de facto heads of households. They face similar constraints as female heads of households assuming that they cannot rely on relatives to assist in activities such as ploughing, threshing, or watching at night.

Farming requires a wide variety of economic transactions, such as the purchase of seeds, fertilizer, pesticides and weedicides; selling and marketing the produce; and eventually negotiation and bargaining of prices and transport arrangements. Furthermore, these transactions may also include renting out equipment, such as tractors and water pumps and hiring of day laborers. A lot of transactions have to do with arrangements for tenancy and sharecropping or with credit arrangements and banking affairs. Clearly, economic transactions are subject to the prevailing perceptions with regard to “male” and “female” skills and intra-household responsibilities, e.g., from Paddikaramaduwa:

“My husband buys fertilizers, seed paddy, pesticides and weedicides. I do not like to go, and my husband also doesn’t like me to buy those things. Actually, he even hides chemicals from me. We buy all those things from a boutique in the Huruluwewa colony. Those products are also available in larger stores in Galenbindunuwewa. Men and women are both involved in the selling of products from their home gardens. I sell products at home; my husband takes products to the Dambulla market. When my husband goes to the market, he hires a lorry with a small group of people (male relatives and neighbors)” (field notes, Paddikaramaduwa, 1998).

One of the reasons for women’s limited involvement in economic transactions (in relation to paddy), is related to their access to means of transport. Transport facilities are traditionally in the hands of the males, and transport of the purchased goods or the products to be sold is inevitably part of market-related activities. In male-headed households, men are considered to be responsible for all economic transactions required for paddy, as this requires transport arrangements and involves strenuous physical labor. Women’s involvement in selling OFCs is, compared to paddy, more common. Smaller amounts and portions (volume, amount and weight) of inputs and products facilitate the transportation requirements. Moreover, tradesmen come to the village to purchase and collect the products for particular fruits and vegetables. The transport of paddy is sometimes based on group effort; farmers load the tractors collectively in small groups and transport the paddy to the towns.
“The men buy fertilizers, seeds, pesticides, etc. It is only when he dies, that the wife may take over the husband’s activities, which are sometimes taken over by the eldest son or a neighbor. They buy seeds, fertilizers, pesticides and weedicides at Kadawatgama or, if they don’t have it, buy them from a Mudalali, a private shop owner at Medawachchiya. The men also sell the products; and all products are sold in town. They keep part of the yield for home consumption. The reason for this division of tasks is simple: not all women can ride a bicycle, and have less strength to load and unload” (field notes Walpola, 1998).

Women who can rely on male relatives for such activities are not very eager to take over these activities, as it means strenuous labor, an extra burden (photo 5) on their workload and, as it does not match with the gender-based division of tasks.4 For them, there is no benefit in taking over this activity from their husbands, as they are not likely to get better prices or get

Photo 5. A woman with heavy burden.

\[4\text{Physical strength is sometimes used as an argument, but inconsequentially. Women are expected to carry heavy water jugs and to participate in other strenuous activities in, e.g., land preparation.}\]
more credit from their relatives for taking responsibility for these economic transactions or more control over the income. Also women expressed that, in female-headed households, they were not eager to take over this responsibility. They ask their male relatives to assist them in the activities, which require transport and physical labor.

Women’s noninvolvement in economic transactions is not necessarily related to the control over the family income. Whereas a woman’s say over large expenditure decisions is related to her contribution to the family’s income, the decision as to who keeps control of the household budget and money is based on other considerations as well. In some families, men turn over the remaining money (after selling the paddy and paying off any debts) to their wives, as they do not want to be bothered by their children’s requests for money and gifts. Additionally, some respondents mentioned that, compared to men, women are less likely to spend money on unnecessary luxury items and drinks.

Some women are involved in those economic transactions, which do not require transport and labor, such as making arrangements with day laborers, renting equipment, banking and credit arrangements. Only a few women from female-headed households (between zero and five for each village) did take the responsibility for almost all activities in the domain of economic transactions for paddy cultivation and marketing, as long as they could make transport arrangements. While some of these women had only a few perches of paddy land and hardly any income-security, others had much more acreage of paddy land, and even some machinery such as a water pump or a tractor. Their involvement in economic transactions was borne out of necessity, based on lack of alternatives. As they originated from another area or province, there were no male relatives in the village they could rely upon. Additionally, they considered their relation with other villagers not good enough to ask them for assistance, or to rely on their services. Many stories revealed that their social network is crucial, which is also visible in the following example.

One woman came from Sabaragamuwa, where she grew up, to live with her husband, in the Anuradhapura district, whom she married 20 years earlier. They owned one of the larger farms in the area, which provided them a secure income. In addition to that, her husband was also appointed as Grama Niladhari, which provided him with opportunities to help others. According to her, villagers came to them with requests for help and financial assistance, when they faced problems. She said that these villagers clearly appreciated their support, and that she felt accepted within the village. Yet, when her husband died some years ago, this situation changed. Because she herself had no relatives in the village and others demonstrated no interest in assisting her, she had no choice but to make most arrangements on her own. She felt that their relations would have been much more supportive if she had descended from this area (field notes, Walpola, 1999).
All families are, in one way or another, involved in contacts with governmental organizations, and in legal matters. They might have to contact officials for inheritance of land or for the division of land among their children, to apply for land under the Jayabhoomi program or to submit a request for subsidies. In general, it is considered to be the responsibility of the head of the household to take care of these tasks. However, it is not a very rigid division of responsibilities.

The intra-household allocation of these tasks is related not only to the prevailing gender-ideology and power relations in which one gender monopolizes the productive forces in agriculture, but also to other circumstances, which make it more or less attractive to women to take care of official matters. For example, while all women tend to contact the Grama Nilidhari quite easily when he or she keeps office in the village, they indicate they are less inclined to travel to the offices when located at some distance from the village. Dealing with formalities at the offices of governmental organizations often involves inconvenient traveling conditions and long waiting hours with the risk of getting indecent looks or proposals from men. Therefore, it is not surprisingly that women, who can rely on their husbands or their sons, are not always eager to deal with these tasks. Yet, their choice is based not only on the notion that it is the responsibility of the head of the household but also by intra-household efficiency and practical considerations (lack of ability to ride a bicycle or a motorbike, more are bound to travel during daytime, because of domestic activities like childcare).

For female heads of a household, widows and divorced women, the situation is quite different. Their active involvement, more than in economic transactions, is related to their position within the household; they do not always want to rely on their male relatives. This is quite understandable, when one learns from governmental officials about the numerous conflicting situations within families about the inheritance of land and property. Government officials are regularly asked to interfere in conflicts within the family or between families. In the case of conflicts within the family (e.g., between brothers and sisters), women are not too shy to stand up for their rights. These women have a direct interest in dealing with government officials themselves in order to settle legal matters.

The previous sections clearly reveal that, with the exception of female-headed households, men, more than women, control the resources, expenditure, and income-generation within the family. Men’s dominant role in economic transactions, representation and legal matters, and their contribution to family income is extended to the responsibility to participate in

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5See section 4.1

6These officials are, e.g., Grama Niladharies, Divisional Officers, Assistant Government Agents, Government Agents, members of the Pradeshiya Sabha and officials at the Kachcheri (District Secretariat).
decision-making bodies, such as FOs and their meetings. The use of the word “entitlement” is deliberately avoided here, as it can easily be associated with particular rights someone enjoys. A majority of women and a large minority of men considered the responsibility of attending meetings as an obligation rather than an opportunity. The least interested were farmers in villages where FOs were said to be malfunctioning, which did not provide the promised facilities to the members, and in which the members did not comply with the FOs’ decisions, deadlines and rules.

An argument that is frequently employed by respondents is that, in general, men are better equipped than women with knowledge and representation skills to participate in decision-making processes and organizations. This argument is part of a self-enforcing process. It starts with the people’s individual perception about “male” and “female” skills, behavioral patterns and the gender ideology with regard to respective responsibilities within the household. As this results in a situation in which the man usually takes responsibility for economic transactions, representation and legal matters, he is likely to gain familiarity with the different procedures, processes, formal requirements and market arrangements and thereby fulfill the expectations with regard to “male” skills and capacities. The intra-household division of responsibilities with regard to attending the meetings of the FO is hardly subject to discussion between male and female members. As one of the women said:

“Ten years after my husband’s death, I became member of the FO. When I attend the meetings, I only listen to the others because it is not necessary to speak myself. After all, all the different opinions and arguments are already mentioned by others. I really think it is better to send men to the meeting. After my husband died, I wanted to send my son, but since he was not yet married and did not have any land property yet, he could not get membership. After he gets ownership of paddy lands, he can become a member. Then I will give up membership unless both of us can become members” (field notes, 1998).

