

**MINISTRY OF ECONOMIC DEVELOPMENT
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

Democratic Socialist Republic of Sri Lanka

The Project for Development Planning for the Urgent Rehabilitation of the Resettlement Community in Mannar District

FINAL REPORT

MAY 2012

Japan International Cooperation Agency

M&Y Consultants Co., Ltd.

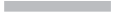




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SRI LANKA

LEGEND

-  Northern Province Area
-  Border between Province
-  Border between District
-  Main Road
-  Local Road



Area Map of the Northern Province in Sri Lanka



Mannar District

Map of Target GN Divisions



DS/ AGA Division		GN Division	Village
Mannar Town	01	Parapankandal (272)	Periyakulam (122)
			Sirukkulam (130)
			Adaikalamoddoi (9)
			Palaithalvu (13)
Nanaddan	02	Cheddiarmagan Kaddaiadampan (81)	Cheddiarmagan Kaddaiadampan (81)
Madhu	03	Vilathikulam (93)	Vilathikulam (88)
			Ampadda Illupaikulam (5)
	04	Parasankulam (153)	Parasankulam (45) Sinna Valayankaddu & Periya Valayankaddu (108)
Manthai West	05	Vellankulam (160)	Sewa Village (34)
			Ganeshapuram (86)
			Vellankulam (40)
	06	Thevanpidy (206)	Thevanpidy (87)
			Puthukadu (120)
	07	Pali Aru (330)	Pali Aru (95)
			Moonrampiddy (210)
			Theththavaady (16)
	08	Illupaikadavai (195)	Illupaikadavai (127)
			Padakuthurai (0)
Kaddaduvayal (8)			
Muthaliyarkamam (8)			
		Parankikamam (53)	
09	Anthoniyarpuram (134)	Anthoniyarpuram (134)	
10	Nedunkandal (114)	Nedunkandal (114)	
11	Kannaddy (311)	Kannaddy (62)	
		Chalampan (56)	
		Neduvarambu (183)	
		Maruthonduvan Velakulam (10)	

(): Number of households as of the end of September 2011

SUMMARY

Part I: Outline of the Project and Project Area after Resettlement of IDPs

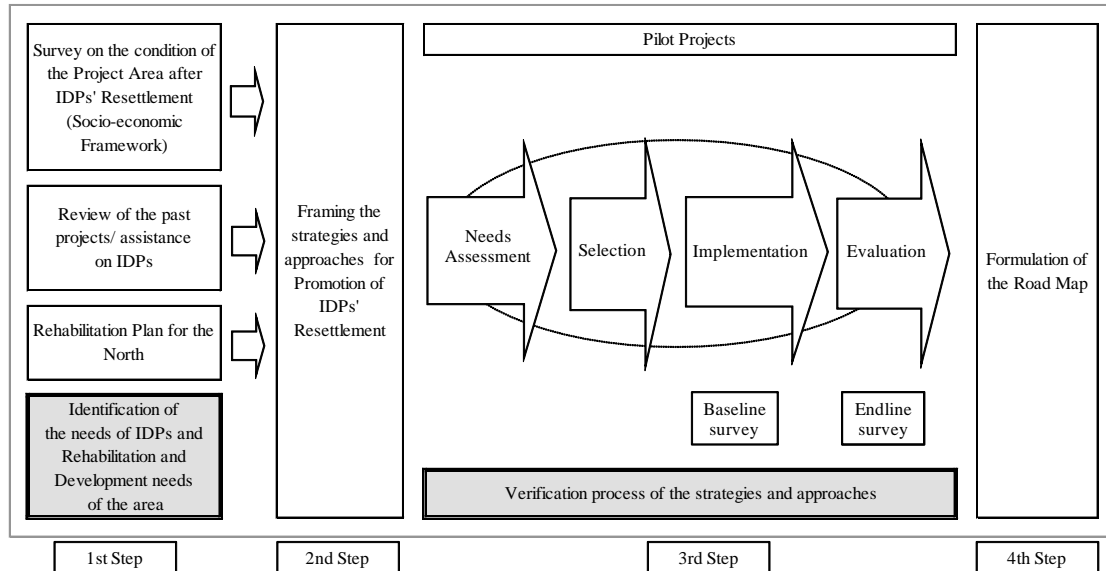
Chapter 1 Outline of the Project

Background of the Project: The nearly 30-year-long conflict ended in May 2009. More than 260,000 civilians were displaced due to the conflict. Those Internally Displaced Persons (IDPs) who had been accommodated in various IDP camps started to return to their own villages in October 2009. Although the conflict has been terminated, there are many urgent issues to be tackled to promote resettlement of the IDPs. It is essential to assist the IDPs in rebuilding their lives and livelihoods and resettling in their own villages in northern Sri Lanka, where the severe military confrontation took place, in order to share the peace dividends fairly among the people affected by the conflict and not to widen the socio-economic disparity. Towards this end, Japan lays stress on its assistance in rehabilitation and reconstruction of the facilities that benefit the regions and communities affected by the conflicts. Along the direction, in April 2010, the “Project for Development Planning for the Urgent Rehabilitation of the Resettlement Community in Mannar District” (hereinafter called the Project) was commenced by the JICA Project Team.

Objectives of the Project: The objectives of the Project are as follows:

- (1) To formulate a Road Map to promote rehabilitation of internally displaced persons (IDPs) and of socio-economic activities in Mannar District.
- (2) To implement the Pilot Projects and to reflect the feedback of lessons learned from the projects to the Road Map.

Key Principle of the Project: The Project is planned to bridge the gap and to promote a smooth shift from emergency humanitarian relief to development activities by presenting the above-mentioned Road Map for the rehabilitation/ reconstruction phase. It is suggested that the Road Map will be utilized by the central, provincial and district administration of Sri Lanka as a tool to properly set the priorities for reconstruction and development of Mannar District and to negotiate with donors on necessary assistance in accordance with the set priorities. The Road Map is formulated through the following process.



Strategies: Taking lessons learned from the past experiences and the ground situation of Mannar District, the following strategies are framed for the Project.

- (1) Assistance based on the needs
- (2) Rehabilitation process with the scope for sustainable development
- (3) Connectedness to the government/ local systems

Target Area of the Project and Project Period: The Project target area is Mannar District. The Project period to implement Pilot Projects and formulate the Road Map is 30 months, from April 2010 until September 2012.

Chapter 2 Condition of the Project Area after Resettlement of IDPs

General Conditions of Mannar District after the Conflict* : Demographic and natural data, and information on (1) livelihood and land use, (2) social services and related infrastructure such as water supply, road and transport, electricity supply, health and education, and (3) economic activities and related infrastructure such as agriculture, livestock, irrigation, fisheries and cooperatives were gathered and analyzed to clarify the prioritized issues in the Project area.

Status and Progress of IDP Resettlement: Since the Government had commenced the ‘Accelerated Returns Programme’ on 22 October 2009, the IDPs of Mannar District started to return to their original places according to the demining status, mainly from Manik Farm in

* Data and information presented in this chapter were mainly gathered during the initial survey conducted from May to November 2010.

Vavuniya. In November 2010, the Government declared the end of the official return process of IDPs from Manik Farm to Mannar District.

Socio-Economic Classification of the DS/ AGA Divisions: Based on the information on social services, economic activities and external assistance gathered and analyzed by the Project Team, the socio-economic status as well as the degree of external assistance of the respective Divisional Secretary (DS)/ Assistant Government Agent (AGA) Divisions in Mannar District were classified and a socio-economic framework that includes development potentials and disincentives of the Divisions was formulated.

Review of the Past Projects/ Assistance for IDPs: Some of the important lessons learned from the past experiences of supporting the IDPs are:

- (1) Need of a strategy for sustainable development
- (2) Attention to the process for capacity development of the target people/ organizations
- (3) Importance of collaboration with the government institutions

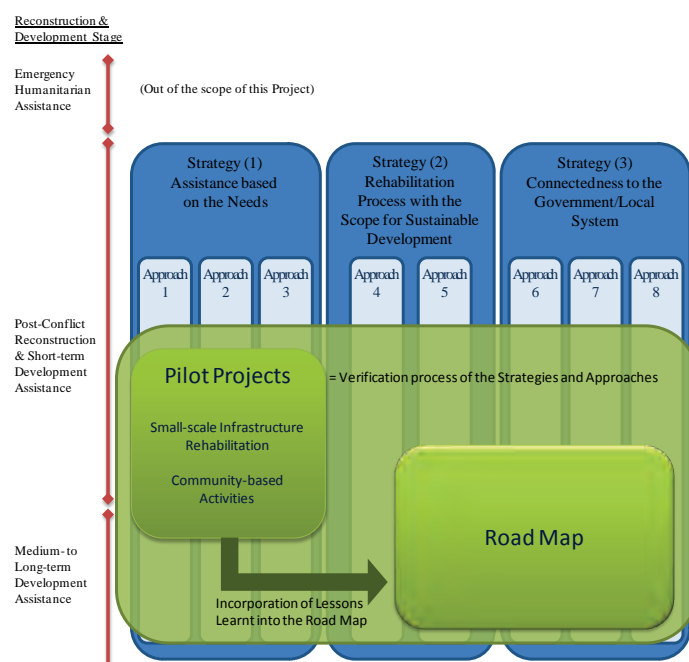
Rehabilitation Plan for the North and Assistance for IDPs: Since June 2009, to resettle the families within a short space of time, “Vaddakkin Vasantham (Northern Spring)” has been planned and carried out by the Presidential Task Force (PTF). The *Joint Plan for Assistance for the Northern Province (JPA) 2011 and 2012* were formulated to facilitate resettlement of IDPs and to ensure the long-term sustainable development of the Northern Province. *Development Priorities of Sri Lanka*, prepared by the Department of National Planning, is not a specific plan for the North but encompasses the entire country. However, targets in each sector presented in the paper need to be referred to in the rehabilitation/ reconstruction and development activities in the North since they are national targets for the whole country. Emergency humanitarian relief and assistance such as rehabilitation of village infrastructure and livelihoods has been rendered to IDP returnees by various organizations besides the Government’s own efforts.

