

The Contribution of Women in Rebuilding Livelihoods in the Long-Term After Involuntary Resettlement: A Case Study of Resettlers of Kotmale Dam, Sri Lanka

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Abstract

The experiences of resettlers of Kotmale Dam, Sri Lanka is revisited, with a focus on the involvement of women in shaping the well-being of the family, more than 35 years after their resettlement. This study is based on field visits to eight resettlement sites in Mahaweli System B, C, and H, in which interviews were held mainly with the women of the first generation of resettlers. In most cases, women had to contribute to farm labour apart from housework. With time, women were instrumental in saving enough money, which enabled

them to purchase agriculture machinery that lessened the burden of women who engaged in agriculture. The time thus saved could be used for additional income generating activities. Resettlers who were resettled in Mahaweli areas have now reached a stage where they have been successful in the formation of social/community networks and satisfactory economic development. The contribution of women has been a catalyst for such successes. The second/third generations have better opportunities for the future. The results indicate that resettlers, especially women, have made conscious choices for their future, especially for their children. For future resettlement programmes, it is essential that considerations of women's economic role in the household should be given prominence.

Keywords: Livelihood rebuilding, Involuntary Resettlement, Landlessness, Marginalization, Women's role

1. Introduction

Irrespective of their purpose, large-scale development or infrastructure projects typically require extensive areas of land (Vanclay, 2017). Physical displacement and resettlement of households are needed after the acquisition of land, with or without compensation, to make way for such development activities. The focus of most of the resettlement projects has been on providing cash compensation and/or replacement of lost assets such as housing, without paying much attention to other aspects of their lives that are experienced by resettlers, especially rebuilding sustainable livelihoods (Cernea, 1995). In the short run the dispossession and displacement of people from their assets, resources, established livelihoods, incomes, and sociological relationships present complex risks and could potentially lead to impoverishment (Cernea, 2000; Manatunge et al., 2001; Takesada et al., 2008, Manatunge & Takesada, 2013a, b).

Cernea and McDowell (2000) have described several potential risks in resettlement and reconstruction of lives. Some of them include the risk of further impoverishment, loss of land and livelihoods and decision making. Only a few studies have focused on how heterogeneous groups (when resettlement involves households from different villages) interact and cooperate among themselves in the new spaces and places.

Given that 'land is life' for many people and that people everywhere have placed a preferential attachment to a varying extent (Wickeri, 2011; Vanclay, 2017), land acquisition and consequent resettlement and disruption of economic and social networks can cause much hurt and hardships – especially for women and children (Manatunge & Takesada, 2013a,b; Smyth & Vanclay, 2017; Vanclay, 2017). Displacement from original traditional rural settings can give rise to significant emotional suffering and other negative social impacts even when resettlement leads to progress in economic benefits and the material standard of living, (Takesada et al., 2008; Das & Shukla, 2011; Bennett & McDowell, 2012). Because of their varying vulnerabilities, capacities, positioning in the society and interests, the resettlers are affected in differing ways (Vanclay, 2017), between households and within the household. Between households, some may benefit from economic opportunities triggered by the resettlement process (e.g., new economic opportunities through access to employment). Within the household or otherwise, women and children may suffer due to losing things they

value and or cherish very much (e.g., social relationships, the way of life the family is accustomed to, etc.), for which no amount of new material benefits can compensate (Cernea, 2000).

In general, rehabilitation after resettlement looks at rebuilding livelihoods, improving the household economy and quality of physical assets, providing better physical infrastructure, proper ownership, and land entitlement and rebuilding social networks and facilitating the access to decision making (Cernea, 2000). On a larger scale, it is also a question of proper administration, planning, and implementation (de Wet, 2006). Relatively little research has been conducted on the relatively longer-term impacts (say, after 30–35 years after resettlement) of relocating communities in new environments provided with convincingly better socio-economic and physical facilities (Partridge, 1989; Mathur, 1998; Manatunge & Takesada, 2013a, b; Manatunge, 2016). Gender has been introduced only recently as one of the significant factors (Vanclay, 2017) that affects the outcomes of recovery, as gendered experiences are enforced in involuntary displacement and their consequences (Mehta, 2009).

The consequences of resettlement are experienced at different scales between men and women. This is partly due to legal ownership of assets and sources of livelihood and how they are involved in rebuilding livelihoods and the manner that women and men are adjusted to new environments, especially the social networks. Home as a familiar and safe place before resettlement versus a place filled with socially unsettled and insecure attachments after relocation (Massey, 1994), which are felt primarily by women and children after involuntary resettlement. When women and children often realize that home is not a safe place in the new settings after resettlement, and the loss of familiar social networks often leave them with uncertainty. In traditional and conservative communities, social networks and informal assistance among and between households can be crucial survival mechanisms (e.g., informal relationships as described in Manatunge et al. (2001; 2009); Manatunge & Takesada (2013a, b) and Manatunge (2016) in Sri Lankan traditional villages before resettlement). In new settlements, such mutual help among the households and the community trust are non-existent, which lead to an individual's sense of belonging to a common social group being shattered. These are the aspects that planners often fail to acknowledge in monitoring rehabilitation and recovery after involuntary resettlement even though such informal social networking might play a pivotal role in sustainable and socially acceptable resettlement, especially by the women.