There are particular reasons why women deliberately choose not to attend the FO meetings, or for not showing any interest in FO membership, even if they have paddy lands registered in their names. Most female farmers, with the exception of women in female-headed households, indicated they were quite satisfied with the situation in which their husbands, sons or fathers represented their family at the FO meetings. Frequently mentioned arguments that contributed to the women’s disinterest in attending meetings were that a) they were engaged in domestic tasks, b) the presence and behavior of drunken men at the FO,\(^7\) c) lack of benefits from the FO, and d) dislike to have anything to do with an organization that was

\(^7\)In two villages, a considerable number of men (estimated at 30–50%) were drunk in the afternoon. In these areas, power relations within the village were also strongly determined by the persons in charge of the brewing and selling of kasippu.
clearly malfunctioning. Of the women who attend the meetings, 90 to 100% (with a slight variation among the villages) indicated that they only “go to listen.”

The question whether women also took part in the discussions or expressed their opinions during the meetings caused some amusement among the respondents. “No, of course not,” was the common response. “Why should we, we only come to the meetings if there is no one else to go. We only come to listen to the decisions taken,” the women explained. The question whether they would go, if at least 50 percent of the participants were females, gave rise to even more amusement. “Yes, I probably would,” said some, but also indicated that it was a good opportunity to meet and chat with the other women present (field notes 1998).

Interviews and observation revealed that there is a combination of factors at play, such as the prevailing norms of modesty and appropriate behavior for women; direct or indirect discouragement by other participants; or the feeling that it is not really their duty to contribute actively. Some of the respondents (including office bearers of two FOs) indicated that women are not too shy to stand up for their rights outside the context of public meetings, which was confirmed by the outspokenness of some women themselves. The outspokenness of women was found to be highest in the FOs with the highest number of female members.

The rationale for female farmers, who attend the meetings, not participating actively in the discussions can be found further in the prevailing gender ideology among the population in the case study areas. As articulated frequently by male and female respondents, women are considered to be less capable in their understanding of the FO and the issues at stake. Furthermore, they would not have sufficient insight on the consequences of particular decisions. Those women, who choose to participate actively in the discussions, run the risk of being accused of mindlessness, or being “too proud.” Although the outspokenness of male members should not be overestimated, their remarks did not provoke any comments such as “mindless” or “impulsive.” In addition to the gender-related reasons for not actively participating in the discussions of the meetings, there are also more general reasons for them to not partake in the discussion or not to oppose to the suggestions of particular other members at meetings of the FO for other groups. This is much more related to one’s position as landowner, cultivator and one’s dependency on other landowners for credit, labor, and other assistance. This will be discussed in section 5.

The few women (variation between 0 and 5 in various villages) who did complain about the extent to which the FO accommodated their needs and wishes, had no option but to protest. They did not have relatives to stand up for their interests and could not count on the support of the other villagers. They were (already) looked down upon, treated as outsiders, or accused of inappropriate behavior. Although they have equal entitlement to the benefits of the FO, they are not invited to attend the meetings, but are not excused for nonparticipation in shramadana, and disadvantaged (cheated upon) in the distribution of goods and services.
The assumption that participation will be always in the interest of women—and subsequently that women will always be eager to become members of an FO, to attend meetings and to participate actively in the discussion at meetings—is not confirmed by this study. The information from interviews strongly indicated that as long as food security or the basic living conditions of people are not guaranteed, food supply and livelihood are the first priorities of both men and women. Most women, in particular those who can rely on their husbands or male relatives for representation of the household, are not eager to take over the responsibilities, which they perceive to be the responsibility of men within the household.

However, special attention is required for women from female-headed households who cannot rely on support from male relatives or relations. They face problems in their efforts to take care of economic transactions due both to a lack of transport facilities and to the gender ideology. Similarly, they face problems in their efforts a) to contact governmental organizations due to limited office hours, lack of transport facilities, indecent looks or humiliation from men and b) to settle legal matters according to their wishes due to legal provisions. Additionally, the study clearly revealed that they have good reasons for not attending the meetings. First and foremost, the large majority of women are quite satisfied with the way their households’ interests are represented by their husbands at the FO meetings. Even if they would be interested, their participation is constrained due to their engagement in childcare and other domestic tasks and—not the least—due to the behavior of drunken participants. Their participation in the discussion at FO meetings is limited to “listening,” which is related to the prevailing gender ideology, norms of modesty and appropriate behavior, and to direct or indirect discouragement. In addition, some of them, in particular those women and men without paddy lands, feel that their problems and needs should be taken more into consideration by the FO; yet they do not have (or get) the opportunity to bring this forward in the meetings (see section 5).

Any effort to improve the situation as mentioned requires changes in the arrangements for transportation of paddy as well as in the behavior of governmental officials and office bearers of FOs, and an adjustment of the “rules” for participation in the FOs. Such a change of behavior will not occur overnight. Therefore, it is most suitable to be taken up in the “aftercare” programs of irrigation rehabilitation programs. Although formulated from a gender perspective, measures to change the above-mentioned situation are likely to benefit other farmers as well, and can be expected to contribute to a more effectively functioning FO.
In this section and the next I will try to identify the factors on which this inequity is based. The analysis will start in this section with the most eye-catching appearance of inequity: inequity in women’s entitlement to paddy land. Government officials mentioned that some women come to them, crying and begging, and asking why they do not get the same right as their brother. The ownership of paddy lands is relevant to women; it also results in other inequities among farmers in the FO.

Section 4.2 deals with an interesting phenomenon, which was observed in a number of the case-study areas: temporary redistribution of land in the command area when only part of the command area can be cultivated. It is not only a response-strategy to drought, but is also a strategy from which all landowners may benefit equally.

The most structural cause for an uneven gender balance in the membership of FOs is the unfavorable situation for women with regard to inheritance, division and allocation of land. A person’s entitlement and access to paddy land are determined by:

a. formal law consisting of legal provisions, enactments, ordinances
b. local “law,” such as customs with regard to marriage, settlement of a couple after marriage and the division of land among heirs
c. project “law” such as the criteria used by project organizations in the case of land allocation.

The government issues several types of deeds for land: short-term leasehold, permanent leasehold and freehold. Most paddy land in the command area of a tank is registered in the name of men. Besides freehold titles, leasehold titles, and temporary leasehold deeds, there are particular regulations for granting landownership (Jayabhoomi [photo 6]). Under these regulations, encroachment of land, proof of the actual exploitation of the land and a temporary leasehold permit precede the procedure of granting full title to land. The legal provisions with regard to permanent leasehold under the Land Development Ordinance require the nomination of a successor. If no successor has been nominated, and the permit holder dies without leaving behind his or her spouse, the priority (in line of order) is: sons, daughters, grandsons, granddaughters, father, mother, brothers, sisters, uncles, aunts, nephews, nieces (Land Development Ordinance, rule one, third schedule; in: Legislative Enactments of the Democratic Socialist Republic of Sri Lanka, revised edition, Vol. XI, 1980).
Some authors indicate that land is, to a large extent, transferred through inheritance and marriage. Some even argue that statements about kinship links are nothing more than statements about rights and claims to land (Bloch, M. et al. quoted in M.P. Moore 1981). The research confirmed that a crucial factor for determining women’s claims to land is based on inheritance and marriage customs. The location of settlement of a couple after marriage determines one’s rights and claims to land. If women continue to live with or near their families, they generally enjoy much stronger rights to land than if they move far away from their own families (Von Benda-Beckmann et al. 1997).

In the case study areas, most marriages (estimated at 85% in Walpola to 98% in Rotawewa) are diga marriages, where a wife leaves her parental home and moves in with her husband and parents-in-law. A son living in, or near to, his parents’ house is more likely to inherit than a daughter living in with her parents-in-law. This situation is similar for sons who live further away from their parents. The sons of a family with five children who move to Colombo are less likely to inherit land than their brothers or sisters who are settled near their parental home.

In three of the villages under study, rehabilitation of the tank allowed for extension of the command area; the spill and bund were raised, thereby increasing the full water-capacity level of the tank. According to the project’s intentions, the land was to be allocated to landless farmers. However, by the action of clearing and preparing the land, these farmers
claimed (seized) the land as theirs. Paddy land (either seized or allocated) is usually registered in the name of the head of the household. Divorced women and widows without paddy land or with a small landholding are unlikely to benefit from land allocation, for, in the existing sociocultural setting, they are not able to cultivate the land without the assistance of male relatives or hired labor. Some of these women complained about this, explaining that the FO held this against them. Furthermore, to plead for their interests, they have a rather weak position in the FO.