Part II: Preparation for Formulation of the Road Map

Chapter 3 Concept of the Road Map

Strategies and Approaches: Based on the strategies mentioned in Chapter 1, the following approaches to facilitate the resettlement process are framed and verified through implementation of the Pilot Projects. These approaches are the basis of both the Pilot Projects as well as the Road Map as shown in the following figure. The lessons learned from the verification process are incorporated into the Road Map. The strategies and

approaches are as follows.



Strategy (1): Assistance Based on the Needs

- (1) Approach 1: Assessment of the needs and priorities according to the progress of resettlement and reconstruction activities
- (2) Approach 2: Classification of the target areas according to the characteristics
- (3) Approach 3: Identification of development potentials and disincentives

Strategy (2): Rehabilitation Process with the Scope for Sustainable Development

- (1) Approach 4: Promotion of self- and mutual-help activities
- (2) Approach 5: Strengthening of CBOs and activities of mutual help

Strategy (3): Connectedness to the Government/Local System

- (1) Approach 6: Involvement of various stakeholders
- (2) Approach 7: Utilization of local methods
- (3) Approach 8: Assistance in line with the Development Plan of the Government of Sri Lanka

Basic Concept of the Road Map:

Objective: Even in the rehabilitation/ reconstruction phase it is significant to incorporate approaches to fulfill the mid- to longer-term development needs of IDPs into any assistance so as to ensure their resettlement and self-sustaining lives. In this respect, the Road Map aims to present the effective approaches and necessary measures taken in the transition from humanitarian assistance to long-term development to promote resettlement of IDPs and

rehabilitation/ development of socio-economic activities in Mannar District, with the scope for sustainable development.

Contents, Target Area and Target Year of the Road Map: The Road Map includes the development visions, analysis of the development potentials and disincentives to reconstruction/ development, priority projects and action plan. The target area is Mannar District and the target year of the Road Map is 2020.

Development Visions for the Road Map: The overall development vision towards the target year of 2020 is set as follows:

Enabling environments for IDP and areas in Mannar District to realize their potentials are created and measures to facilitate sustainable development are reinforced, in order for them to shift smoothly from the rehabilitation/ reconstruction phase to mid- to longer-term development.

Under this overall development vision, more concrete visions are set as follows:

Vision 1: The lives of the IDPs are reconstructed based on their needs, and socio-economic activities are implemented on the initiative of the IDPs in a self-sufficient manner, and

Vision 2: The local industry to contribute to improvement of the livelihoods and living standards of the resettled communities is rehabilitated and developed.

Framework of the Road Map: The Road Map consists of two parts, namely the “Village-wise Development Plan” whose goal is the development of Vision 1 and the “Sector-wise Development Plan” whose goal is the development of Vision 2 mentioned above. It is expected that the “Village-wise Development Plan” and “Sector-wise Development Plan” will reinforce each other and maximize their effects.

Chapter 4 Implementation of the Pilot Projects

Selection of the Target GN Divisions: 11 Grama Niladhari (GN) Divisions out of 153 GN Divisions in Mannar District were selected for the target GN Divisions of the Pilot Projects.

Assessment of the Needs to Promote Resettlement of IDPs: The main needs identified by/ for stakeholders such as IDPs and the government officers are as follows.

- (1) Rehabilitation of livelihoods such as agriculture and fisheries
- (2) Water for drinking and agricultural purposes
- (3) Reconstruction of houses

- (4) Support for income generation activities including a revolving fund to start the activities
- (5) Renovation/ reconstruction of social and economic infrastructure
- (6) Special needs of women-headed households such as securing a means of livelihood and funds for their children’s education.

Issues, Development Potentials and Disincentives of the Target GN Divisions:

Village-wise and Sector-wise (Social and Economic Infrastructure, Water Supply, Agriculture, Irrigation and Fisheries) issues, potentials and disincentives to promoting development of the target villages/ GN Divisions were analyzed by the Project Team. The target villages were classified into the following four clusters according to the livelihood, potentials for, and disincentives to development.

Cluster	Location	Major Livelihood
A	Northern part of Manthai West AGA Division	Other Field Crop (OFC) cultivation
B	Fishing villages in Manthai West AGA Division	Fisheries
C	Rice Bowl Area	Paddy cultivation
D	Madhu AGA Division	Paddy and OFC cultivation

Direction in the Implementation of the Pilot Projects: Based on the needs assessed and the information gathered by the sector surveys, directions in the implementation of the Pilot Projects are set as follows:

The Pilot Projects will contribute to (1) restore the livelihoods of the IDPs, (2) rehabilitate basic social and economic infrastructure, and (3) develop the capacity of the resettled communities/ organizations such as Community-based Organizations (CBOs) to plan and carry out socio-economic activities.

Selected Pilot Projects: Based on the procedure and criteria of the selection of the Pilot Projects, the following Pilot Projects of Small-scale Infrastructure Rehabilitation and Pilot Projects of Community-based Activities are selected.

Cluster	Small-scale Infrastructure Rehabilitation												Community-based Activities							
	Restoration of Livelihood					Social Infrastructure				Economic Infrastructure		Capacity Development of CBOs		Agriculture		IGA	CBO, MF			
	Irrigation Tank	Nursery Farm	Poultry Hatchery facilities	Fish Pond for Fry Rearing	Fishing Crafts & Equipment	Tube Well (drinking & highland crop)	Village Water Supply System	Village Internal Road	Preschool	Bridge & Flood Dike	MPCS facilities	Market facilities	Multi-Purpose Hall / Community Center	FCS Building	Paddy Reactivation Program	OFC Cultivation Reactivation Program	Poultry Reactivation Program	Income Generation Activities	Microfinance Activities	Strengthening CBOs
A																				
B																				
C																				
D																				

Stakeholders Involved in the Pilot Project: Stakeholders identified are DS/ AGA offices at the DS/ AGA Division level, Pradeshiya Sabha, GN, Rural Development Officers (RDO), the government departments and institutions of the respective sectors, multi-lateral/ bi-lateral donors and NGOs. The focal point to coordinate those actors' assistance is the Government Agent (GA) office. Stakeholders' involvement in community development is crucial and could be a conditionality for the effective implementation of the Road Map.

Environmental and Social Considerations: The purpose of the environmental and social consideration work in this Project is to evaluate adverse social and environmental impacts that are expected to be caused by the Pilot Projects and examine countermeasures against the adverse impacts. Issues on environmental and social consideration including consideration for the vulnerable were scrutinized by the Project Team.

Validation of the Effects of the Pilot Projects: Evaluation of the effects of the Pilot Projects is conducted by examining the information of the Baseline Survey and the Endline Survey. The following points are evaluated based on the data and information gathered in the surveys: (1) output of each Pilot Project, (2) contribution of the Pilot Projects to reconstruction of lives and livelihoods of IDPs and (3) the effectiveness of the strategies and approaches presented in Chapter 3. A series of surveys were conducted as the Baseline Survey.

Chapter 5 Lessons Learned from the Implementation of the Pilot Projects

The Endline Survey was conducted to draw lessons learned from the implementation of the Pilot Projects and incorporate those lessons into the Road Map.

Main Findings of the Survey on Outcomes of the Pilot Projects: There are completed Pilot Projects of Small-scale Infrastructure Rehabilitation that are well utilized by the communities and contribute to improving their income levels and living conditions such as fishing crafts and equipment, nursery farms, village water supply systems and multi-purpose halls constructed by community contract. A period of some other construction works was extended and the construction still continues due to various reasons such as an exceptionally heavy rain, UXOs found at work sites and a wide range of the Pilot Projects of Small-scale Infrastructure Rehabilitation in terms of the number and kind of target facilities, so that the outcomes of the Pilot Projects to be created through utilization of the completed facilities were not fully evaluated. Assistance for operation and maintenance of the facilities is continued by the Project.