Involuntary resettlement in rural agricultural settlements can be a significant burden (relative to before resettlement) to women in particular (Mehta, 2009; Manatunge & Takesada, 2013a, b). These studies show that everyday survival strategies in such rural communities are perceived differently between women and men. After resettlement, economic hardships, sub-standard housing and sanitation, lack of basic infrastructure and access to public services, and health and hygiene have an overwhelming impact on the lives and lifestyles of women. This is mainly because they are often the ones who are in charge of family affairs: child care, cooking, and other household chores, and spending time near home. More often than ever, women have to contribute to day-to-day labor in their farmland and/or income generating activities such as livestock or home gardening to supplement household income. Therefore,

on top of their everyday struggle, involuntary displacement is an unnecessary burden for poor women, who often lack rights and ownership to property, do not have a say in dislocation processes, are uneducated and therefore do not have access to knowledge, and often also need to give up on their social safety networks (Mehta, 2009; Vanclay, 2017).

In projects where large-scale resettlement occur, the dispossession and displacement of people from their assets, resources, established livelihoods, incomes, and sociological relationships present complex risks and could potentially lead to impoverishment – at least in short to medium term (Manatunge et al., 2000; Miyata & Manatunge, 2004; Sunardi et al., 2004; Takesada et al., 2008; Manatunge & Takesada, 2013a, b; Manatunge, 2016). Many previous studies related to socio-anthropological investigations demonstrate the immediate effects of the displacement caused by development projects (Eriksen, 1999; Cernea, 2000; World Bank 2001). It is worth looking at how females in the household have contributed to overcoming of such difficulties after resettlement, especially rebuilding the livelihoods.

By focusing on the resettlers of Kotmale Hydropower Development Project in Sri Lanka that was constructed under the Mahaweli Accelerated Development Project in the late 1970s and early 1980s, the purpose for this research is to find out how resettlement of people coming from traditional agricultural backgrounds face the difficulties that they experience over time after relocating, and to learn the process how they have reorganized into stable communities in the long term, and how benefits of rehabilitation have been realized. This study attempts to go into the individual level of family members, and it also tries to understand the economic and social implications of a livelihood rebuilding process while giving prominence especially to the women's role in the household.

In addition, perceptions of women on the rehabilitation process after resettlement is focused, paying special attention to how the daily elements of life in the newly settled areas have affected the women to reconstruct their livelihoods, a sense of belonging in a reorganized social network. Previous studies have shown that women carry a bigger burden of the household after involuntary resettlement compared to that of men as they are in charge of the household chores and child-care, use of public services and common property, using home gardens for additional income, depend more on social relationships and assistance, and spend more time in the proximity of the house (Fernandes, 2009; Mehta, 2009; Amrithalingam & Lakshman, 2013; Vanclay, 2017).

Compared to the males in the family, female members often also lack security of tenure, are uneducated (at the time of relocation, which was more than 35 years ago) and lack power in decision-making and ownership (Manatunge, 2016). Schrijvers (1993) pointed out some gender issues that could arise due to resettlement, from the perspective of cultural anthropology: 1. Especially women and children were visibly undernourished. 2. Women missed supports of their mother, after resettlement, in case of child care, martial conflicts, and in general to help them. In addition, girl-children could not go to school because of the distance and had to engage in childcare and housework, leading to social isolation. 3. Many men tried to suppress their own frustration and fear of failure by taking to heavy drinking and harassing their wives (the changes in male behavior). 4. Women became so economically

dependent on men because of the loss of land for slash and burn cultivation and job opportunities (their economic dependency on men).

However, studies conducted on the contribution of women members of the household to overcome difficulties faced by the family after resettlement, especially livelihood rebuilding, are very few. Therefore, there is a clear need to conduct research to study how women have suffered and how they have overcome such situations successfully. Thus, understanding how resettled women perceive the impacts of resettlement and how they have reconstructed livelihood and economic activities and organized social networks and their general life experiences are the key focus of this research. The present study focuses on the resettlers affected by Kotmale dam construction, women in particular, and it analyses the responses given by them, in relation to their current status compared with their status before resettlement. Their adjustment to the resettled areas and the process that they had to undergo is discussed. Their overall satisfaction about the compensation packages provided to the resettlers and the material means through which they attempted to restore the quality of life and derive satisfaction is also discussed.

2. Mahaweli Development Program and Kotmale Dam Construction

Mahaweli Development Program was formulated in the 1960s as a 30-year master plan and was expected to provide land for the landless, increase food security, create more employment opportunities in non-farm sectors together with water resources development targeting at irrigation, hydropower, and flood control. In 1977, the government decided to accelerate the Mahaweli Development Program, which envisaged the development of 365,000 ha of land for agriculture in 13 Systems identified in Mahaweli Master Plan in the Dry Zone. The total project area was divided into different zones or systems which were to be developed gradually. During the period from 1978 to 1986, major dams such as Kotmale, Victoria, Randenigala, Rantambe, and Maduru Oya were constructed, and development of large irrigation settlements in System H (Kalawewa), C (Dehiattakandiya) and B (Welikanda area) was commenced, and work was carried out successfully.

The criteria for selecting settlers were very clear from the outset: First priority would be given to those who were displaced from reservoir areas and project-affected areas. Afterward, those with experience in agriculture as sharecroppers/laborers who owned not more than 0.4 ha of farmland from other parts of the country were given land. Limited numbers of project-affected families also had the choice of resettling within the riparian areas by receiving productive land plots or migrate to nearby urban areas by receiving home plots for resettlement.

First, extensive areas were cleared of the jungle, and access roads were built. Impressive networks of canals were then built to supply irrigation water, mostly to revitalize ancient small village tanks, around which new settlements were created. Farm families were settled on 1 ha plots (for agriculture) together with a smaller plot as a homestead, and each block consisted of about 10–15 such farms, supplied by a single farm canal. Several such blocks formed one new settlement village, and roads were then built to connect different localities and facilitate the establishment of a market economy in these newly created settlements.