The simultaneous coexistence of these various forms of law, also referred to as legal pluralism, produces complementary and reinforcing constraints for women in their entitlement and access to land. Even though this is not within the short-term range of government organizations to change, the amendment of existing legislation might be an interesting starting point for structural change and more gender equity. It is hardly feasible to aim at a change of local customs with regard to inheritance, as parents naturally look at the actual and future users of land, who will be the children living in with the parents or close to the parents’ house.

Bethma is the cultivation of part of the command area with temporary redistribution of land in combination with rotational distribution of irrigation water. It can be applied either during maha or during yala when rainfall is not sufficient to cultivate the entire command area, but when it is likely to be sufficient to cultivate part of the command area. In such a situation, the FO or Vel Vidane may propose temporary redistribution of land so that all landowners can cultivate at least a small plot of land.

There are two options for redistribution of land under bethma: proportional and nonproportional. The actual size or percentage is subject to the number of shareholders, the size of the command area allocated for cultivation, and the water level in the tank. The rule for proportional redistribution of land is usually set at 25 percent of the size of one’s landholding, sometimes with a minimum size of 0.25 acre to accommodate the landowners who only have a few perches of land. The land available under nonproportional distribution is usually 0.25 acre for each shareholder. In the case of nonproportional distribution of land, small landowners, whose landholding does not exceed 1 acre, are always ensured of at least 25 percent of their original property, whereas large landowners may end up with a much smaller proportion (e.g., 5% of their original landholding of 5 acres). In the case of proportional distribution of land, small landowners may end up with shares too small for profitable cultivation. As expected, small landowners and larger landowners have different preferences for the rules for redistribution of land. In some cases, large landowners blocked the option of bethma, either by their disagreement in the meeting or by “force.”

Several farmers complained that, even though the Chairman of the FO expressed several times to be in favor of applying bethma, this chance was taken away from them by the behavior of a close relation of the previous Vel Vidane. This farmer had a relatively large size of land (10 acres), of which 6 acres were within the command
area of the tank, which was considered for bethma. As he also owned two tractors and a threshing machine, he was able to start harvesting well in advance of the date that was allowed according to the cultivation schedule. As a result, he completed the harvesting, and started with land preparation of his land before the kanna meeting for the next season could be held. He was well aware of the commonly accepted norm that crops, which have already been sown, should not be left to parch, even though he did not comply with the rules. As a result, the decision was taken to cultivate only that part of the command area, but not under bethma (field notes, 1999).

The entitlement to land under bethma is based on a combination of formal and informal rules. The simplest rule that determines who is entitled to land, is that only shareholders are entitled to land under bethma, provided that they are present at the meeting, or are represented by their wives. Female landowners (mostly women from female-headed households) have the same entitlement to land as other owners of paddy lands. This land may be cultivated by the shareholder himself or herself, or by others on mutual agreement. Ande tenants (temporary shrecroppers), who cultivate the land for only one season under a share cropping arrangement, have to make an individual arrangement with the landowner, but have no entitlement to land from the FO.

A female farmer, cultivating the land that is registered in the name of her husband, has equal rights under bethma if her husband is not able to cultivate (due to illness, temporary emigration, or employment), provided that either one of them attends the pre-cultivation meeting and participates in maintenance activities. The situation for a farmer, who cultivates the land of one of his or her relatives, is much more subject to an individual assessment by the Chairman of the FO or the Vel Vidane. This is especially the case if this relative is not able to be present at the FO meetings.

There is no indication that, under bethma, such women have a more or less favorable position than male farmers. Yet, several women said that they were, in general, more in favor of applying bethma than men. Some men are not interested in bethma, because it leaves them with a small plot of land, which is hardly profitable anymore. The initial investments for seed paddy, fertilizer, pesticides, weedicides are high. On top of these investments, they have to spend considerable time for the land preparation and cultivation of a small plot of land, not knowing whether the crop will be successful at the end. Women who have much less options outside the village boundaries as compared to men⁸ are more in favor of cultivation under bethma, despite the high investments.

The research findings clearly indicated that the bethma system provides a good opportunity for temporary improvement of peoples’ food and income security under particular conditions. The challenge will be to promote the application of bethma, to think of adequate

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⁸Because of travel constraints and the limited range of activities they can potentially be involved in day labor.
measures to prevent conflicts between large and small landowners, and to take adequate measures against farmers who willingly try to block the option of bethma by illegitimate behavior. Yet, to create more equity between farmers in a more structural way requires first and foremost an improvement of one’s entitlement to land. The ownership of paddy land creates a series of other rights. It is conditional for one’s eligibility as office bearer, for voting and nomination rights in the FO, and for access to the FO benefits. This will be discussed in the next section.
This section demonstrates that equity within the FO is a myth. People’s rights to attend the meetings, their active participation in discussion and their participation in agenda setting, voting and informal decision making are based on more than only membership. Similarly, the FO benefits are not allocated strictly according to formal criteria as used by the government or project organizations.9

Farmers, landowners or members of an FO do not necessarily represent the same interests, nor do they face the same constraints. The position of women as well as that of men is most clearly affected by class (size of landholding), marital status, family composition, age, and lineage.10 For example, the interests of a widow from a family who has control over all means of production and who is well represented by her sons or brothers, cannot be equated with the interests of a divorced woman, who has 20 perches of land, who has no relatives in the village, and who is treated as an outsider after her the divorce.

The breakdown of farmers into subgroups is often simplified to landowners and tenants. This, however, proves to be too general for explaining differences in interests and behavior among the farmers. As will be elaborated hereafter, a more detailed breakdown is desirable, even though there is frequent overlap of interests in some of the categories. In addition to the office bearers and committee members, one can observe the following distinct characteristics:

- Male paddy landowners with control over means of production, trade or political support and male paddy landowners who are close relatives of office bearers or who have been office bearers.
- Male paddy landowners with limited or no control over means of production, trade or political support.
- A male cultivator, cultivating paddy land (either alone or with his wife) registered in the name of the wife.
- A male cultivator, cultivating paddy land (either alone or with his wife) registered in the name of his parents.
- A female paddy landowner (widow); family has control over means of production, trade and political support.

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10The population of each village was rather homogeneous in terms of caste and ethnicity (all Sinhalese). Nallamudawa, Paddikaramaduwa and Walpol are all high caste, Govigama, whereas the people in Rotawewa are from the lower caste, Berawa. People from Indigehawewa are from the Hakgediya caste.
? A male owner of paddy land (from female-headed households); no control over means of production.
? A female owner of paddy land (binna and other), cultivating land jointly with her husband or by herself.
? A female cultivator, cultivating paddy land (with her husband or alone) registered in her parents’ name.
? Male and female farmers, cultivating paddy or OFC in highland, chena or home garden.
? Day laborers without paddy land, no membership of FO.

This includes families with more than the average acreage of paddy land (often divided over several tanks), equipment (tractor, water pump), means of transport (tractor, car, lorry, truck), cattle (buffaloes or cows), a shop, and families who maintain good relations with local government officials and politicians. Office bearers are usually selected from this group. These families usually have a strong position in the FO. They manage to keep this position through maintaining close relations with office bearers, officials and politicians, through their role in the FO, through their control over credit facilities and contracts, and through their demand for labor within the village. The role of women in these households is complementary to that of the male head of the household, and their position serves to consolidate the position of the family. In three villages, the distribution of land and positions among sons and daughters within these families resulted clearly in a de facto strengthening of their position through differentiation (e.g., farming, cattle, trade, and politics). This also conveniently distracted the attention of the influence of their extended family in committees, organizations and positions e.g., as Govi Niymaka (Samurdhi Mobilizer).

The strong position was sometimes the natural outcome of collective behavior by other farmers in the nomination and selection of representatives. For generations long, farmers have tended to select the most experienced persons and families, and the sons of those families, for the position of Vel Vidane or other leadership positions. Age, wealth and the amount of land were seen as indicators for “experience.” Their position in community-based organizations, although established through nomination and acceptance, often reveals a continuation of the line of leadership based on patrilineage (their fathers, grandfathers).

Shareholders are the registered landowners, but in many cases, adult children cultivate their parents’ land, and represent them at the meetings, when their parents are not able to participate in these activities anymore due to their age or physical condition. When women, with paddy land, choose to be represented by their

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11For example, Members of the Pradeshiya Sabha and the Provincial Council; Provincial Council (Chief) and Ministers; Members of Parliament and Ministers in the Cabinet.

12Sometimes, the result of a purposeful strategy by the family, where illegitimate means were an integral part of the actions of members of the nuclear or extended family (5 cases reported by multiple sources).
husbands in the FO, the husbands can participate in the decision-making process and voting as if they were the lawful landowners. In all other situations (wife representing husband who is landowner, or children cultivating parents’ land and representing them at meetings), the situation varies among FOs. In three FOs, cultivators who were the children of the \textit{de jure} shareholders were only allowed to attend the meeting without contributing to the decision-making process during the meetings.