Through the Pilot Projects of Community-based Activities, farmers in the target villages

(re)commenced activities such as seed paddy reproduction, home gardening and poultry. Income generation activities such as dry fish production have just started to generate profits. The saving group members of Microfinance activities gained a sense of security and self-reliance because they do not have to depend on money lenders and are able to provide with the emergency loan to the group members at the time they incurred sudden expenses. A sense of unity and friendship was also created among the group members through conducting weekly meetings and sharing their problems. CBO leaders obtained knowledge and skills to manage their organizations through training and study tour.

Contribution of the Pilot Projects to Reconstruction of Lives and Livelihoods in the Target Villages - Findings of Household Survey and Case Studies:

- (1) Incomes and expenditures of the target villages increased remarkably mainly because of resumption of productive activities and increase of employment opportunities at construction sites, etc. However, expenditures and incomes of the target villages were still much lower than the average of the rural sector of the country. Percentages of the households below the poverty line were very high in Clusters A, B and D compared with the poverty head count ratio of the rural sector of the country.
- (2) It was found from the case studies that there were several families who were still unable to get out from under consequences of the conflict and displacement, such as mental instability caused by a loss of their children in the welfare camp, absence of bread-winners, fluctuation of family relationships as a result of long-time separation and others.
- (3) A significant number of households have outstanding debt and the amounts of debt are relatively large.
- (4) There was a significant improvement in food security for the past year. However, there are still around 14% to 31% of households which stated it is sometimes/ always difficult to have three meals a day.
- (5) It is likely that the Pilot Projects contributed to increased production of self-consumed vegetables in every cluster through promotion of home gardening. There are also some positive signs that construction works such as village water supply systems, successful results of seed paddy production and promotion of home gardening, active participation of women's saving groups in microfinance activities and small-scale income generation activities would contribute to the improvement of lives and livelihoods of the IDPs in the future.

Evaluation of the Strategies and Approaches to Promote Resettlement of IDPs:

(1) Contributing Factors and Positive Experiences in Implementation of the Pilot Projects

- (a) Needs-based approach for the effective implementation of the Pilot Project

(Approach 1 of Strategy 1)

- (b) Classification of the target villages into clusters to capture the needs of the target areas appropriately and to propose the Road Map based on the needs (Approach 2 of Strategy 1)
- (c) Identification of the development potentials and disincentives of clusters to identify the Pilot Projects most effective to the clusters and to verify the effects of the Pilot Projects by examining the changes created in their lives and livelihoods (Approach 3 of Strategy 1)
- (d) Continuous monitoring and advisory visits by the Project Team
- (e) Promotion of a sense of security and self-reliance, and a sense of unity and friendship through the microfinance program (Approach 4 of Strategy 2)
- (f) Strengthening of CBOs through the work by community contract (Approach 4 and 5 of Strategy 2)
- (g) Motivating and strengthening capacity of the CBOs to use their initiative for community-based activities (Approach 5 of Strategy 2)
- (h) Involvement of the government officers to make the Pilot Projects technically appropriate and to ensure “connectedness to the government / local systems” stated in Chapter 1 in the future (Approach 6 of Strategy 3)
- (i) Promotion of home gardening to improve the status of self-consumption and to generate some income even for women-headed families, families with persons with disability and families in coastal marine fisheries areas
- (j) Importance of introducing new technology to add value to the activities/ products
- (k) Use the locally familiar methods that have been accepted by the Government and local people (Approach 6 and 7 of Strategy 3)
- (l) Consistency with the development plans of the Government (Approach 8 of Strategy 3)
- (m) Achievement and experience of JICA in Mannar District in the past
- (n) Importance of providing assistance not only to restore livelihoods but also to improve psychological stability and reconciliation among villagers

(2) Disturbing Factors and Negative Experiences in Implementation of the Pilot Projects

- (a) Delay in the implementation of the construction works due to a wide range of the Pilot Projects of Small-scale Infrastructure Rehabilitation in terms of the number and kind of facilities to be rehabilitated/ reconstructed
- (b) Delay in the commencement of the Pilot Projects of Small-scale Infrastructure Rehabilitation and slow progress in the construction works
- (c) Delay in the commencement of the Pilot Projects of Community-based Activities
- (d) Inadequate time to see the business results of the Pilot Projects such as the nursery

- farms, poultry hatchery and rearing facilities and bakery
- (e) Inadequate time to quantify the increase of incomes of the beneficiaries from the income generation activities
 - (f) Due to the short timeframe of the Project, inadequate time to monitor and follow-up with local public organizations and CBOs that will operate and maintain the small-scale infrastructure rehabilitated under the Pilot Projects
 - (g) Inadequate time to materialize synergetic effects by the combination of rehabilitation of small-scale infrastructure (hard component) and community-based activities (soft component)
 - (h) Land issues and illegal occupation
 - (i) Adverse effects of heavy and continuous rain to crops and the agriculture-related reactivation programs as well as delays of preparatory works of small-scale infrastructure rehabilitation resulting in delays of construction.

Lessons Learned to the Road Map: Taking the above-mentioned results of the Endline Survey, the following lessons learned to the Road Map at the present time, before the full impact of the Pilot Projects is evaluated, are drawn.

(1) Summary of the Verification Process of the Pilot Projects and Reflection to the Road Map: The outcomes of the individual Pilot Projects, the overall effect of the Pilot Projects to reconstruction of lives and livelihoods of IDPs and the effectiveness of the strategies and approaches to promote resettlement of IDPs are verified, and reflection of the outcomes as lessons learned to the Road Map are analyzed.

(2) Project Administration:

- (a) The size of any activities jointly implemented by the local authorities, communities and a donor(s) needs to be decided in consideration of the implementing capacity of not only the donors but also the recipient side including contractors, communities and local authorities.
- (b) The Project could not yet satisfy most of the urgent needs of the resettled communities, partly because the procedure of project administration took a longer time than expected. With due consideration of the urgency of the needs of the resettled communities, it is necessary to simplify and expedite administrative procedures, such as the process of project approval and procurement of contractors, to create the expected outputs in a short time.
- (c) From the lessons learned from the implementation of the Pilot Projects of Small-scale Infrastructure Rehabilitation, when any project is planned in the conflict-affected regions, the Project Team recommends dividing the activities into two categories: one is to be carried out immediately after the launch of the project in

consultation with GA and other donor organizations such as UNHCR, which includes water supply, provision of fishing boats and agriculture inputs, and the other shall be rehabilitation and construction of infrastructure to be decided through participation of beneficiaries for their future necessity. The division will contribute towards fulfilling the urgent needs of IDPs swiftly, which will help the IDPs realize the peace dividends soon after the termination of a conflict. This division shall be adopted not only for the construction of infrastructure, but also for community-based activities.

- (d) Taking into account the short timeframe of a project under this assistance scheme of JICA, it is not quite possible to incorporate the results and lessons learned from the Pilot Projects into the future development plan such as the Road Map of the Project. Therefore, while the results and lessons from the process of implementation of the Pilot Projects are learned and incorporated into a development plan as much as possible, monitoring and follow-up activities for the Pilot Projects need to be continued for the future sustainability and elaboration of the lessons even after termination of the Project.

(3) Lessons Learned from the Implementation of Small-scale Infrastructure Rehabilitation:

- (a) Construction of the infrastructure as the Pilot Projects has been delayed partly due to the issues in relation to contractors. The causes of the delays are the combined effects of (a) shortage of the management staff of contractors acquainted with the local conditions and skilled laborers since so many construction works have been implemented in 2011 and 2012 in the North, (b) national and local contractors are still weak to carry out the works in Mannar District after nearly 30 years' interruption of the construction business and (c) others. As the lessons learned, elimination of such causes of delays shall be taken into consideration.
- (b) As already learned in other JICA projects, community contract proved to be efficient and effective, especially when local contractors have a limited capacity. However, community contract had created successful results in the Project because the CBOs, which had undertaken the community contract, had a similar experience and the Project provided the CBOs with technical support and close supervision. Therefore, at the time of introducing the community contract in a project, it is important to carefully consider the factors, such as experience of the CBOs, capacity of the project team to provide close supervision and technical support, and availability of time for construction with due consideration of seasonal factors, such as farming, fishing and rainy seasons.

(4) Issues to Strengthen the Capacity of Field Level Officers:

The Project activities shall be monitored and guided by the officers after the Project is completed. In this connection, it is necessary to enhance the level of knowledge and skills of the field officers on community development in order for them to grasp the communities' needs and render appropriate assistance to the communities, in addition to the improvement in their working environment such as ensuring transportation.