The Kotmale project is one of the five major head works projects that were undertaken under the Mahaweli Development Project. Financially assisted by the Government of Sweden, Kotmale is the most upstream of the projects and was developed to regulate the river flows in addition to harness the hydropower potential of a major right bank tributary of the Mahaweli River, the Kotmale Oya. The Kotmale Oya flows through the rural mountain regions of Sri Lanka passing ancient villages steeped in history and tea plantations of a more recent era. The tranquility of this river valley has been changed recently with the construction work of the Kotmale reservoir.

3. Resettlement Options for Kotmale Dam

During the late 1970s to early 1980s, Kotmale reservoir flooded more than 4,000 ha of fertile land in the mountain valleys of the Mahaweli upper catchment which included about 600 ha of paddy fields. Altogether 3,961 families were affected because their entire or visible portion of landholdings were inundated (3,056 families), and some others had to be evacuated from areas prone to high risk of increased earth-slips (905 families).

Two categories of options were provided for the people who were displaced due to their land being inundated:

Option 1: Agricultural land (dry land and/or rice fields with irrigation water) from new Mahaweli settlements in the dry zone: 1,722 families selected this option.

Option 2: Tea plots from the vicinity of the Kotmale reservoir and home plots among the other communities in riparian areas: 1,334 families selected this option.

Those who wished to migrate from Kotmale to the dry zone (option 1) were provided with agricultural land in Systems B, C, and H. The authorities selected several newly created irrigation settlements in the dry zone, and verified with the affected families for their choice, which settlement that they preferred to move. They were physically moved with various in-kind compensation provided to them. Majority of them were provided with 2.5 acres of dry land and 0.5 acres of the home plot as resettlement compensation.

Although exact details and data are not available, it is believed that more than 60% of the project-affected families chose option 2 and were resettled in seventeen settlements around the reservoir. Both communities received similar compensation packages in terms of economic returns, though falling short of best practice guidelines, the provisions did attempt to alleviate some of the hardships of relocation and ensured that the displaced communities benefit from the development.

4. Methodology

In addition to the objectives mentioned above, this study intends to assess the experiences of resettlers of Kotmale Dam in Sri Lanka, in rebuilding their livelihoods after resettlement after more than 35 years of resettlement. The observations made by previous studies by Manatunge et al., (2001), Miyata & Manatunge (2004), Takesada et al. (2008), and Manatunge et al. (2010) are also reviewed, and the same resettlement areas studied by Manatunge et al. (2010) and Takesada et al. (2008) are revisited in this study as a follow up study.

The present study is based on several field visits to resettlement sites, in which interviews were held with households, particularly the women of the first generation of resettlers, and key informants using two structured questionnaires (See Table 1). In addition, key informants such as officers attached to relevant local authorities and institutions were interviewed separately. The household surveys conducted in 2005 (Takesada et al., 2008; Manatunge et al., 2010), and in 2011 (Manatunge & Takesada, 2013a, b) are also made use of for the analysis of observations.

Table 1. Details on the questionnaire survey conducted (Respondents were all women from the first generation of resettlers)

Mahaweli System	Mahaweli region	Villages where people were resettled	No. of women interviewed
		Bandanagala	15
B	Dimbulagala	Ihala Ellewewa	6
		Weerana	3
		Gankewela	11
C	Giradurukotte	Heta Pahe Yaya	12
		Othalawa	8
H	Tambuttegama	Kothmalpura	18
		Gurugama	15
	Total		88

Michael Cernea's Impoverishment Risks and (livelihood) Reconstruction (IRR) model, which has been developed following extensive research of the World Bank projects (Cernea, 1995; 2000) was adopted in obtaining data, information and further analysis of the responses expressed by the respondents. This IRR model focuses on eight reasons why, in almost all projects, people who were resettled were made worse off by the resettlement process. This model identified the key risks of resettlement as being: (1) landlessness; (2) joblessness; (3) homelessness; (4) marginalization; (5) food insecurity; (6) loss of access to common property resources; (7) increased morbidity and mortality (i.e., declining health); and (8) community disarticulation. Sometimes a ninth risk, interruption to education, is included (Cernea, 2003; World Bank, 2004). This IRR model is widely cited and was used as the basis of the World Bank's Safeguard Policy on Resettlement and the IFC Performance Standard 5 (World Bank, 2001; IFC, 2012).

In survey 1, the questionnaire for resettled families comprised (first generation resettler women were interviewed on behalf of the household) of the following sections:

Section 1. '*Dam Brides*' (Urgent Marriages that took place just before resettlement): Focused on the marital status of the women interviewed, and the circumstances which prompted

marriage - if one married just prior to resettlement.

Section 2. Short term impacts focusing on the IRR Model: This consisted of questions to measure the women's satisfaction on their physical or materials well being [from landlessness (and homelessness) to land-based resettlement (and house construction); from joblessness to employment, etc.].

Section 3. Long term impacts: This focused on economic activities of the community. The questions to measure their economic satisfaction. Comparison of the previous and present economic activities. How well off are they? Opportunities created by dam construction and resettlement vs. opportunities lost.

The questionnaire for survey 2, aimed at collecting further details from women members of the households, included the following:

1. Economic conditions of the community – how women were affected (better or worse)? Trends in the household economy. The contribution of women in rebuilding the livelihoods.
2. Income generating activities – on-farm, off-farm and non-farm
3. Community participation in re-building social infrastructure; support extended towards improvising the conditions of the resettled community by relevant authorities.
4. General – improvement/impoverishment of quality of life, social problems, the safety of people with respect to man-elephant conflicts, etc.