Not all landowners are in the position to cultivate the land themselves, due to their old age, illness, family responsibilities or due to other employment. If possible, their wives, their children or relatives take over the cultivation of the lands, and provide the landowners with part of the harvested paddy. If this is not possible, they will look for other options, such as cultivation by a tenant in return for part of the yield (ande tenancy). Under such arrangements, the water rights for that particular plot of land automatically shift to the tenants. The arrangement between the landowner and the tenant thus creates a situation in which maximization of the yield is in the interest of the landowner. Simultaneously, the arrangement also comprises a \textit{de facto} transfer of responsibilities (cleaning part of the canal, fencing, building huts, and watching at night).\textsuperscript{13} Ande tenants are entitled to attend the kanna meetings, but not to decision making or voting unless they are shareholders of another plot as well.

A large majority of the families (more than 80\%) in all case study areas have only a very small plot of paddy land (1 acre or less) each, no paddy land at all, paddy land in the command area of an abandoned tank, or paddy land in the command area of a tank with chronic low cropping intensities. Their share of land was determined when their parents decided to divide the land among the children, or when they inherited a small part of land from their parents. Their grandparents might have had as many as 5 acres to cultivate, but with 3 children and 8 grandchildren, not much was left for each of them. Their food supply and income are highly insecure compared to those of farmers in Mahaweli areas with cropping intensities of more than one. For households without a regular income from farming, it is essential to have access to other means of income. Therefore, both women and men work as day laborers. In the early morning, tractors or small lorries arrive in the village to pick up the women and men who want to work as day laborers. During the day, men and women work together in groups as they are weeding, transplanting, harvesting, or collecting paddy. In the late afternoon or evening, they are brought back to their village. In contrast to the large range of activities done by women in their own fields, the range of activities in which they are involved as day laborers is more restricted. Activities such as leveling, construction of field bunds, and cleaning of field channels (photo 7), are not within the range of activities for which women can be hired as day laborers.

\textsuperscript{13}The Agrarian Services Act, no. 58, 1979, provisions 34 (2) and 34 (3) assign these duties to ‘the owner-cultivator or occupier,’ including usufructuary mortgagees and tenants.
Most of the FO members are landowners in the command area of the tank. Traditionally, ownership of paddy lands has been inextricably linked to FO membership or to participation in the kanna meetings. Under the current Agrarian Services Act, the criterion of ownership of paddy lands has been removed. Others may also apply for membership of the FO, provided that they cultivate land, their age is over 18 years, they reside in the FO area and they show interest in the FO activities.¹⁴ The adjustment of the criteria for FO membership gives the FO more authority to effectuate its decisions and to exercise control among a larger group of cultivators and tenants. The owners of paddy lands in the command area of the tanks were, and still are, referred to as shareholders. The shares refer to the share of land they have in the command area of the tank. All shares are listed in a pangu (shares) list.

Clearly, there is a conflict between the legal provisions and informal criteria for FO membership. Membership, also by farmers themselves, is still perceived to be first and foremost for landowners of paddy, or “shareholders.” Although the ownership of lands in the command area of one of the common tanks is directly related to one’s status as shareholder, it does not automatically imply FO membership. Membership requires the payment of an annual contribution and regular attendance of meetings, which are obligatory though usually not sanctioned. An important reason for owners of paddy lands and non-paddy lands to consider obtaining membership is the provision of what they refer to as “benefits.”

¹⁴See Agrarian Service Amendment Act, 1991, no. 4: Interim Constitution for the Farmer Organization.
Almost all FOs (promise to) provide seed paddy, fertilizer and pesticides on a credit basis. The agricultural inputs have to be paid back after harvesting is completed. However, 10–40 percent of the farmers (both male and female) who were interviewed in the various villages complained that these were only promises. The entitlement to this facility is subject to the conditions of being an FO member and cultivating land in the command area of the tank. The spouse, sons and daughters of the landowner are also entitled to this credit facility, when they cultivate the land, which legally belongs to their spouse or parents, who cultivate the land on their behalf. Other benefits may include participation in tank rehabilitation projects, in income-generating or training activities organized by project organizations and institutional development officials, and in receiving seedlings or plants. Many farmers who were not FO members indicated that they were not interested in membership or in attending the meetings so long as the FO did not provide its members with the benefits they were entitled to, or so long as the FO was malfunctioning.

Members of the FO who do not own or cultivate land in the command area do not have an entitlement but depend on the willingness of the office bearers to accommodate their requests. They sometimes apply to obtain the facility for the purchase of seed, fertilizer and pesticides for the cultivation of crops in their home gardens or in highlands. The decision of the FO to grant them these favors is often based on individual judgement of the office bearer(s) or the committee, who may consider individual skills of the farmer, the reliability of the yield from the home garden or highland, or personal relations with the applicant. This is also expressed in the following example:

One woman was disenchanted with the unwillingness of the office bearers to listen to her complaints and requests. She cultivated the paddy land of her brother who had been ill for a long time. Additionally, she also grows paddy and vegetables in her home garden with water from an agro-well. As an FO member, she attends the meetings regularly. She and her husband (a bus driver) migrated to this village 20 years ago. She said: “I know that I am not the legal owner of this land, but the Chairman doesn’t even want to listen to my questions and problems, because my name is not on the shareholders’ list. I don’t seem to have the right to ask his attention for the problems I face; I don’t get the same benefits from the FO. This year, I only received half of the seeds, fertilizer and pesticides on credit as compared to the members who have paddy lands themselves. They said that this was because the yield in my home garden is less reliable with rainwater cultivation, even though we have an agro-well. I don’t think this is fair. After all, I also pay the membership fees and comply with the cultivation calendar. I equally participate in maintenance activities, such as cleaning of the channels, and in the collective maintenance activities, to remove weeds and bushes from the bund of the tank” (field notes 1998).

It may be clear that this example of inequity goes beyond the issue of gender inequity. The woman acknowledged that male farmers in a similar position would face the same problems, even though they might have a slightly higher chance of getting attention to their
problems and needs. This example demonstrates that the FO makes not only a distinction between landowners and cultivators, but also between cultivation of paddy in the command area and cultivation (of paddy) elsewhere.

Recently, membership has also been enabled through the implementation of tank rehabilitation projects, where the local population has been involved in the labor works, such as digging, desilting, and strengthening or raising the bund. The newcomers, who joined the FO for the purpose of participation in the rehabilitation works, are referred to as “temporary” members, even though the temporary nature of membership is not always interpreted strictly. Like the other members, they have to pay the annual contribution, but their entitlements to benefits are not necessarily the same as those of permanent members.

All farmers are allowed to participate in the pre-cultivation FO meetings, regardless of their statuses as member, landowner, cultivator or tenant. Participation in the pre-cultivation meetings is either obligatory for members (though not sanctioned) or considered to be desirable. Representation by other family members is quite common. This results in the situation where the farmers attending the meetings are not necessarily FO members or shareholders. Sometimes, the husbands of female farmers, who are owners of paddy lands and enjoy a binna marriage, represent their wives. Male farmers who are shareholders, with a diga marriage, participate themselves, and are only represented by their wives if they are not able to attend the meeting themselves. Married male farmers who are shareholders, and their wives, who also have paddy lands, participate in the FO meetings themselves. Double representation is considered (by men and women) inefficient and unnecessary.

In four villages, respondents mentioned the low turnout of members at the FO meetings. The most common causes for the low attendance rate at meetings were dissatisfaction among a large group of members about the functioning of the FO, the failure of the FO to provide benefits and to organize the pre-cultivation meetings, and suspicion of misallocation of funds. The inequity among the cultivators without paddy lands and shareholders, the distribution of benefits among relations of the office bearers, and lack of information about the allocation of funds nourished feelings of frustration, distrust and jealousy.

Section 3 has already indicated why most women attending the meetings come to listen, and not to participate actively in the discussion at meetings. However, the active participation of the other members in the discussion should not be overestimated. During the meetings attended for the purpose of the research, more than 80 percent of the time the farmers were addressed by either the Divisional Officer (if present) or by office bearers of the FO. The choice not to join the discussion is, for men as well as women, based on their expectations with regard to the social and economic costs and risks involved in active participation. This explains why male farmers are not likely to openly oppose more influential farmers. The options open to them are based on their statuses as compared to those of other members (cultivator or registered landowner, employer or
laborer) and on the risks they face in active opposition. Any organization involved in tank rehabilitation should be aware of the concentration of political and economic power in the village and the way this affects decision making within the FO, for, it proves that power and dominance can operate through consent and complicity (Kabeer, N. in Razavi 1999, p. 441).