(5) Lessons Learned from the Environmental and Social Considerations:

- (a) The case studies and interviews from CBO leaders revealed that there were some families who were still unable to get out from under the consequences of the conflict and displacement, such as mental instability, absence of bread-winners, fluctuation of family relationships and others. The Project Team also learned the importance of providing assistance to improve psychological stability and reconciliation among the villagers from the experience of the Peace Reconciliation Workshops. These are the examples to show that effects of conflicts and displacements are not transitory symptoms but are the issues that require long-term care and assistance. It is important to reestablish interpersonal communication among the affected people and reconstruct a community, through implementing community-based activities, such as women's saving groups and group-based income generation activities, so that a sense of mutual understanding and care are enhanced.
- (b) In the selection of the Pilot Projects of Small-scale Infrastructure Rehabilitation, rehabilitation/ reconstruction works were purposefully selected with the expectation that no land issues would be raised from the works, unlike construction of new infrastructure at new sites. Contrary to the expectation, there occurred several land issues and one of the Pilot Projects, namely construction of a fish pond for fish fingerlings rearing, was finally cancelled due to the issue. The land issue occurred due to complications of land ownership during the prolonged conflict and repeated displacements, taking advantage of post-conflict confusion and so on. On implementation of a construction project, necessary measures to avoid land issues such as information gathering from all the stakeholders need to be taken in addition to the basic procedures such as confirmation of land ownership and publicity of the Project work to the surrounding villages and the administration.
- (c) The Pilot Projects were implemented in the areas where the Low Risk Certificate had been issued and the safety had been confirmed. However, several Un-Exploded Ordnances (UXOs) were found at work sites in the focal villages. In addition, with the passage of time after the resettlement, the villagers' range of action was expanded and landmines and UXOs were encountered. Implementation of any activities even in the Low Risk Areas requires actions such as cross-check of information gathered, close communication with relevant organizations and

implementation of Mine Risk Education to the stakeholders.

- (d) Various community-based activities were carried out under the Project to rehabilitate lives and livelihoods of IDPs. Many agriculture-related activities have been contributing to the quick rehabilitation of the livelihoods. Promotion of home gardening proved to be effective to ensure food security and to increase cash income of the resettled families. Promotion of home gardening was also found to be appropriate as assistance to women-headed families and families with persons with disability. Other community-based activities such as trainings to strengthen capacity of CBOs and women's saving groups of microfinance activities also enhanced motivation of IDPs to reconstruct a community.

Those lessons learned are incorporated into the Road Map. At the same time, it is expected that the Government of Sri Lanka will take them on the implementation of reconstruction/development activities proposed in the Road Map.

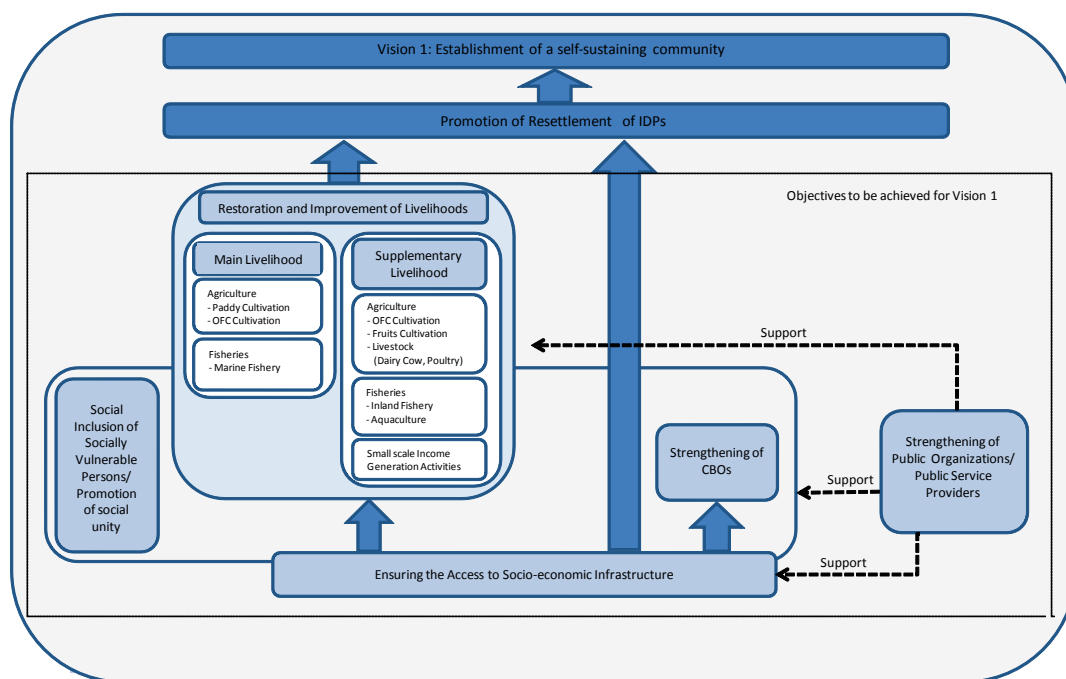
Part III: Proposed Road Map

Chapter 6 The Road Map for Development of Mannar District

Structure of the Road Map: As mentioned earlier, the Road Map consists of two parts, namely the “Village-wise Development Plan” and the “Sector-wise Development Plan.” The “Village-wise Development Plan” aims to promote resettlement of IDPs and establish a self-sustaining community, while the “Sector-wise Development Plan” aims for development of local industry related to the livelihoods of a majority of the population in Mannar District, namely agriculture and fisheries. Both plans are formulated based on the clusters characterized by the main livelihoods of the area, namely (1) paddy cultivation, (2) OFC cultivation and other agricultural activities and (3) marine capture fisheries. Hereafter, “Cluster I”, “Cluster II” and “Cluster III” refer to the paddy cultivation area, the OFC cultivation and other agriculture areas, and the marine capture fisheries area, respectively[†].

Proposed Road Map: Village-wise Development Plan: The following figure illustrates the concept of the Village-wise Development Plan.

[†] Target villages for implementation of the Pilot Projects were classified into four (4) clusters, whereas Mannar District is classified into three (3) clusters for formulation of the Road Map.

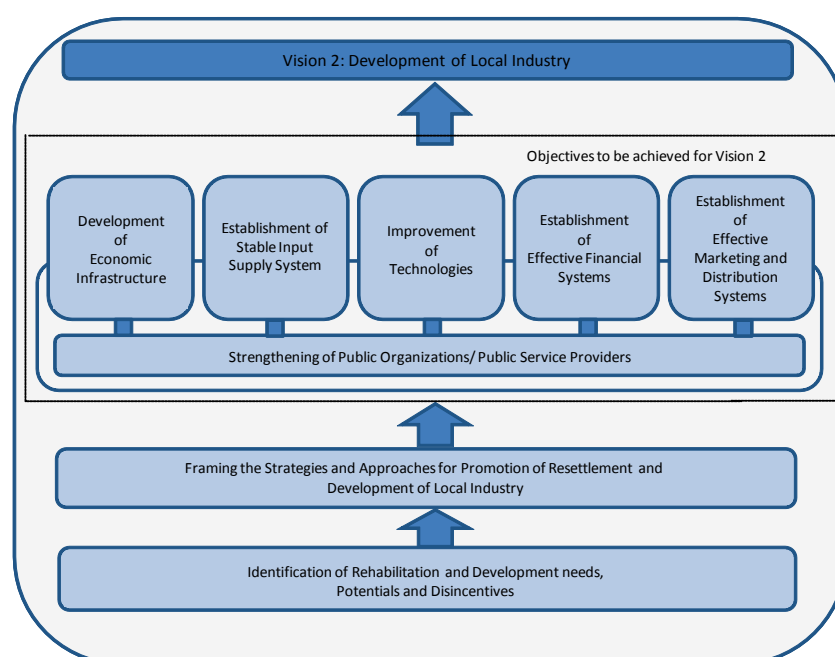


Potentials and disincentives to promote village-wise development in each cluster are analyzed and the development themes and necessary measures to fulfill the goals are proposed. The following is a summary of the Village-wise Development Plan.