In analyzing the experiences of the resettlers in the long term, the framework of Scudder (2005) is being used, which is a modification of an earlier framework of Scudder and Colson (1982). This framework presented a four-phase model, the Stress and Settlement Process that focused on the experiences of the people being resettled.

Phase 1: Planning and recruitment - communities are stressed by the preparations for the resettlement and uncertainty about the future.

Phase 2: Coping and adjustment - which occurs after resettlement takes place, individuals attempt to learn to adjust and cope with their new circumstances.

Phase 3: Community (re)formation and economic development occur, and individuals re-establish normal community life.

Phase 4: Handing over and incorporation, which occurs many years later, individuals and communities seek to take full control of their lives and the new community becomes fully established and integrated (incorporated) into the regional economy.

The questionnaire surveys were conducted in October/November 2019 in three villages in the Mahaweli System B, three villages in the Mahaweli System C and two villages in the Mahaweli System H (See Table 1). All the interviewees were women from the first generation of resettlers. Their age ranged from 40+ years to above 90 years (Table 2).

Table 2. Age distribution of interviewees (Respondents were all women from the first generation of resettlers)

Age Category (Years)	No of Interviewees
40-50	07
51-60	27
61-70	36
71-80	15
Over 80	03
Total	88

5. Results and Discussion

5.1 Urgent Marriages Just Before Resettlement

Out of the 88 women interviewed, there were six who got married just prior to resettlement with the view of obtaining compensation during the negotiation period (Table 3 and 4). At the time of resettlement, land plots (2.5-acre paddy land and 0.5-acre bare land) were given by the government to families who were already legally married. Any married family who lived in the affected areas was given land plots though several families lived together in one house. Since the marriage certificate was a pre-requisite to obtain land, urgent marriages were reported in the affected area. These marriages were basically arranged between a relative living in the same village. The project-affected persons of Kotmale Dam had no choice but to leave their village since the government strongly informed villagers that they have to move to resettlement areas. In case of Kotmale dam resettlement, each village in Kotmale had different length of negotiation periods (The negotiation period was the length from the time when villagers were informed about resettlement to the time when they started to leave). For example, Maswela village, Nawangama village and Thispane village had more than 1½ years to move to resettlement area although other villages had only 4–5 month to resettle from the announcement of dam construction. It seems that some villages which had relatively long negotiation period that triggered ‘urgent marriages.’

Table 3. Details on urgent marriages reported among interviewees

Mahaweli System	Mahaweli region	Villages where urgent marriages were reported	No. of interviewees got urgent marriages
B	Dimbulagala	Bandanagala	1
C	Girandurukotte	Gankewela	2
		Othalawa	1
H	Tambuttegama	Gurugama	2

Table 4. Reasons for the urgent marriages and details on partners

Village	No. of interviewees	Age at marriage	Reason for urgent marriage	Details of the partner
Bandanagala	1	12 (1980)	To become a landowner	Partner is a relation of her, and both parties lived in the same village
Gankewela	1	24 (1984)	To become landowners	Partner is a relation of her, and both parties lived in the same village
	1	24 (1986)	To become landowners	Partner is a relation of her, and both parties lived in the same village
Othalawa	1	21 (1983)	To become a landowner	Partner is a relation of her, and both parties lived in the same village
Gurugama	1	17 (1982)	To become a landowner	Partner is a relation of her, and both parties lived in the same village
	1	19 (1985)	To become a landowner	Both parties lived in the same village

5.2 Short Term Impacts in Kotmale Case

Concentrating on seemingly successful case studies would provide a guide on aspects that should be included in future resettlement planning. On the other hand, unsuccessful cases would suggest those aspects which would not make the resettlers better off after resettlement. However, conditions may vary from place to place, and therefore decisions have to be taken with particular attention paid to the dynamism of the local socio-economic and political system. The case of Kotmale Dam in Sri Lanka provides an interesting case study to focus on. The survey results of the present study can be used to identify the strengths of the resettlement scheme and to review the negative impacts and propose preventive/ mitigation

measures.

Based on the IRR model, risks that the women faced during the negotiation period and after resettlement are described below under five categories: Landlessness, Joblessness, Homelessness, Marginalization, and Morbidity.

5.2.1 Landlessness

In most cases, resettlers received lesser extent of land, and the quality of land (in terms of productivity) was lower. As shown in Table 5, the interviewees of Bandanagala and Weerana (System B), Gankewela and Othalawa (System C) stated that they received lesser extent of land, whereas, those who responded in Ihala Ellewewa (System B), Heta Pahe Yaya (System C) and both the villages in System H (Kotmalpura and Gurugama) said that they received larger extent of land. These observations are similar to that were reported earlier by Manatunge & Takesada (2013), where they have observed that around 60% of the resettlers received more land that they owned previously, however, the productivity did not proportionately increase.

Women who were engaged in paddy cultivation in addition to housework, such as childcare, suffered relatively more than their male counterparts, as they had to engage in intensive agriculture, which was more difficult than traditional home-based gardening for which they were more accustomed to before resettlement. The reason why resettlers faced the problem of productivity of land was due to the reason that the government selected the forested areas of the dry zone as resettlement areas to develop the land which had never been used for agriculture.