A meeting was organized by the project organization, a government officer from the AGA’s office and the Vel Vidane to discuss the possibilities for a tank rehabilitation project. During this meeting, farmers were asked to point out which tank they wanted to be rehabilitated. One farmer, whose family had a large landholding, a large herd of cattle, and who was related to the Vel Vidane, proposed to rehabilitate a tank with a small command area, where only ten landowners (including himself) would profit from the rehabilitation. These landowners could be traced back to two extended families. A representative of the second family who had land in the command area of the same tank seconded his proposal. Because none of the other farmers opposed, the decision was taken (by consent) to rehabilitate this (private) tank. Although the other farmers wasted their chance of rehabilitation of a tank where 80 families would benefit from tank rehabilitation, they did not endanger their relation with these influential families, as they provided day labor opportunities, credits and other support (field notes, 1999).

In addition to criteria, which determine one’s eligibility for FO membership, there are also rules through which a person’s priority in decision making and voting is established. Landowners with control over means of production and access to political support have the best position in setting the agenda and dominating the decision-making process. But among the other members, there are different rules: shareholders and permanent members enjoy more rights than cultivators and temporary members, whereas female members—female cultivators, widows, divorced women and women in binna marriages—have limited opportunity to actively join the discussion in the FO meetings.

Landowners who are FO members have the right to participate in the meetings, to nominate and vote, and to all the benefits of the organization. Farmers who cultivate the land of one of the shareholders are entitled to participation, discussion and benefits, but not in all cases to voting, unless the FO decides otherwise. Finally, those members, both temporary and permanent, who do not have paddy lands in the command area of one of the common tanks, have the right to participate in the meetings, but not to vote or to the FO benefits.

The distinction made by the FO between shareholders and cultivators is a major source of dissatisfaction and frustration among some farmers. It is especially the young (and higher educated) sons and their wives cultivating the land of their parents and in-laws who are not satisfied with their position in the FO. Even if they represent their parents, the younger generation is not endowed with the same rights for participation in the discussions and in voting as the legitimate shareholders. However, they are in no position to openly challenge the opinion (or question the behavior) of influential farmers during the FO meetings as long
as they depend on these farmers for their livelihood, credits and opportunities for day labor. They were caught between a Scylla and Charibdes where the wish to change the decision-making process is concerned because they realized that openly challenging the procedures and decision making at FO the meetings might endanger their relationship with the influential farmers.

The frustration and fear of repercussions of the younger generation were most expressed in two villages with a strong “clan” of influential families. These families had comparatively large areas of land and large herds of cattle and held control over other means of production. They also had good relations with the local traders and four of these families were widely accused of being involved in illicit brewing of liquor. Their position was strengthened by support from politicians in terms of jobs, subsidies and grants and, in the case of illegal brewing and trade of liquor, protection from police interference. These families dominated positions within the FO and most other organizations within the community.

The criteria for selection of office bearers provide a clear example of the gap between rules (whether formal, local or project law) and implementation. Formal rules are: having residence in the village, ownership of paddy lands and being literate and being male. Female landowners are not eligible for the position of office bearer and none (!) of the respondents considered it likely or desirable that women would be elected as office bearers in the near future. In addition to the perceptions about “female” skills and characteristics, the lack of mobility of women was considered as a major stumbling block to women’s (potential) functioning. The general qualifications are: having experience (see section 3.2), being active in the community and being honest. Almost all respondents mentioned “honesty,” yet the actual situation revealed that many FOs had not been very successful in selecting leaders on this criterion.

Furthermore, in the majority of the FOs, one could almost speak of a virtual order of eligibility for potential candidates, even though the farmers themselves did not openly express this. One of the most important factors is lineage: office bearers of the FO are often a son, brother, or first cousin of previous office bearers. Often, the office bearers of the FO suggested the names of new office bearers or Vel Vidanes. Below is a list of the succession of Vel Vidanes in Paddikaramaduwa, starting with the name of the current Vel Vidane at the top. There are three tanks in Paddikaramaduwa:

The selection of office bearers takes place through nomination and acceptance by other farmers. Hand-raising belongs to the possibilities, but is rarely practiced. A candidate is accepted when some of the shareholders second the nomination and others do not openly oppose the nomination. Farmers also consider the candidate’s political preference and relations. Office bearers who support the ruling party are expected to perform well in fund-raising and attracting projects for rehabilitation the village.
Paddikaramaduwa maha wewa, Dambegaswewa and Puvakpitiya.

<table>
<thead>
<tr>
<th>Paddikaramaduwa maha wewa</th>
<th>Dambegawewa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Rambanda, Local shopkeeper (Mudalali)</td>
<td>Mr. Kaurale, previously Vel Vidane Paddikaramaduwa</td>
</tr>
<tr>
<td>Mr. Kaurale, current Vel Vidane of Dambegaswewa and cousin of Mr. Rambanda</td>
<td>Mr. Sirisene, local shopkeeper (Mudalali) elder brother of Mr. Kaurale, who was Vel Vidane from the 1960s onwards</td>
</tr>
<tr>
<td>Mr. Kapurale, father of Mr. Kaurale</td>
<td>No cultivation¹⁵</td>
</tr>
<tr>
<td>Mr. Tikiri Apu, uncle of Mr. Kapurale</td>
<td></td>
</tr>
</tbody>
</table>

“The Sabhapathi (Chairman), Lekam (Secretary) and Treasurer have much political power, even though the Treasurer is actually an outsider (his elder brother came here in a binna marriage). All three are supporters of the ruling party and they have a deal with some Ministers and MPs, especially with Mr. S.P. [ruling party], and with the Pradeshiya Sabha officer who lives in the village, who is the Chairman’s younger brother. The daughters of the Lekam Mahattaya (Secretary) are the Samurdhi mobilizers. The Treasurer is also one of the kasippu brewers. There are also about ten families in both villages, including a woman, who deal in kasippu. The villagers select the office bearers themselves, but now they are fed up with the FO. There is no participation of all farmers in the selection procedure, but only a small group of supporters of the ruling party who get together and select new candidates” (field notes, Wellamudawa and Punchikuluma, 1999).

Contacts with the political establishment are seen as legitimate means to attract projects and funds, irrespective of their reputation and political views.

“We tried to get a feeder canal to the village and asked members of the Pradeshiya Sabha as well as politicians at the Cabinet level. All promised to give a canal (in return for votes), but no one did. I think it was in 1970 that we discussed this with Mr. T. (the late SLFP MP at the time). He promised to get a canal to the village under the Masterplan of the Mahaweli Project. But he received a bribe from people of Selestiyamaduwa. The result was a canal through Mawathewewa, Selestiyamaduwa, Halmillutima and Nachchaduwa” (field notes Wellamudawa and Punchikuluma, 1999).

¹⁵When Mr. Kapurale was Vel Vidane, only Padikaramaduwa was cultivated; Puvakpitiya and Dambegaswewa were abandoned (conflicts and enough lands for a small population).
Table 2 (p. 37) shows the situation of the FOs included in the study. The subgroups mentioned are the same as those mentioned in section 4.2. The columns are ranged from the most influential to the least influential. It starts with one’s eligibility as office bearer, succeeded by the column agenda setting. This includes the opportunity to suggest or to block particular items on the agenda, such as resignation of an office bearer. The last column is “listening,” which is the most passive form of participation.

A proper understanding of the system and the prevailing rules and practices is a prerequisite for taking more effective measures, and addressing the existing inequities as discussed in the previous section. Although most of the locally managed irrigation systems have established FOs with a preset structure and responsibilities, any attempt to get a closer look at these organizations reveals that there are important differences among them.

In two villages, the organization could be characterized as a traditional system. In this system, the Vel Vidane is responsible for operational tasks (opening and closing of the sluices), monitoring, decision making, resolution of conflicts and kanna meetings.

In this system, participation is based on consultation of (mostly male) shareholders. A Vel Vidane is often succeeded by one of his sons, a younger brother or another relative. In some cases, there was a selection procedure, where a candidate was nominated based on his experience, landownership (more than average) and literacy. In villages where the FO had replaced the Vel Vidane system, the majority of farmers spoke very highly of the Vel Vidane system, as they associated it with respect, honesty and solidarity (also towards widows). They claimed that it used to be much better in terms of continuity, respect and compliance with the rules. Yet, in those villages where the Vel Vidane system was still functioning, it has proven to be very vulnerable to lack of accountability and transparency. In these villages, the economic and political power is highly concentrated among a few extended families. The attendance (also female-headed households) and active participation of women in the discussions or the decision-making process at meetings, are negligible. In five villages, one could speak of a disguised traditional system, which remains functional under the “disguise” of the FO structure. The Vel Vidane has taken the position of the Chairman of the FO. He is often referred to as “Vel Vidane” and not as Sabhapathi (Chairman or President). Although one speaks of selection criteria for office bearers, many office bearers are succeeded by one of their relatives (son, brother, cousin). One’s influence in the FO is based on one’s control over means of production, trade and relations with politicians. As in the situation encountered under the traditional system, the disguised traditional system is vulnerable to lack of accountability and transparency in communities where the economic and political power is highly concentrated. Although “honesty” is often mentioned as a criterion for selection of an office bearer, in reality, “honesty” or integrity seemed to be a rather rare qualification, or difficult to uphold after (s) election as office
bearers. Tank rehabilitation projects frequently faced (unforeseen) reallocation of funds and food for the benefit of office bearers and their relations.