Cluster Component of the Plan	Cluster I: Paddy Cultivation Area	Cluster II: OFC Cultivation and Other Agricultural Activities Areas	Cluster III: Marine Capture Fisheries Area
Restoration and Improvement of Main Livelihoods	Paddy agriculture is the main industry in Mannar District. It is essential to rehabilitate paddy-related infrastructure and inputs supply systems to improve the production and productivity.	As an agricultural district, the extent of the cultivation areas of OFC and vegetables are still small, taking the amount of arable land into consideration. It is necessary to enhance OFC cultivation by improving inputs supply, marketing and farmers' skills.	The development potential of Mannar fisheries centers on its rich fisheries resources that have not been adequately harnessed, however, fishing efforts are stagnated to inshore coastal waters. It is essential to improve marine capture fisheries by provision of fishing equipment, rehabilitation/ construction of fishery-related infrastructure and improvement of marketing
Restoration and Improvement of Supplementary Livelihoods	The net income from the irrigated paddy mono-crop with the extent of 1 ha is below the poverty line defined by the Sri Lanka	The net income from the OFC cultivation with 1 acre of land is expected to exceed the poverty line defined by the Sri Lanka Government.	This Plan expects that fishing communities make their living by marine capture fisheries. Still, this Plan proposes to introduce marine

Cluster Component of the Plan	Cluster I: Paddy Cultivation Area	Cluster II: OFC Cultivation and Other Agricultural Activities Areas	Cluster III: Marine Capture Fisheries Area
	Government. Therefore, this Plan proposes to introduce multiple farming in combination with other agricultural activities such as OFC cultivation and livestock.	Still, this Plan proposes to introduce multiple farming in combination with dairy cow and layer poultry to diversify the source of income and increase household income.	aquaculture and dry fish production to diversify the source of income and increase household income.
Ensuring the Access to Infrastructure for Improvement of Living Standards and Activation of Activities in Community	Common to all clusters		
	<ul style="list-style-type: none"> • Housing Acceleration of the existing housing project 		
	<ul style="list-style-type: none"> • Water Supply Construction or extension of water supply schemes for the GN Divisions where existing/ongoing schemes do not supply sufficient water to all of the population of divisions 		
Promotion of Social Inclusion/ Social Unity	Common to all clusters		
	<ul style="list-style-type: none"> • Strengthening of CBOs (1) to conduct trainings and monitoring on managerial skills of CBOs (2) to promote joint planning and implementation of village-wise activities between CBOs and the Government sector 		
	<ul style="list-style-type: none"> • Promotion of Social Inclusion Incorporation of the support for the socially vulnerable people into the community-based activities 		

Proposed Road Map: Sector-wise Development Plan: The following figure illustrates the concept of the Sector-wise Development Plan.



Taking the potentials and disincentives of the sectors and sub-sectors into account, development themes and plans for the short-term and mid-term are proposed. The following is a summary of the Sector-wise Development Plan.

Sector/ Sub-sector		Development Plan	Cluster
Paddy		In order to make paddy monoculture profitable, it is necessary to rehabilitate and development paddy-related infrastructure, rehabilitate and improve stable supply of inputs, develop value-added products, improve access to loan/ credit facilities by private sector and improve marketing systems, in addition to increase in the cultivation area of one operation unit by either one farmer or a group to facilitate utilization of the machinery.	I
OFC and Other Agriculture Sectors		In the OFC and other agriculture sector, marketing plays a significant role to encourage cultivation and production. FOs and production groups shall be strengthened through study tours and field trips to the advanced areas. It is also suggested that specialty products in a specific area such as grapes in Jaffna, banana in Walawe, and dry fish in Mannar be promoted. The following were the plans for each sub-sector.	II
(1)	OFC	Production of each crop except ground nuts meets the requirement of the District population in 2020. Production of ground nuts shall be 3 times that of the 2009 production.	
(2)	Vegetables	Sufficient quantities of vegetables will be supplied to the population in the District in 2020.	
(3)	Fruits	Establishment of a specific area for specialty fruits such as palmyra, coconut, cashew, mango and wood apple in the District will be promoted.	
(4)	Dairy	Replacement of all milk cows by hybrid variety cows by 2020 is proposed to increase the production of milk in the District. It is inevitable to establish collecting centers and chilling centers for marketing milk. To add value to the products, processing of milk is also proposed in this Plan.	
(5)	Poultry	Taking the capacity of the poultry breeding farm in the District into consideration, production of eggs shall be 3 times the self-sufficiency consumption in the District in 2020.	
Fisheries Sector		Mannar District can be characterized into 4 production zones based on its geography and the following factors. (1) strategic locations of fish landings and fish supply, (2) marketing and distribution activities and (3) accessibility to services. 3 zones are in coastal marine areas and 1 is in hinterland (inland fisheries areas). This Plan is formulated based on the zones (equivalent to the clusters).	
(1)	Marine capture fisheries	To achieve quantitative and qualitative enhancement of fish production through use of the limited fisheries resources in a sustainable way, this Plan proposes to promote an effective and sustainable use of the fisheries resource, establish an effective marketing and distribution systems, improve fish processing and quality control and strengthen Fisheries Cooperative Society and DFAR.	III
(2)	Inland capture fisheries and aquaculture	To promote inland capture fisheries, this Plan proposed to restore fingerling stocking by NAQDA and CBOs and establish fry-fingerling raising ponds and facilities for CBOs' operation. To promote aquaculture, this plan proposes to develop commercial-oriented aquaculture through private sector.	I & III

Common Supporting Activities Necessary to Promote Sector Development: To promote sector-wise development in Mannar District, the following supporting activities common to

all the sectors are required:

- (1) Improvement of economic infrastructure to connect to other districts
- (2) Encouraging Multi-Purpose Cooperative Society (MPCS), various federations and private entrepreneurs

Priority Projects: The proposed Priority Projects for the Road Map are selected on the basis of the following criteria: Necessity, Urgency, Relevance and Impact. A list of the Priority Projects is tabulated below.

No	Name of Project	Selection Criteria				Cluster and/or Sector	Priority
		Necessity	Urgency	Relevance	Impact		
(1) Projects for Village-wise Development Plan (Vision 1)							
a.	Institutional Development Project for FOs of Irrigation Systems	⊙	△	○	○	Cluster I	A
b.	Pali Aru Diversion and Karayankannadhi Development	⊙	○	○	⊙	Cluster II	AA
c.	Minor Tank Reactivation Project	⊙	○	○	⊙	Cluster I & II	AA
d.	Northern Musahi Water Supply Scheme	⊙	○	○	○	Cluster II	A
e.	Mannar Island Regional Water Supply Scheme	○	○	○	○	Cluster III	B
f.	Strengthening CBO on Non Paddy Agriculture and Livestock Project	○	○	○	○	Cluster II	A
g.	Mixed Farming Development Project for Small Scale Farmers	○	△	○	○	Cluster I & II	B
h.	Rural Community Water Supply and Sanitation Development Project	○	○	○	△	All Clusters	B
i.	Women-led Activities Development Project	⊙	○	○	○	All Clusters	A
j.	Vocational Training for Women and Youths with Micro Credit Services	⊙	○	○	△	All Clusters	B
k.	Village Road Improvement Project	○	○	○	○	All Clusters	B
l.	Replacement of Damaged Fishing Crafts & Equipment	⊙	○	○	○	Cluster III & I	A
m.	Fish Landing/Handling & Marketing Facilities	⊙	○	○	⊙	Cluster III	A
n.	Dry Fish Processing Improvement	⊙	○	○	○	Cluster III & I	A
o.	Supply & Stocking or Release of Fish Fingerlings Inland Water Bodies	⊙	○	○	○	Cluster I	A
(2) Projects for Sector-wise Development Plan (Vision 2)							
a.	Northern Province Master Plan Study	⊙	-	○	○	All Sectors	A
b.	Land Use Study	⊙	○	○	⊙	Agriculture Sector	A
c.	Marketing Study on Agriculture Products	⊙	⊙	○	○	Agriculture Sector	AA
d.	Maluwatu Oya Development Project	○	-	○	○	Agriculture Sector	B
e.	Parangi Aru Development Project	⊙	△	○	○	Agriculture Sector	A
f.	Kurai Tank Development Project	⊙	○	○	○	Agriculture Sector	AA
g.	Post Harvest and Marketing Promotion Project	⊙	○	○	⊙	Paddy Sector	AA
h.	Marketing Study on Non-Paddy Agriculture Products	⊙	○	○	○	Non-Paddy Agriculture Sector	A
i.	Paddy Seed Production and Marketing Project	○	○	○	⊙	Paddy Sector	A
j.	Livestock Development Project	⊙	○	△	○	Livestock Sector	A
k.	Private Enterprise Promotion through District Chamber of Commerce	○	△	○	○	All Sectors	B
l.	Vocational / Entrepreneurship Training with Credit Services	○	△	○	○	All Sectors	B
m.	Perennial Crop Development Project	○	△	○	⊙	Non-Paddy Agriculture Sector	A
n.	OFC and Vegetable Development Project	○	△	○	⊙	Non-Paddy Agriculture Sector	A
o.	Development of Off-Shore Fishery	○	○	○	△	Marine Fishery Sector	B
p.	Fish Landing/Handling & Marketing Facilities	⊙	○	○	○	Marine Fishery Sector	A
q.	Development of Coastal Marine Aquaculture	○	○	○	△	Aquaculture Sector	B
r.	Participation of Private Investors in Aquaculture	○	△	△	○	Aquaculture Sector	B
(3) Common Projects to Village-wise and Sector-wise Development Plans (Vision 1 & 2)							
a.	Training Programs for Strengthening Implementation Capacity	⊙	○	⊙	○	Government Sector	AA
b.	Regional Training Centre and Training Program Development Project	⊙	○	○	⊙	Government Sector	AA
c.	Study on the Prevention of Seawater Intrusion	○	○	○	△	ID (Provincial) & WRB	B
d.	Monitoring & Evaluation Systems Improvement Project for Agriculture & Regional Development	⊙	○	○	○	Government Sector	A
e.	Strengthening of Mannar DFAR Office	○	○	○	△	Government Sector	B
f.	Establishing & Strengthening of NAQDA Office in Mannar	⊙	○	○	○	Government Sector	A

Note: AA: first priority, A: second priority, B: third priority

Chapter 7 Lessons Learned and Recommendations

Lessons Learned:

(1) Effectiveness of Strategies and Approaches to Promote Resettlement of IDPs:

The strategies and approaches framed by the Project to promote resettlement of IDPs have been verified to be effective through implementation of the Pilot Projects as follows.