Although the majority of resettlers decided to move to Mahaweli Systems due to their intention of paddy cultivation, the resettlers were not provided with full title to their land, which is one of the reasons why they could not prosper. Women were never given the title, as they were not recognized as the head of the household. However, there were exceptions that the inheritance of land from the husband to the wife (one-half of the ownership) and the second half divided among the children. The title of the land was not given, though the ownership is vested with the household, because of a paternalistic concern that they would speculate with the land rather than cultivate it. However, this was counterproductive; farmers, including their wives, did not have any other property for obtaining loans to offer as collateral, which was a reason most of the resettlers were unsatisfied. The women that were interviewed expressed their dissatisfaction because they did not have a chance to obtain loans to buy livestock or any other asset (such as a sewing machine) that they could have made use of for supplementary income generation. They opined that the loss of productivity of land could have compensated if they could have supported the household economy by any means.

Table 5. Responses received for ‘Landlessness’

Category	Responses received from the interviewees	No. of responses received and percentage of receiving similar responses															
		B						C						H			
		B	%	I	%	W	%	Ga	%	65	%	O	%	K	%	G	%
Landlessness	Interviewee lived with her parent’s home. Since she was married at the time of resettlement, separate lands were given by the government	4	33	1	25	1	50	4	40	4	40	4	57	3	25	3	25
	Lands received were larger than interviewee previously had	-	-	3	75	-	-	-	-	3	30	-	-	8	67	2	17
	Lands received were smaller than interviewee previously had	5	42	-	-	-	-	3	30	1	10	2	29	1	8	5	41
	Coffee and some other crops were cultivated in their own lands. After the resettlement, only paddy lands were given	3	25	-	-	-	-	3	30	-	-	-	-	-	-	2	17
	Other responses	-	-	-	-	1	50	-	-	2	20	1	14	-	-	-	-
Total		12	100	4	100	2	100	10	100	10	100	7	100	12	100	12	100

B – Bandanagala, I – Ihala Ellewewa, W – Weerana, Ga – Gankewela, 65 – 65 Yaya, O – Othalawa, K – Kothmalpura, G - Gurugama

Acquisition of land due to involuntary resettlement is disruptive for those who are affected and whose land is taken and, if done poorly, will have serious negative impacts on people and their livelihoods. Compensation packages should be formulated according to two overlapping sets of questions: who should receive compensation for what kind of loss; and how should the quantum and type of compensation be determined. Such method of compensation should be carried out with the consultation of the recipients; however, the resettlement planners should have long term experience on how to compensate the resettlers so that they would be in a better position to make their lives better off than they were relocated.

5.2.2 Joblessness

After the resettlement, some women were not able to engage in any income generating activities at least during the initial period after resettlement (Table 6). One main reason why women could not earn a supplementary income was that they had to work full-time in the new farmland, which needed extensive labour inputs as the land has never been cultivated before their resettlement. Land preparation, weeding, tilling, sowing, harvesting and other farm activities were shared among the males and females in the family. The resettled families mostly were so poor that they did not have the money to employ waged labour. These reasons, together with the additional burden of childcare and other household chores such as cooking, fetching water and firewood, washing clothes, etc. were the responsibility of the female members of the household. Therefore, women had no chance of engaging in any other supplementary income-generating activities.

Table 6. Responses received for ‘Joblessness’

Category	Responses received from the interviewees	No. of responses received and percentage of receiving similar responses															
		B						C						H			
		B	%	I	%	W	%	Ga	%	65	%	O	%	K	%	G	%
Joblessness	Same job was continued	3	25	1	25	-	-	6	60	5	50	4	57	7	58	9	75
	Paddy cultivation was done since interviewee lost her job/ other income sources	6	50	-	-	-	-	3	30	3	30	2	29	3	25	2	17
	She was under parent’s custody at the time of resettlement	3	25	-	-	1	50	1	10	2	20	-	-	-	-	-	-
	Other responses	-	-	3	75	1	50	-	-	-	-	1	14	2	17	1	8
Total		12	100	4	100	2	100	10	100	10	100	7	100	12	100	12	100

B – Bandanagala, I – Ihala Ellewewa, W – Weerana, Ga – Gankewela, 65 – 65 Yaya, O – Othalawa, K – Kothmalpura, G - Gurugama

Also, the women were not educated, at the time of resettlement, especially in System C and H. Therefore, it was difficult for them to find jobs instead of farming. The resettlement areas were still in the process of development and establishment of infrastructure and offered no job opportunities, especially for women.

Women resettlers from Kotmale were not accustomed to large-scale agriculture, including paddy cultivation. They were much used to traditional small-scale farming and rice cultivation. Most of the resettlers, especially women did not have farm skills of intensive agriculture and crop selection depending on water availability. There was a strong tradition from the time of resettlement to focus on overall paddy production targets rather than market-driven demand for produce. These circumstances always led to gluts and lower market prices, which resulted in less stable income patterns and therefore is less satisfaction among resettlers (Manatunge & Takesada, 2013a, b).

The evacuees who moved to the newly developed areas could have predicted that the land being developed at the resettlement sites would initially be less productive and that the living conditions in the area might be harsh. At the same time, they had better long-term economic prospects, as the government administration (Mahaweli Authority of Sri Lanka) was ready to assist and instruct resettlers regarding increased agricultural production. The resettlers mainly decided to move to Mahaweli Systems was to earn an increased income in addition to increased land ownership. However, instability of income was one of the reasons that lead to less satisfaction of resettlers. During informal interviews, the women reiterated that more stable income was as important as increased levels of income. Takesada et al. (2008) mentioned that the project-affected households who decided to be resettled near Kotmale, both the levels and stability of income increased, leading to relatively higher levels of satisfaction. About two-thirds of the households stated that their levels of income rise after resettlement in all the three resettlements (Systems B, C, and H); however, the stability of income has decreased for more than half of the households after resettlement. The satisfaction that the resettlers have derived from income rise has overshadowed by less stability of the income, mainly due to loss of harvest, problems that they faced with output marketing, inability to inject capital when the need arose, mainly for fertilizer and pesticides and for paid

labor.