Table 2. Influence, rights and entitlements.

<table>
<thead>
<tr>
<th>Member</th>
<th>Eligibility as office bearer</th>
<th>Agenda setting</th>
<th>Participation in discussions</th>
<th>Voting rights</th>
<th>Steering discussion</th>
<th>Listening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office bearer</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Committee member</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>a. Male landowner; control over means of production, trade, political support; relative of office bearer</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Other male landowners of the command area</td>
<td>Yes</td>
<td>Rarely</td>
<td>Variable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>c. Male cultivator representing wife who is the registered owner of paddy land</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Male cultivator representing parents who are owners of paddy lands</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Variable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>e. Widow whose family has control over means of production and trade</td>
<td>No</td>
<td>Her sons or male relatives</td>
<td>No</td>
<td>Yes</td>
<td>Her sons or male relatives</td>
<td>Yes</td>
</tr>
<tr>
<td>f. Female owner of paddy land (female-headed household); no control over means of production</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Rarely</td>
<td>Yes</td>
</tr>
<tr>
<td>g. Female owners of paddy lands (binna marriage and other) cultivating land jointly with husband or alone</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes, but only if husband is not present</td>
<td>Rarely</td>
<td>Yes</td>
</tr>
<tr>
<td>h. Female cultivator cultivating land registered in her parents’ name</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Variable</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>i. Male or female tenant</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Variable</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>j. Male or female landowner of highland or home garden</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Rarely</td>
<td>Yes</td>
</tr>
<tr>
<td>k. Day laborer, not FO member</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
One of the differences with the traditional system is gender-related: women from female-headed households, women who are owners of paddy lands and female cultivators are eligible for membership of these FOs. The position of young women as Govi Niyamakas or Samurdhi Niyamakas can be used to consolidate the power of the families in community affairs. The disguised traditional system often emerges when an FO is established on the request of project organizations, and functions for the period of time that the irrigation rehabilitation project is implemented. One or two years later, the organization shows signs of malfunctioning, in such matters as internal conflicts, failure to organize meetings, low attendance rate at meetings, and accusations of unintended reallocation of funds.

It was only in one of the villages that the traditional system had been replaced by a more democratic system, based on actual skills and capacities, where office bearers are held accountable and dismissed in case of malfunctioning. Families with control over means of production were not dominating the positions in the FO. Small landowners were equally eligible for positions as larger landowners. Yet, surprisingly, the attendance of women to the meetings of this FO was directly discouraged: women were not invited and their participation was not appreciated by some of the male members.

“Women are very shy, and it is difficult to get the opinion of the women; they don’t give their opinion easily. Therefore, sometimes we inform the farmers that the (kanna) meetings are only for men. Among women, voting is only allowed for widows. The reason for this is that if we allow women in the meetings and allow them to vote, other farmers will complain the next time that the previous time, they couldn’t get a proper decision with the women being around. Then they say not to accept the previously taken decision” (field notes, Nallamudawa, 1999).

The traditional system is very clear about the formal criteria for membership and decision making (only landowners), unlike the democratic FO, which operates with more flexibility through a more complex set of rules and entitlements. Notwithstanding this flexibility, the example reveals that this flexibility is no guarantee for women to have equal access to the FO meetings.

An analysis of the cases made it very clear that the functioning of the FO depends, to a large extent, on the commitment and integrity of office bearers and the enforcement of rules. The traditional system and the disguised traditional system are strongly influenced by patronage and clientelism. These systems were characterized by lack of accountability, transparency and the unforeseen reallocation of funds for personal gain. The most striking inequities were the result of clientelism within the FO. For that reason, addressing the strong clientelism and patronage within the FO might be effective in removing some of the inequities, as particular measures targeting only the disadvantaged. This requires more attention for institutional development. This is already recognized by some project organizations, which included an aftercare component to their tank rehabilitation projects.
It may be clear from the previous sections that gender inequity cannot be seen apart from other forms of inequity within the FO. In a situation where gender, landownership, kinship, control over means of production, and political preferences constrain the participation in and benefits from the FO, it is worthwhile to look beyond (but not leave out) gender as a source of inequity. Not acknowledging these constraints will result, and has resulted in, at best, cosmetic changes or, at worst, in strengthening of the position of households with high control over means of production, without any attention to other disadvantaged groups of farmers.
Notwithstanding the vital importance of tank rehabilitation projects for paddy cultivation in the dry zone of Sri Lanka, such projects are not always implemented properly. Yet, there are many challenges in tank rehabilitation projects, as there is also a range of options available to create opportunities for enhanced participation, more equity in the distribution of benefits, and in increasing the effectiveness and legitimacy of FOs. Some of these opportunities are directly related to the rehabilitation works, whereas others are related to side-activities or aftercare activities. In this I will discuss some of these options and the (sometimes negative) experiences with tank rehabilitation projects in the area under study.

The projects that were ongoing or completed in the case study areas were those supported by the World Food Program (WFP), Samurdhi Program; Freedom From Hunger Campaign Board (FFHCB); and the National Irrigation Rehabilitation Program (NIRP). Some of these projects had an aftercare component, aiming at institutional sustainability of the water management system and provided income-generating opportunities to farmers.

Most (minor) tank rehabilitation projects in the eight case study areas involved the repair and improvement of the physical infrastructure, such as raising of the bund, construction of a concrete spill, replacement or repair of sluices, construction of a bathing place, or repair of the canal system. All tank rehabilitation programs involved labor-intensive work, such as desiltation of the tank bed or strengthening the bund. In most projects, participation was open to all residents in a village, but in two villages, (temporary) membership of the FO was made conditional for participation. For this purpose, temporary membership of the FO was allowed to all residents of the village, provided they paid the annual contribution.

Participation was an appealing option for women and men as it provided them with food packages or income. In some of the rehabilitation projects, temporary membership was conditional for participation in the labor works, probably because the contract for rehabilitation works was issued to the FO, and all the benefits (daily wages and food packages) were also distributed through the FO. The impact of this condition was that membership (male and female) of the FO almost doubled in a few cases. For example, in Indigahawewa, membership increased from approximately 30 to 120 members after the implementation of a rehabilitation project.

An interesting observation was that women, though underrepresented in the meetings and membership of FOs, are very well present in the labor works of tank rehabilitation projects. The conditions for participation in these labor opportunities were such that they resulted in a high rate of female participants in these works.

“The reason for the high participation of women was that most people need food or income each day; they don’t have enough money or food supply available to cover 15 days during drought periods. Therefore, the men went out for hire labor to bring
home some money every day. Women didn’t have any hired labor to do during that time of the season (no weeding of chena fields, harvesting paddy or millet during that time), so they stayed in the village and did rehabilitation works. The working hours were from 8.00 a.m. to 12.00 noon daily, and sometimes up to 3.00 p.m. As this only took half a day’s work each day, it was especially convenient for women. Women would participate in digging small plots in the tank, carrying soil to the bund, applying turf, cleaning the canal, putting soil along the canal and loading and unloading tractors bringing gravel (field notes, Punchikuluma, 1999).

Men and women participate actively in labor works if they result in food packages or payment. The participation in some rehabilitation projects showed that, on average, the women accounted for 50%–70% of the total number of participants. The scarcity of opportunities for women to work as day laborers in their own village or nearby, obviously attracts women to participate in the rehabilitation works, as it implies an additional food supply or an additional income for their household. Most rehabilitation projects in the eight case study areas were executed during the yala kanna, which is the best time for such works, considering the low water level, the lack of cultivation opportunities and the scarcity of income during this season.

The attractiveness for both men and women is further enhanced by its location (within close range of the village), the stretch of time (3 to 6 months during the dry season) and the “working hours” (from 8.00 to 2.00 p.m., or dependent upon completion of one share).

The extent to which women and men participate is thus determined by financial rewards in combination with factors of space and time (period within the year, duration of the works, daily working hours). Whether or not a woman eventually decides to participate in the labor works has to do with a lot of other factors as well, such as personal preference, division of tasks within the family, age, financial necessity, family composition and alternative jobs. One of the constraints project organizations might be aware of is the invitation policy for the initial meetings informing the population about the project and opportunities for them to participate. Two of the FOs had only invited supporters of the ruling party (beneficiaries of the Samurdhi program) or supporters of the main opposition party (beneficiaries of the Janasaviya poverty alleviation program of the ruling party before 1994). Although the formal argument for such an invitation policy may be that these programs cover the poorest households, these poverty alleviation programs were, in their selection of beneficiaries, highly selective on political preference (and not on income per se).