Strategy (1): Assistance Based on the Needs: Since the situation of the target areas changed according to the progress of resettlement and reconstruction activities, needs and priorities of activities were carefully identified by the Project through workshops and discussions with the stakeholders such as communities and the government officers. It brought active participation and keen interest from the villagers in all the Pilot Projects of Community-based Activities, and sincere cooperation from the government officers. Classification of the target areas according to their socio-economic characteristics and identification of development potentials and disincentives also helped to grasp the ground situation of the areas and plan the longer-term development activities.

Strategy (2): Rehabilitation Process with the Scope for Sustainable Development: Even in the rehabilitation/ reconstruction phase it is significant to incorporate approaches to fulfill the mid- to longer-term development needs of IDPs into any assistance so as to ensure their resettlement and self-sustaining lives. As the past experiences show, communities and CBOs have played crucial roles also in the rehabilitation/ reconstruction activities of the Project. The capacity of the community and CBOs has been fostered through the process of self- and mutual-help activities implemented as the Pilot Projects.

Strategy (3): Connectedness to the Government/Local System: Throughout the implementation period, the Project tried to establish a collaborative working relationship between the community and the Government to ensure the future sustainability of the activities.

(2) Reconstruction of Conflict-affected Community: There exist a variety of socio-economic groups in a community. In addition, the conflict has resulted in large numbers of socially vulnerable people such as women-headed households and people with disabilities. Particular emphasis should be given to the necessary assistance to the vulnerable groups. However, there is a possibility that an overemphasis on targeting the socially vulnerable people would make other members of the community feel

neglected by or excluded from the outside assistance. This could be followed by a social disharmony within a community and isolation of the socially vulnerable people. In this respect, incorporation of the support for the socially vulnerable people into the community-based approach in combination with the activities targeting those people was effective, especially in the post-conflict regions where the whole community has been affected by the conflict. It is also important to reestablish interpersonal communication among the affected people and reconstruct a community through implementing community-based activities, so that a sense of mutual understanding and care are enhanced.

(3) Lessons Learned from Project Administration: In the conflict-affected areas in Mannar District, IDPs had lost almost all public and private assets, so that swift actions to assist them in returning to their normal lives through rehabilitation of livelihoods and basic infrastructure are needed. Expectations of the communities for the construction of community infrastructure were very high, and the completed infrastructure are well utilized by the communities and contribute to improving their income levels and living conditions. The Project, however, could not yet satisfy part of the urgent needs of the resettled communities because a period of construction was extended due to various reasons such as an exceptionally heavy rain and UXOs found at work sites. In particular, one of the lessons learned from the implementation of the Pilot Projects of Small-scale Infrastructure Rehabilitation is that a wide range of the Pilot Projects in terms of the number and kind of facilities caused the delay in implementation of the construction works. Therefore, the size of any activities jointly implemented by the local authorities, communities and a donor(s) needs to be decided in consideration of the implementing capacity of not only the donors but also the recipient side including contractors, communities and local authorities. With due consideration of the urgency of the needs of the resettled communities, it is also necessary to simplify and expedite administrative procedures such as the process of project approval and procurement of contractors, and create expected outputs in a short time.

Recommendations

(1) Swift Fulfillment of Urgent Needs of IDPs: From the lessons learned from the implementation of the Pilot Projects of Small-scale Infrastructure Rehabilitation, when any project is planned in the conflict-affected regions, the Project Team recommends dividing the activities into two categories: one is to be carried out immediately after the launch of the project in consultation with GA and other donor organizations, and the other shall be rehabilitation and construction of infrastructure to be decided through

participation of beneficiaries for their future necessity. The division will contribute towards fulfilling urgent needs of IDPs swiftly, which help the IDPs realize the peace dividends soon after the termination of a conflict.

(2) Consideration to a Fluid Situation in the Conflict-affected Regions: Under a fluid situation in the post-conflict regions, issues related to the conflicts, displacements and resettlement such as land issues and disputes over outside assistance or resources tend to happen. On implementation of any project, necessary measures to avoid conflict-related issues need to be taken through information gathering from all the stakeholders and figuring out the background of the issues. In addition, needs of IDPs also change with the passage of time. To meet their needs, any plan need to be flexible and ready to change according to the ground situation.

(3) Support to Reconstruct a Conflict-affected Community: The lessons learned from the Project show that the community-based activities with full consideration for the socially vulnerable groups is appropriate and effective to reconstruct a community, especially in the post-conflict regions where the whole community has been affected by the conflict. Accordingly the methodology taken by the Project is recommended to be adopted in other activities implemented in the conflict-affected regions. It is also effective to conduct a reconciliation workshop to restore mutual trust among the community.

(4) Implementation of Proposed Priority Projects in the Road Map: It is recommended that the Government of Sri Lanka implements the projects identified through preparation of the Road Map at an early date in consideration of the following points in order for the people of Mannar District to recover from the negative effects of the conflicts, move along with the development stream of the Sri Lankan economy and improve their living conditions and livelihoods to the level equal to the other parts of the country before 2020.

Capacity Development in Planning: As mentioned earlier, the Road Map is expected to be utilized by the central, provincial and district administrations, namely the Ministry of Economic Development, the Northern Provincial Council and the District Secretariat of Mannar, as a tool to properly set the priorities for reconstruction and development of Mannar District and to negotiate with donors on necessary assistance in accordance with the set priorities.

Proposed Priority Projects in the Road Map include various sectors and stakeholders since the Road Map aims at a comprehensive community as well as

area development, and some projects are planned to cover not only Mannar District but also the adjoining districts. Taking the characteristics of the Road Map into consideration, when the central, provincial and district administrations utilize the Road Map as the above-mentioned tool, higher planning capacity is required. At first, it is recommended to strengthen the planning function of the District Planning Secretariat and to have close coordination with the Provincial Planning Committee for appropriate planning and coordination of the development projects.

Assistance to the Government Officers: It is necessary to enhance the level of knowledge and skills of the field officers on community development in order for them to grasp the communities' needs and render appropriate assistance to the communities, in addition to the improvement in their working environment such as ensuring transportation. It is recommended to utilize facilities of the *Project for Training in Community Development for Front Line Officers in the Northern and Eastern Provinces* being implemented under JICA's technical cooperation at present for trainings of such field officers in the Northern and Eastern Provinces including Mannar District.

(5) Development of Other Sectors Outside the Scope of the Road Map: The Road Map was prepared for the urgent necessity of rehabilitation and development of Mannar District, which gave priority to the agriculture and fisheries sectors. Taking the objective of the Road Map into account, some sectors such as tourism were excluded from the Road Map, though the Project Team well recognized the importance of these sectors. It is recommended to carry out a study on tourism and other industries under the Master Plan study in the Northern Province proposed in the Road Map.