However, the society now has changed; the resettled communities have undergone huge changes with time. It is now more than 35 years since they have been resettled. The interviewees said that the households were mainly engaged in paddy cultivation before resettlement as the main crop, and paddy cultivation was the main income source. This dependency on paddy income decreased gradually after resettlement and with time when they were more able to adapt to the economic environments and able to derive extra income or switch on to other economic activities (Figure 1).

Many families were able to save enough to purchase/lease agriculture machinery, thereby lessening the burden of women in engaging in agriculture. The women then could use the time that was thus saved for additional income generating activities. Some families have missed this opportunity, especially in System H, where irrigation water shortages are reported. Such situations have aggravated the plight of the women, and they had to share the burden of securing the family finances.

It was very clear that some families in Systems C (especially Bandanagala area) had very progressive foundry industries as their main source, which they were able to develop 15–20 years after resettlement. In Systems B and H villages, the males were able to find paid employment in urban areas close to their villages. In all these cases, the women took care of the cultivation, once the heavy labour work was taken care of by the males. The farm work became less laborious once they were able to rely on better machinery and equipment, compared to manual labor that they adopted at the time of resettlement. At present, most households possess agricultural machinery, and use both families and hired labourers. The gradual shift in agri-technology favored women to take up bigger roles in farming activities, thus contributing more to the household economy. This was a major change since Takesada et al. (2008) conducted their studies about 10 years back.

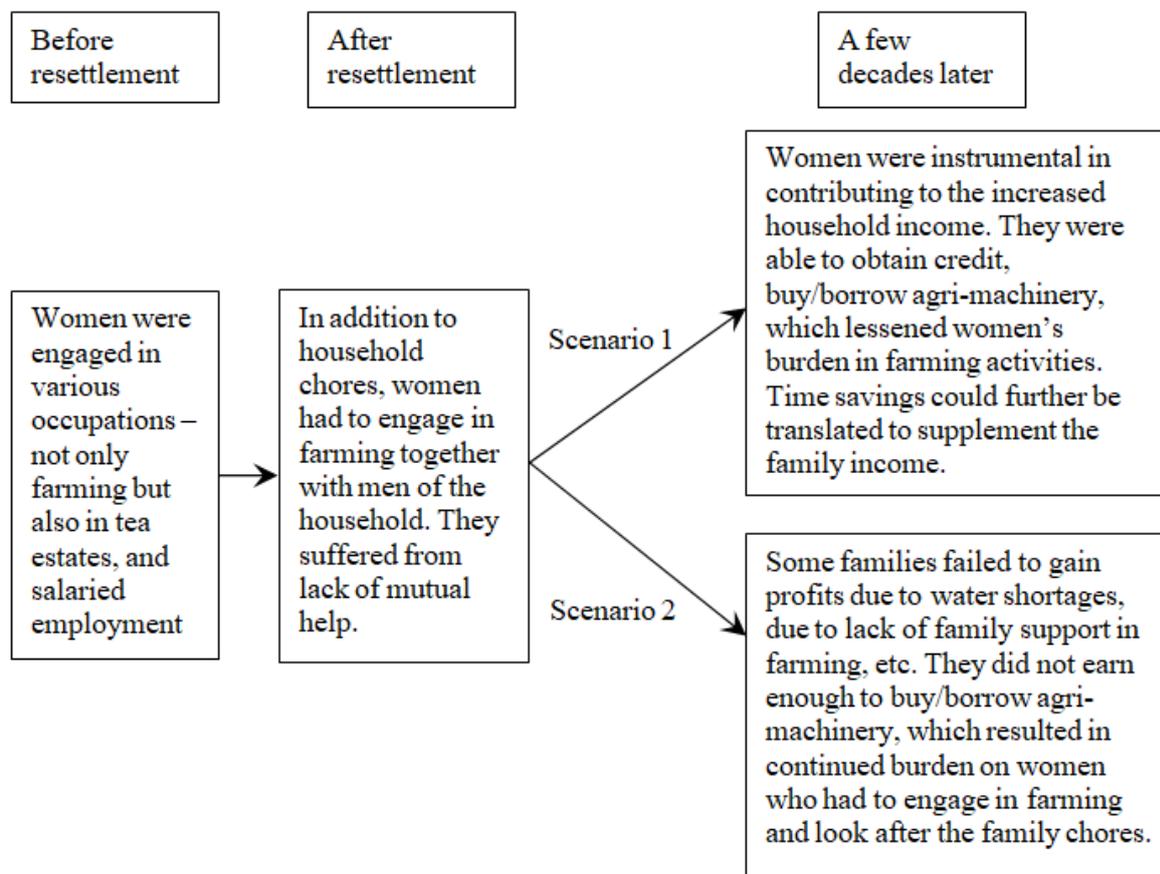


Figure 1. Changes in productive activities of women in the long run after resettlement

In addition to main economic activities, a few families have poultry farms or cattle that they established with external support, where women were the main contributor. In addition, younger members were able to engage in paid employment outside the village, mainly in garment-related jobs and/or employment overseas. Such activities also have contributed to the economic well-being of the resettled families in the long term.