The immediate effect of participation in the labor works of a tank rehabilitation project being a welfare-effect, in the long term it could result in gradual empowerment of female farmers and male and female cultivators. For this to materialize, one important condition is still missing. The rights and entitlements of temporary members without paddy land are not similar to those of permanent members (landowners and cultivators). Similarly, the rights

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16The narrow range of activities open to women in day labor (weeding, transplanting, harvesting and plucking) restricts their participation in day labor to a couple of weeks during the cultivation season, whereas men have more options for day labor throughout the season (see 3.1).
and entitlements of cultivators and shareholders (registered landowners) are also not the same. However, even though the rights and benefits are not similar for temporary and permanent members, further steps may be taken to increase FO membership and provide opportunities for permanent membership and access to the FO benefits.

Tank rehabilitation programs provide the opportunity and momentum to reconsider and reformulate the rules for membership, participation, voting, and positions in the FO and access to benefits of the FO. One of the most relevant tasks of an aftercare program should then be to introduce the new rules, to steer and to monitor the implementation and enforcement of rules.

Tank rehabilitation projects have resulted in extension of the command area in three villages. Allocation of paddy lands in the command area of a tank is highly attractive to farmers: both for those who do not have any paddy land as yet, and for those who would like to extend the size of their land under the tank. Land allocation might be related to the consolidation of encroached land or to an extension of the command area after tank rehabilitation. The formal selection criteria, determining who is, and who is not, eligible for allocation of land are a) being a resident of the village, b) being a farmer, and c) being the head of a household. In three villages, FOs and their officials claimed that the first priority should go to farmers who are not owners of paddy lands in the command area of one of the tanks, and the second to farmers with small sizes of paddy lands. Yet, they acknowledged that in reality, farmers who have access to tractors and other equipment tend to “seize” new land, by preparing the land for cultivation. In that way, they “jump the queue” and have a claim to the land. The challenge is thus to formulate rules for allocation of land and to find ways to ensure that “seizing of land” is either not tolerated or made impossible. Early land allocation and the conditionality of participation in the works may be one way to prevent the use of illegitimate means by landowners.

In one of the projects, project officials talked about their achievement in getting the government’s permission for new land titles. The land was automatically registered in the name of the head of the household of those who had seized it and cultivated it for some time. By doing so, it denied female farmers the right to be allocated land. Additionally, it denied them of FO membership that, in turn, denied them participation in the decision-making process within the organization. Subsequently, it denied them access to benefits from the FO and participation in future food-for-work activities. Through the project’s denial of access to land property, a sequence of other rights and entitlements is cut off as well, such as the benefits from the FOs.

Notwithstanding the important notions in literature with regard to unequal distribution of goods (and land) within the household, membership and the entitlement to benefits from the FO are still largely based on the household as the entity.\(^{17}\) As demonstrated in one of the

\(^{17}\text{This is also reflected in the Land Development Ordinance, 1980 and in the Agrarian Services Act, no. 58, 1979, where cultivator refers to “any person ….who by himself or by any member of his family, or jointly with any}
previous sections, ownership of paddy land by both husband and wife does not result in double membership or participation of both husband and wife in the meetings. Therefore, it is important to decide whether one should also take account of their parent’s land property (when still alive) and the land property of their spouse.

Not taking account of the land property of one’s spouse and parents may result in a situation in which the more wealthy families benefit from land allocation through their wives and daughters. One way of dealing with this dilemma is to allocate land to (female) farmers without paddy land who spent most days in the labor works of the tank rehabilitation project. Because of the strenuous labor involved, it is especially the women from poorer households who try to earn an additional income by participation in the rehabilitation works. The issuing of certificates should be preferably before completion of the project, to prevent others from seizing the land.

One of the project organizations (the World Food Program [WFP]) showed concern about the strong male domination of positions in the FO and the existing gender relations. Therefore, a gender component was included, which consisted of awareness raising for office bearers of the FO in a training program. The booklets used for awareness raising did not portray the role of women as key actors (who could provide valuable contribution as actors in the FO), but first and foremost as beneficiaries (receiving benefits and awareness about their burden of tasks).

Under this program, the implementing organization (Department of Agrarian Services [DAS]) also invited FOs from various villages to send female office bearers to the training program. Through an active invitation, the WFP hoped to strengthen the position of female office bearers. The officers at the DAS could not recall whether any women were on the list of participants for the training program. The feasibility of this component is highly questionable at a time when the number of FOs with female office bearers is negligible.

The criteria for distribution of seedlings and plants, provided by project organizations through the FO, are applied with flexibility. The eligibility for receiving seedlings and plants may be determined by membership of the FO, by active participation in the project, by playing an active role in the FO and, last but not least, by one’s personal relations with office bearers of the FO. Therefore, the challenge for project organizations is to monitor the distribution of seedlings and plants, or to take care of distribution by themselves.

other person, carries out such extent (a) two or more of the operations of ploughing, sowing and reaping; and (b) the operation of tending or watching the crop in each season during which paddy is cultivated on such extent.”
When we approached the house of the FO treasurer, we noticed that there were at least 50 young lime trees, which were recently planted in his garden. After completing the interview, we complemented him and his wife on growing all these lime trees. He explained that these plants were provided by the project organization, and that they had decided to keep the plants themselves, as no one else had shown interest in the plants and, in any case, all other people had no space available anymore in their home gardens for some lime trees (field notes, 1998).

Even though the contract was handed to (office bearers of) the FO, the execution of works was not always satisfactory. In four villages, farmers complained about inadequate rehabilitation of the tanks executed under contract to one of the office bearers or through cooperation between office bearers of the FO and technical officers of the DAS, and about their personal benefits from taking these contracts. One respondent said:

“People who were then involved in rehabilitation works say it has been conducted properly, others do not agree. The work of the WFP has been done properly, but the rehabilitation works did not include the repair or improvement to the canal structures, which block irrigation to a major part of Akkarawela. The reason why the rehabilitation project of the WFP did not improve the canal structure is that, although all office bearers know about this, they only care about rehabilitation of the parts close to their land but not to other people’s plots; they do not care about them. The office bearers have lands under Puranawela and under that part of Akkarawela, which does not have a problem. People thought that the project was taking care of everything, but they do not even know that the work is officially already completed. They also do not know about the value of the food package they get in relation to the days they participated, nor about the exact plans. The FO systematically marked fewer days for participation than people contributed and they adjusted the weighing scale in such a way that it indicated 5 kg for only 4 kg. Whether distributing 20 kg or only 16 kg at one time, people do not feel the difference. The exact amounts and working days, and procedures were explained in a meeting before rehabilitation, but the office bearers messed with that. They kept back rice and sugar and even brewed kasippu with this extra sugar. The old people would get less food because they could not participate that well according to the office bearers. When I asked the FO why they did it in that way, the office bearers said that the sacks they use also weigh something, which weight is deducted. This is nonsense; those sacks do not weigh anything. They made clear to me that I should shut up. The contract work, worth Rs. 7 lakhs, was just a show-off. The office bearers themselves were the contractors and they earned a lot of money. It was a three-man show” (field notes, Punchikuluma and Wellamudawa, 1999).
This is quite exemplary of other rehabilitation projects as well. Farmers expressed their frustration with regard to various “inadequacies,” in particular:

- inadequate or “superficial” repair of the physical infrastructure
- selection of only that part for repair, which benefits primarily a few FO members (office bearers or their relations)
- selective invitation policies for participation in the meetings and the labor works
- suspicions of financial irregularities and unforeseen reallocation of funds (to the benefit of a few)
- inadequate supervision, unreliability of attendance lists
- inequity in the distribution of benefits, problems in the distribution of food packages

One of the challenges for donor as well as governmental organizations will be to find ways to enhance participation of all farmers during the formulation stage instead of only consulting the office bearers. Similarly, the monitoring and supervision of works are an important area, which should not be neglected. Also the final transfer of money to the common FO fund might be made conditional to proper implementation of the works. Various farmers suggested that the inspection of progress and completion should be handled differently than relying on a guided tour by the office bearers to only those parts of the works, which have been executed properly.

The research findings demonstrate that good intentions are often “hijacked” by individual farmers and by some of the FOs. They are able to do so through their access to local government officials, technical officers, engineers and Divisional Officers and to politicians such as Members of the Pradeshiya Sabha or Members of Parliament. Whereas most literature speaks of the expected “wonders” of participation, in the case study areas participation was most beneficial to those who were already among the category of farmers with more than average paddy lands, with tractors, water pumps, storage facilities, cattle, good business, etc.