PHOTOGRAPHS

Needs Assessment



Social survey conducted in a target GN Division



Community Action Plan (CAP) Workshop at
Anthoniyarpuram, Anthoniyarpuram GN Division

Pilot Projects of Small-scale Infrastructure Rehabilitation



Irrigation Tank Spillway at Periyakulam,
Parapankandal GN Division



Poultry Hatchery Building at the Breeding Farm
in Cheddiyarmagan Kaddaiadampan GN Division



Drilling of Tube Well at Sinna Valayankaddu,
Parasankulam GN Division



Elevated Tank for the Village Water Supply System
at Vilathikulam, Vilathikulam GN Division



Fishing crafts provided by the Project
(Anthonyarpuram GN Division)



Bakery on the premises of Community Center
at Illupaikadavai, Illupaikadavai GN Division



Multi-purpose Hall at Pali Aru,
Pali Aru GN Division
before the rehabilitation by community contract



Multi-purpose Hall at Pali Aru,
Pali Aru GN Division
after the rehabilitation by community contract

Pilot Projects of Community-based Activities

(1) Agriculture-related Activities



Training in Paddy cultivation
under the Paddy Reactivation Program



Distribution of seedlings under the
OFC Cultivation Reactivation Program



Production of seedlings at the nursery farm
in Sewa Village, Vellankulam GN Division
under the OFC Cultivation Reactivation Program



Chick rearing at the Breeding farm in
Cheddiyarmagan Kaddaiadampan GN Division

(2) Income Generation Activities



Cement block making
at Ganeshapuram, Vellankulam GN Division



Training in Mat weaving
at Pali Aru, Pali Aru GN Division



Training in Bakery
at Illupaikadavai, Illupaikadavai GN Division



Training in Dry fish production
at Sirukkulam, Parapankandal GN Division

(3) Strengthening CBOs and Microfinance Activities



Study tour on community-managed O & M
of community infrastructure



Construction Skill Training
at Sewa Lanka Training Center, Vavuniya



Training in Financial Management for CBO leaders



Women's Saving Group activities
at Sewa Village, Vellankulam GN Division

Other Workshops and Meetings



Reconciliation Workshop



The 3rd District Steering Committee (DSC)
meeting held on 29 November 2010

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ADC	Agrarian Development Center
AGA	Assistant Government Agent
AI	Artificial Insemination
ASC	Agrarian Service Center
BHN	Basic Human Needs
CAP	Community Action Plan
CBA	Community-based Activities
CBO	Community-based Organization
CCPI	Colombo Consumers' Price Index
CEA	Central Environmental Authority
CFA	Ceasefire Agreement
CFC	Ceylon Fisheries Corporation
CFHC	Ceylon Fishery and Harbours Corporation
DAD	Department of Agrarian Development
DAPH	Department of Animal Production and Health
DATC	District Agriculture Training Center
DCC	District Coordinating Committee
DCD	Department of Co-operative Development
DEA	Department of Export Agriculture
DFAR	Department of Fisheries and Aquatic Resources
DG	Director General
DMAO	District Mine Action Office
DOA	Department of Agriculture
DRRS	District Rehabilitation and Reconciliation Secretariat
DS	District Secretary/ Divisional Secretary
DSC	District Steering Committee
ECC	Environmental Clearance Certificate
EMP	Environmental Management Plan
EMoP	Environmental Monitoring Plan
ENReP	Emergency Northern Recovery Project
EPL	Environmental Protection License
FAO	Food and Agriculture Organization
FAOSTAT	FAO Statistical Database
FCS	Fisheries Cooperative Society
FI	Fisheries Inspector
FO	Farmer Organization
GA	Government Agent = District Secretary
GN	Grama Niladhari
GOSL	Government of Sri Lanka
IBE	Inboard Engine
ID	Irrigation Department
IDB	Industrial Development Board
IDP	Internally Displaced Person
IGA	Income Generation Activity

IOM	International Organization for Migration
JICA	Japan International Cooperation Agency
JPA	Joint Plan for Assistance for the Northern Province
LIBCO	Livestock Breeders Cooperative Society
LTTE	Liberation Tigers of Tamil Eelam
LRC	Low Risk Certificate
LS	lump sum
m	million
MANRECAP	Mannar District Rehabilitation & Reconstruction through Community Approach Project
MANREP	Project for Development Planning for the Urgent Rehabilitation of the Resettlement Community in Mannar District (the abbreviated form of the Project)
M/ D	man/ day
MEDIPIP	Ministry of Enterprise Development and Investment Promotion
MFARD	Ministry of Fisheries and Aquatic Resources Development
MNB&EID	Ministry of National Building and Estate Infrastructure Development
MOA	Ministry of Agriculture
MOD	Ministry of Defense
MOED	Ministry of Economic Development
MOU	Memorandum of Understanding
MOYA&SD	Ministry of Youth Affairs and Skills Development
MP	Member of Parliament
MPCS	Multi-Purpose Cooperative Society
M/M	Minutes of Meeting
NARA	National Aquatic Resources Research & Development Agency
NAQDA	National Aquatic Development Board
NBSB	Beach Seine Crafts
NECORD	North East Community Restoration and Development Project
NEHRP	North East Housing Reconstruction Program
NEPC	North East Provincial Council
NGO	Non-Government Organization
NIFNE	National Institute of Fisheries and Nautical Engineering
NISDO	Nanaddan Integrated Social Development Organization
NPC	Northern Provincial Council
NPD	Department of National Planning
NSC	National Steering Committee
NTRB	Non-motorized Traditional Crafts
NTS	Non-Technical Survey
NTSC	Non-Technical Survey Certificate
NWS&DB	National Water Supply and Drainage Board
OBE	Outboard Engines
ODA	Official Development Assistance
OFC	Other Field Crops
OFRP	Out-board engine Fiberglass Reinforced Plastic boats
O&M	Operation and Maintenance

PEACE	Pro-Poor Economic Advancement and Community Enhancement Project
PTF	Presidential Task Force
RAP	Community Livelihood in Conflict Affected Areas Project
RDO	Rural Development Officer
RDS	Rural Development Society
Rs.	Sri Lankan Rupees
SLA	Sri Lanka Army
SSIR	Small-scale Infrastructure Rehabilitation
S/W	Scope of Work
UN	United Nations
UNDP	United Nations Development Program
UNHCR	Office of the United Nations High Commissioner for Refugees
UNOCHA	United Nations, Office for the Coordination of Humanitarian Affairs
UXO	Un-Exploded Ordnance
VS	Veterinary Surgeon
WB	World Bank
WFP	World Food Programme
WRB	Water Resources Board
WRDS	Women's Rural Development Society
WSG	Women's Saving Group
WSS	Water Supply Scheme/ System
ZEO	Zonal Educational Office
ZOA	ZOA Refugee Care Netherlands

MEASUREMENT UNIT

Extent

m ²	= Square-meters (1.0 m x 1.0 m)
km ²	= Square-kilometer (1.0 km x 1.0 km)
ha	= Hectares (10,000 m ²)
ac	= Acre (4,046.8 m ² or 0.40468 ha.)

Length

mm	= Millimeter
km	= Kilometer (1 km = 1,000 m)

Weight

kg	= Kilograms (1,000 grams)
t/ mt	= Metric ton (1,000 kg)
bu	= Bushel (1 bu = 20.87 kg)

CURRENCY EQUIVALENTS

as of May 2012

Sri Lankan Rupees (Rs.) 1.00 = Japanese YEN 0.619

US Dollar (US\$) 1.00 = Japanese YEN 81.07

Rs. 100 = US\$ 0.764

GLOSSARY

Divisional Secretary (DS)/ Assistant Government Agent (AGA)	Chief administrator of a Division
Government Agent (GA)	Chief administrator of a District
Grama Niladhari (GN)	Village level government administrative officer
Maha	Sinhalese word for the North-East monsoon season approximately from October to March
Pradeshiya Sabha (PS)	An elected body at Divisional Secretary level in rural area, through which all rural development programs and public utility services are implemented.
Yala	Sinhalese word for the South-West monsoon season approximately from April to September

PART I: OUTLINE OF THE PROJECT AND PROJECT AREA AFTER RESETTLEMENT OF IDPS

CHAPTER 1 OUTLINE OF THE PROJECT

1.1 Background of the Project

(1) Background in general

The nearly 30-year-long conflict between the Sri Lanka Army (SLA) and the Liberation Tigers of Tamil Eelam (LTTE) ended in May 2009 when the SLA militarily crushed the LTTE.

Since the Ceasefire Agreement (CFA) was abrogated in January 2008, the conflict had intensified and people in the Vanni region had been evacuated from their villages toward the North within the uncleared area. When the LTTE was militarily crushed in May 2009, more than 260,000 civilians were displaced¹. All of these Internally Displaced Persons (IDPs) were accommodated in various IDP camps, mostly in Vavuniya District. The SLA and International Demining Organizations began demining operations right after the end of the conflict and IDPs started to return to their own villages in October 2009.

Although the conflict has been terminated, there are many urgent issues to be tackled to promote resettlement of the IDPs. People's livelihoods have been badly affected by the prolonged conflict. The uncleared area had been left undeveloped due to the conflict and the limited socio-economic infrastructure as well as the people's assets were further damaged by the resumption of the military confrontation in 2006.

(2) Japan's assistance in reconstruction of northern Sri Lanka

The Government of Japan places a priority on "assistance for consolidation of peace and reconstruction" in the assistance strategy for Sri Lanka. Japan has extended its assistance for facilitating the consolidation of peace and socio-economic development, considering area/ ethnic balance.

In northern Sri Lanka, where the severe military confrontation took place, it is essential to assist the IDPs in rebuilding their lives and livelihoods and resettling in their own villages in

¹ According to "Sri Lanka-Vanni Emergency, Situation Report #14, 18 May 2009" by the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), 201,555 people crossed to the government-controlled areas from the conflict zone during the period from 27 October 2008 to 17 May 2009, 1,534 people have been released from temporary camps into host families and elders' homes, and 60,000 - 80,000 people may have fled the conflict zone during the last 72 hours before the end of the conflict.

order to share the peace dividends fairly among the people affected by the conflict and not to widen the socio-economic disparity. Towards this end, Japan stresses its assistance in rehabilitation and reconstruction of the facilities that benefit the regions and communities affected by the conflicts.