The resettled communities now have moved further up in the framework of Scudder (2005). The results and observations of Takesada et al. (2008) and Manatunge and Takesada (2013) are much related to Phase 2: Coping and adjustment - which occurs after resettlement takes place, individuals attempt to learn to adjust and cope with their new circumstances, and Phase 3: Community (re)formation and economic development occur, and individuals re-establish normal community life. The women interviewed in 2018 mentioned that now the women have more opportunities to engage in income generating activities since about 8–10 years. The women in resettled areas are now more independent and are relieved somewhat from intensive farming activities. This time that they have as ‘free time’ can be utilized for supplementing the household economy. This implies that the resettlers are now finally reached Phase 4: Handing over and incorporation, which occurs many years later, individuals and communities seek to take full control of their lives and the new community becomes fully established and integrated (incorporated) into the regional economy.

During the time of resettlement, those who were resettled in Kotmale and suburbs and in the vicinity of the reservoir had more options available for the second generation. For all the resettlers, the land that was compensated (2.5 acres of farmland) was not large enough to be sub-divided and be passed on to the second generation. However, the government was optimistic enough regarding the future of the second generation of resettlers and expected that they (the second generation) be absorbed to other sectors than traditional agriculture, e.g., industrial sector, public and private sector employment, etc. Previous studies by Takesada et al. (2008) mentions that this

industrial growth that was expected did not trickle down to these remote areas due to many reasons: lack of major infrastructure, relatively uneducated youth that lack any formal education and/or vocational training. This study found that the circumstances have now changed. The communities have well-adapted to the mainstream economic opportunities and have been able to supplement their income sources greatly, thereby expanding the options available for the second generation. Villages in the System B area is notable in this aspect, where the precious researchers observed the social and economic conditions to be the worst out of all the resettlement areas. Villages such as Bandanagala and Weerana in Systems B have developed significantly during the last decade or so. Most of the resettlement areas, now have satisfactory access to educational facilities, and availability of affordable transportation to the schools, which has expanded the horizons of the second and the subsequent generations.

5.2.3 Homelessness

Resettling Kotmale Dam evacuees to Mahaweli settlements in the dry zone, entailed a shift of peasant families from their traditional socioeconomic setting to planned new settlements characterized by totally different environments, and with a focus on commercial agricultural production. Majority of the resettlers were living in the same house with their extended families before resettlement (Table 7). They had lived in permanent houses, but many families did not own a spate housing unit. In Mahaweli projects, government authorities did not construct houses in the resettlement area for resettlers. Therefore, people had to build their houses by themselves. The government distributed some materials for building houses. These materials were not sufficient, and resettlers had to find or buy additional materials. Usually, women are regarded as passive victims in the context of forced displacement. However, it became clear that women positively contributed to rebuilding the new houses in addition to their more conventionally prescribed responsibilities such as household chores, childcare, and routine farming work. There were unique cases where some women even went back to their old villages in Kotmale to bring back construction materials although it took many hours to go back to their old village by bus.

Table 7. Responses received for ‘Homelessness’

Category	Responses received from the interviewees	No. of responses received and percentage of receiving similar responses															
		B					C					H					
		B	%	I	%	W	%	Ga	%	65	%	O	%	K	%	G	%
Homelessness	Though interviewee had well - constructed house, temporary house had to be built	7	58	-	-	1	50	4	40	2	20	1	14	1	8	6	50
	Stayed with parents before the resettlement, but own houses had to be built after the resettlement	4	33	4	100	1	50	4	40	3	30	4	57	6	50	4	33
	Temporary house was constructed which was similar to previously stayed	1	9	-	-	-	-	1	10	5	50	2	29	3	25	-	-
	Others	-	-	-	-	-	-	1	10	-	-	-	-	2	17	2	17
Total		12	100	4	100	2	100	10	100	10	100	7	100	12	100	12	100

B – Bandanagala, I – Ihala Ellewewa, W – Weerana, Ga – Gankewela, 65 – 65 Yaya, O – Othalawa, K – Kothmalpura, G - Gurugama

At present, almost all the resettled families have spacious and comfortable housing units, that they have built by themselves, which reflect that their levels of income gradually improved over the long term. This again shows that the resettlers have passed the Phase 3: Community (re)formation and economic development, and individual households have established themselves in the resettled areas. The women’s role in successfully rebuilding livelihoods and supplementing the household economy was acknowledged by their male households as the main reasons for their ability to move into more comfortable and permanent housing units. The resettlers are now finally reached Phase 4: where individuals and communities had taken full control of their lives, and the community has become fully established and integrated into the regional economy.

5.2.4 Marginalization

Since people were rehabilitated in bare lands under system B, C and H, there were no such marginalization issues reported or no such disputes between rehabilitated people and host communities. Further, families who received the same extent of land and no one family had any superiority other than maintaining the status quo in the same way as they lived before the resettlement. Since all families were received bare land, temporary houses were constructed with the support of each other. Since all families received a similar size of land plots (2.5-acre paddy land and 0.5-acre bare land) from the government, no such favoritism was reported. But it was reported that people who had a large extent of lands were received less compensation.

As previous research pointed out, resettlers lost mutual support after resettlement and especially women who had to attend to such work as household chores alone, in addition to helping their male counterparts in farming activities, thereby increasing the burden that fell on women. Also, not only women but also men also faced problems of finding help in terms of the labour workforce in the resettlement area and lack of water infrastructure for farming. These difficulties led to a severe downturn in their lives, and proper community networks did not form in the early days after resettlement. However, as time passed, women’s associations

were formed to share the burden that they faced. With time, several associations were formed by both men and women as mutual self-help associations, welfare associations, farmer associations, etc. to support each other.