First, proper attention to the rights and responsibilities of newcomers (or temporary members) in the FO is necessary to avoid situations as described above. Second, land allocation can be a means to provide landless (female and male) farmers with paddy land, but only if there is a way to check proper land allocation, and if there are sanctions for allocation to those not targeted who try to benefit from the situation. Third, the aftercare programs may consider the opportunity for promoting bethma (see previous section), and to pay special attention to the preference of female farmers, who are much interested in cultivation of paddy for domestic consumption and as a cash crop.

The study revealed that the benefits and funds do not always reach those who were foreseen to be beneficiaries. It is important to realize that, without understanding the prevailing rules, allocation procedures and practices, and gender relations and patterns of
subordination among families, good intentions may get lost in the participatory approaches, resulting in a few being benefited.
The purpose of this paper was to identify the factors, which hamper the participation of women in decision-making processes with regard to land, cultivation and irrigation. The study demonstrated the following:

1. Ownership of paddy land is concentrated in the hands of men. Consequently, one can observe a low rate of female landowners, and thus a low rate of female members of the FO. The study also revealed that the male domination of ownership of paddy lands is related to legal provisions, local customs with regard to marriage and inheritance, and to project realities. Amendments to the existing legislation (especially for leasehold) and different conditions for land allocation might provide a small group of women with more rights to land but, in the case study areas, it is hardly feasible to expect that local customs with regard to inheritance of land will change as a result of project interventions.

2. The majority of female respondents—those who can rely on male relatives for representation—indicated not to be interested in their involvement in transactions and marketing, in representation in legal matters or in maintaining contacts with government officials. The transport and marketing of paddy require a higher involvement of women with much physical labor. Visits to government officials involve inconvenient traveling conditions and long waiting hours, which constitute an extra burden on their workload. Not surprisingly, these women are not eager to take over the relevant responsibilities. They perceive this to be the responsibility of men within the household. Skills and experience in economic transactions and official matters are also considered to be an advantage for active participation in the FO. Therefore, the logic of their participating in the FO activities is not very clear.

3. The assumption that participation will be always in the interest of women is not shared by women who cannot count on the support of their male relatives for economic transactions, legal matters and participation in meetings. The potential benefits of their participation (instead of their husband’s participation) simply do not outweigh the costs of participation. The decision not to attend the meetings, or to be silent during the discussions at the meetings, is often a combination of risk-avoiding behavior, dislike, and socially prevailing norms with regard to appropriate behavior.

The dissatisfaction of most women—those who are married and cultivating land jointly with their husbands—is related not to their position in the FO but to inequities between cultivators and landowners and between those with and those without control over means of production and about the (mal-) functioning of the FO.
When talking about (gender) inequity it is important to realize that it might be more important to focus on the most disadvantaged group of farmers, with particular attention to female-headed households where the family is not in control over means of production, not involved in trade and have no political support. Their access to decision making in the FO, to benefits from the FO and to land is more meaningful than the participation of women who are quite satisfied with the situation, who have access to means of production, and to benefits through the membership of their husbands.

Therefore, any effort to improve the position of women in FOs should first be targeted at the most disadvantaged among them, which are usually female heads of households, especially those who have no relatives in the village.
Annex table 1 gives an example of names of landowners (shareholders). It also shows how canal cleaning and bund cleaning are allocated proportional to the size of landholding. The list was prepared jointly for Wellamudawa and Punchikuluma, as one FO covers these two tanks (and villages).

Due to time-constraints at the moment of copying the list, the first 5 names were copied succeeded by the names of only female landowners, to get an impression (and just an impression) of the average size of their landholdings. According to the information on the list, Punchikuluma counts a total number of 100 families, whereas there are 116 owners (shareholders) of paddy land in the command area of the tank, Punchikuluma. The number of families living in Wellamudawa is 30–35, and the number of landowners of land in the command area of Wellamudawa is 30–35 (with overlap of shareholders of land under Punchikuluma). The total number of female landowners on this list is 31.

Based on the original list, the following details have been noted down.

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (acres)</th>
<th>Tank bund (m)</th>
<th>Canal (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.V.G. Subasinghe</td>
<td>6</td>
<td>63</td>
<td>68</td>
</tr>
<tr>
<td>V. Silva</td>
<td>4</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>Wimal Senaratne</td>
<td>4–2</td>
<td>48</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (acres)</th>
<th>Tank bund (m)</th>
<th>Canal (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. Pina (W)</td>
<td>20 perches</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>H. Wickramasinghe (P)</td>
<td>1 rood</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>K. M. Somarasinghe (P)</td>
<td>2 rood</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note:* W = Wellamudawa and P = Punchikuluma.

Similar lists, which merely state the names, location and area of land (pangu-lists or land-registration lists) are kept at Agrarian Service Centers for all common tanks, but in most cases they are outdated. Some of the FOs keep the names of landowners and members in similar lists.
Annex table 1. Random sample with names of male and female owners of paddy lands.

<table>
<thead>
<tr>
<th>Name</th>
<th>Residence</th>
<th>Land-owner (L); tenant (T)</th>
<th>Area of land (acres, roods, perches)</th>
<th>Tank bund (m)</th>
<th>Canal (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. Upali Senaratne</td>
<td>W</td>
<td>L</td>
<td>2, 3,-</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>B. Piyadase</td>
<td>W</td>
<td>T</td>
<td>-, 2, 20</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>D. Nandana Wijeratne</td>
<td>W</td>
<td>L</td>
<td>-, 3,-</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>V.G. Subasinghe</td>
<td>W</td>
<td>L</td>
<td>6,-,-</td>
<td>63</td>
<td>68</td>
</tr>
<tr>
<td>Kanthi Premalatha</td>
<td>W</td>
<td>L</td>
<td>3, 1,-</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Mrs. K. Pina</td>
<td>W</td>
<td>L</td>
<td>-, 2, 20</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Mr / Mrs. H. Soma</td>
<td>W</td>
<td>L</td>
<td>2,-, 20</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Mrs. Mangalika</td>
<td>P</td>
<td>L</td>
<td>-, 2,-</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Samarasinge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mrs. W. Walli</td>
<td>P</td>
<td>L</td>
<td>-, 3, 20</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Mrs. Anulawathi</td>
<td>P</td>
<td>L</td>
<td>-, 2,-</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Mrs. D. Ukkumenika</td>
<td>P</td>
<td>L</td>
<td>1,-,-</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Mrs. K.B. Shanthi</td>
<td>W</td>
<td>L</td>
<td>-, 2,-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Premalatha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. / Mrs K. Asheka</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. K. Yasawathi</td>
<td>W</td>
<td>L</td>
<td>1, 1,-</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Mrs. K. Babe</td>
<td>W</td>
<td>L</td>
<td>1, 1,-</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Mrs. K. Dingiri</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. L. Somawathi</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. L. Nachchi</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. K. Ukkumenika</td>
<td>W</td>
<td>L</td>
<td>-, 2,-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mrs. S. Gnanawathi</td>
<td>W</td>
<td>L</td>
<td>-, 2,-</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Mrs. K. Yasawathi</td>
<td>W</td>
<td>L</td>
<td>2, -20</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Mrs. G. Viole</td>
<td>W</td>
<td>L</td>
<td>-, 2,-</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Mrs. R. Chandrawathi</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Mrs. Nayana Kumari</td>
<td>W</td>
<td>L</td>
<td>-, 3,-</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Mrs. Lalitha Padmini</td>
<td>W</td>
<td>L</td>
<td>1,-,-</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Mrs. N. Ranmanika</td>
<td>W</td>
<td>L</td>
<td>2,-20</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mrs. B. Muthumenika</td>
<td>W</td>
<td>L</td>
<td>1,-,-</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Mrs. D. Somawathi</td>
<td>W</td>
<td>L</td>
<td>1,-,-</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Mr. / Mrs Rankiri</td>
<td>W</td>
<td>L</td>
<td>2, 1,-</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Mrs. N. Ranjani</td>
<td>W</td>
<td>L</td>
<td>1,-,-</td>
<td>10.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Mrs. D. Muriel</td>
<td>W</td>
<td>L</td>
<td>1,-,-</td>
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<td>11.5</td>
</tr>
<tr>
<td>Mrs. Manel</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. Surilawathi</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. Kasawathi</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. Anuralatha</td>
<td>W</td>
<td>L</td>
<td>-, 1,-</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1 W = Wellamudana; P = Punchikuluma.
2 perch = 25.3 m²; 1 rood = 1,012 m²; 1 acre = 4,046.9 m²; 1 ha = 2.5 acres (about 10,000 m²).


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