These changes of a community group for mutual support means that resettlers were not always passive and they tried to solve issues in the long run. These community groups which gradually established were found in almost all of the resettlement area in System B, C and H. Therefore, issues related marginalization was gradually solved, and women's burden was also decreased.

As for land ownership, male or husband was recognized as head of the household and women who originally owned their own lands before displacement were excluded from the rights to lands. In addition, only the son had the right to inherit the land for preventing fragmentation while customary law allows women to have their own lands. As for women's burden, the introduction of double cropping meant that women's burden was increased and the husband started to manage cash income, which makes women suffered from mental distress.

Interviewees mentioned that women lost "*gam medda*" (clusters of houses consisting of several nuclear families) which supports women and shares the burden of women's task such as housework. Moreover, people lost the traditional system of reciprocal exchange labor (*attama* and *kaiya*), and they could not help each other due to caste differences and different places of origin. Also, the marriage style (*binna* marriages, *deega* marriages), where the husband lives in the wife's house was lost, and women lost support from their family. On top of all these, the lack of common lands was another factor that women lost their access to income-generating opportunities. Women were not able to use common lands for keeping livestock and slash-and-burn cultivation which are traditional ways to earn money for women.

Most women missed any capacity building programmes, mostly conducted by the government authorities and NGOs, aiming at introducing them with additional sources of income generating activities, such as animal husbandry, sewing, handicrafts, etc. Also, social programmes were conducted initially to make women more resilient, however, with poor attendance records. The main reason was lack of time as women had responsibilities in both domestic work and livelihood-related work. However, women had only little influence on decision making regarding farm production, marketing and family budget due to lack of land.

These clearly show that the women were more marginalized initially during the initial phases after resettlement. However, the resettlers were able to make use of new economic opportunities, and the burden was shared gradually with other female members of the family when the small children grew up with time.

5.2.5 Morbidity

Food was given by the government for at least two years free of charge until the resettlers could support themselves with their own income. During that period people started to cultivate paddy, and some other cash crops Majority of the interviewees informed that most of the people engaged in paddy cultivation had to engage in hard labour work that they were

not well accustomed to in their previous settlements. Lack of safe drinking water was another issue faced by them. Several wells were constructed by the government, but water extracted from that wells were brackish water. Women had to go several kilometers daily to collect water for drinking. Kotmale is located in the wet zone of the central mountains of Sri Lanka. The water source for the villagers has been natural springs, with water being plentiful. When they were moved to the Mahaweli Systems areas in the dry zone, however, the first difficulty they faced was the problem of drinking water supply. The water was relatively hard, containing high levels of dissolved solids that made the water less palatable. The resettled villagers claim the incidence of kidney-related diseases has increased after the resettlement.

The resettlers experienced increased incidences of water-related diseases, including malaria and dengue fever. Nearly half of the resettled families stated that at least one member of their family suffered from malaria after the resettlement. Malaria was not a disease that prevailed in Kotmale area. All the people who were rehabilitated were suffered from Malaria disease for a period of 4–6 years just after the rehabilitation. Both elder and the younger population were severely affected, and some of the people died. As per the data collected through the questionnaire survey, it was obvious that medicines and other health facilities were given by the government. Though elders were suffered from malaria, temporary houses were constructed by them as they were homeless at that time. To deal with the problem, the government distributed medicine and controlled spreading of malaria with the use of insecticides. Therefore, the problem did not last a long time. However, women's burden was increased due to the spread of malaria because taking care of the family is completely a women's role.

The majority of the villagers at Kotmale used pit-type latrines. Almost all the resettlers used temporary pit latrines, soon after the resettlement. Over time, the villagers adopted better types of toilets when they constructed their permanent dwelling units. Presently they use water-sealed toilets, while some use toilets with flushing facilities, and some using pit type latrines. These improvements in sanitation have resulted in better hygienic practices among the resettled communities.

6. Conclusions

Resettlers who were resettled in the Mahaweli System areas have now reached a stage where they have been successful in the formation of social/community networks and satisfactory economic development. Majority of the households have re-established normal community life. This is about 35 years after their relocation. It has been noted that the individual households and communities have been able to take control of their lives and they have fully established and integrated (incorporated) into the regional economy. The second and third generations have better opportunities (e.g., better opportunities for education, vocational training, waged/salaried employment). Most of the families have now reached a stage where their level and stability of income is more or less in par with voluntary resettlers in Mahaweli System areas.

Women's contribution to achieving these successes was highlighted during the study. Majority of the households who moved to Mahaweli Systems wanted to continue paddy

cultivation. Land extent and water availability were satisfactory, but they did not have enough labour, both within the family and among the neighbourhood. Therefore, the women had to share the farming work with men in the household, which was almost entirely manual labour, during the initial phases after resettlement. Before resettlement, women were engaged in various occupations – not only farming but also in tea estates, and salaried employment because they had time to spare. However after resettlement, in addition to household chores, the time spent on farming activities prevented women from engaging in any other work. Nevertheless, with time, some women were instrumental in contributing to the increased household income mainly due to their engagement in farming. They were able to obtain credit, buy/borrow agri-machinery, which lessened women's burden in farming activities. Time savings could further be translated to supplement the family income. Therefore, the long-term satisfaction of the resettlers has a direct relationship with the increase of levels of income and stability of income, for which women's role is indispensable. Gradually with time after resettlement, the women were accustomed to derive income from other sources (e.g., rental of equipment, home gardening, animal husbandry) and non-farm sources (wage work, cottage industries, employment outside the village or abroad), which the household has been successful in establishing nearly three decades after resettlement.

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