In addition, one of the serious issues in the conflict-affected regions is the shortage of skilled personnel in the administration, which hinders the effective provision of social services. To address the issue, Japan has assisted in strengthening the administrative capacity in the North.

Japan is committed to the establishment of lasting peace in Sri Lanka with the Government of Sri Lanka (GOSL).

(3) Other donors' assistance in reconstruction of northern Sri Lanka

As described in detail in Section 2.6.3, various UN agencies and multilateral donors have planned and implemented reconstruction activities after humanitarian assistance. Their main focuses are on rehabilitation of village infrastructure and communities' livelihoods. Japan shares in this important rehabilitation work. At the same time, close coordination of programs among donors is significant to avoid overlap of assistance. In this respect, it is meaningful for Japan to provide assistance not only in rehabilitation activities but also in longer-term development activities, which donors seem to have paid less attention to so far.

In response to the official request of the GOSL, the Preparatory Study Team was dispatched to Sri Lanka by the Japan International Cooperation Agency (JICA) in January 2010 and the Scope of Work (S/W) and the Minutes of Meeting (M/M) for the "Project for Development Planning for the Urgent Rehabilitation of the Resettlement Community in Mannar District" (hereinafter called the Project) were signed by GOSL and JICA². In April 2010, the Project was commenced by the JICA Project Team, a Joint Venture of M&Y Consultants Co., Ltd. and Nippon Koei Co., Ltd., Japan (hereinafter called the Project Team).

1.2 Objectives of the Project

The objectives of the Project are as follows:

- (1) To formulate a Road Map to promote rehabilitation of internally displaced persons (IDPs) and of socio-economic activities in Mannar District.
- (2) To implement the Pilot Projects and to reflect the feedback of lessons learned from the

² The S/W and M/M are attached as **Annex 1** and **2**.

projects to the Road Map.

1.3 Key Principle and Strategy of the Project

1.3.1 Key Principle

One of the major issues arising in the rehabilitation/ reconstruction process in the post-conflict regions is the gap between humanitarian assistance and long-term development. The Project is planned to bridge the gap and to promote a smooth shift from emergency humanitarian relief to development activities by presenting the above-mentioned short- to mid-term Road Map for the rehabilitation/ reconstruction and development phase. The concept meshes completely with the key principles of the Joint Plan for Assistance for the Northern Province-2011³.

It is suggested that the Road Map will be utilized by the central, provincial and district administration, namely the Ministry of Economic Development, the Northern Provincial Council and the District Secretariat of Mannar, as a tool to appropriately prioritize the reconstruction and development needs of Mannar District and to negotiate with donors on necessary assistance in accordance with the set priority.

1.3.2 Formulation Process of the Road Map

The Road Map is formulated through the following process described in Figure 1.1.

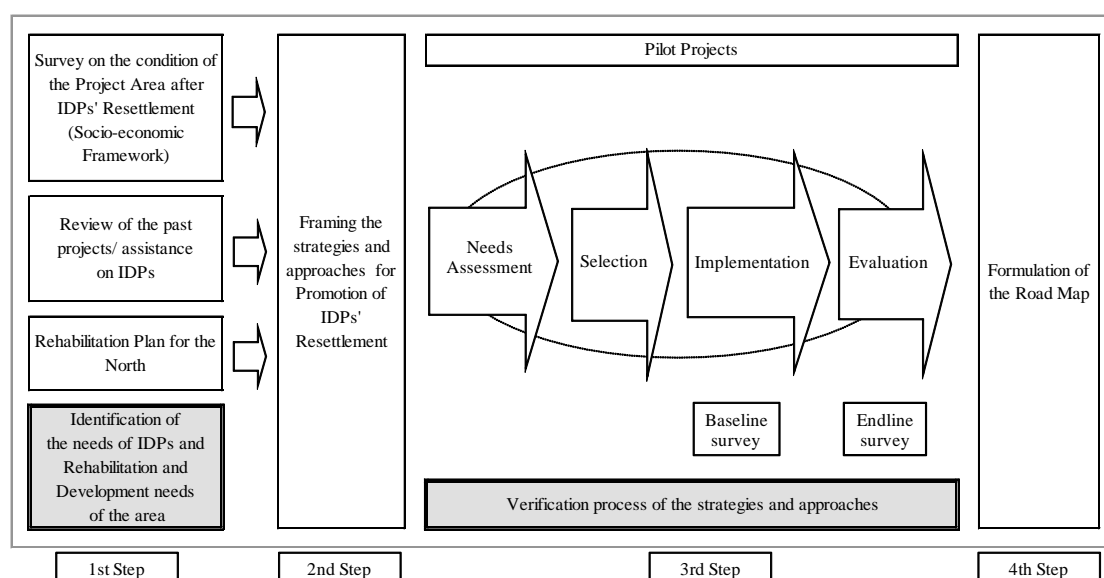


Figure 1.1 Flow of the Formulation Process of the Road Map

³ See Section 2.6.1 for details.

As the first step, the needs of IDPs and rehabilitation/ development needs of the area are identified through various surveys. Taking the survey results and information gathered into account, as the second step, the development visions, strategies and approaches to promote resettlement of IDPs are formulated. As the third step, the Pilot Projects are carried out to verify the effectiveness of the strategies and approaches. The effectiveness of the strategies and approaches is examined by the information gathered from the Baseline Survey and the Endline Survey. As the fourth step, the Road Map is formulated. Lessons learned from the verification process and the survey results are incorporated into the Road Map.

1.3.3 Strategies

Taking lessons learned from the past experiences and the ground situation of Mannar District into consideration, the following strategies are framed for the Project to promote the resettlement process in an effective way.

(1) Assistance based on the needs

To recover from the devastating effects of the conflict and facilitate the resettlement process within a short timeframe, it is vital to respond to various reconstruction needs of the resettled communities and the affected areas. The situation in the post-conflict regions, however, is fluid and complex and the impacts of the conflict vary in degree according to social status in the society. It is known from many research papers about conflicts and natural disasters that structurally vulnerable groups and areas suffer disproportionately from the impacts. To understand such situations and make the assistance effective and conducive to reconstruction of the resettled communities as well as the areas, timely, appropriate and well-coordinated assessment of the needs is required. In addition, assistance based on the needs of the IDPs helps them realize the peace dividends, which will increase their trust of the authority.

(2) Rehabilitation process with the scope for sustainable development

Drawing on the past experiences of mostly natural disasters, returning to the status quo after a disaster is not sufficient as it leaves the root causes of the vulnerability of the community and the area unattended and often reproduces vulnerable situations that existed before the disaster. Therefore, in the reconstruction process and development process that follows, reducing the vulnerability and creating a safer and better community with improvements in the areas where problems and issues existed in the pre-disaster period need to be addressed. The capacity of the community for those purposes will be fostered through the process of self- and mutual-help activities, and in the meantime the resilience of the community toward future trouble will be enhanced.

(3) Connectedness to the government/ local systems

One of the most important lessons learned from the Kobe Earthquake in 1995 in Japan and the Indian Ocean Tsunami in 2004 is that communities play crucial roles in the rehabilitation process following disasters. At the same time, many case studies of the Kobe Earthquake also revealed the importance of the role of the government in the post-disaster period to provide appropriate assistance and create enabling environments for the communities. There are many things beyond the capacity of the communities to address and the limitations of the communities are hard to overcome without assistance from the government. The government officers play a vital role in assisting communities directly or through larger programs that contribute to the communities. Therefore, it is important to connect the needs of the communities to the government systems and to realize the reconstruction plans formulated by the government in resettled communities. The collaborative working relationship between the community and the government together with other important factors such as active Community-based Organizations (CBOs) and availability and accessibility to resources promote the reconstruction process. JICA's former project implemented in Mannar District, *Mannar District Rehabilitation and Reconstruction through Community Approach Project (MANRECAP)*, shows that promotion of a close relationship between the community and the government ensures the future sustainability of the activities⁴.

To facilitate the reconstruction process with the above-mentioned strategies will support the communities to be self-sufficient, which can contribute to the region's socio-economic development in the future.

1.3.4 IDPs to be Supported

Some IDPs have no intention to return to their original villages due to various reasons such as jobs obtained in other areas and education of their children. IDPs supported through the implementation of the Project to resettle are those who have the intention to return and resettle in their original villages.

1.4 Target Area of the Project

The Project area is Mannar District, which is comprised of three Divisional Secretary (DS)

⁴ MANRECAP had close relationships with the government agencies and handed over all buildings and facilities constructed under the project to the relevant agencies taking the future support for the maintenance into account, and it works well. For example, after electrification of three villages in a GN Division, Pradeshiya Sabha exchanged diesel water pumps with electrified ones at the request of the communities, which surely ensured the sustainability of these community water supply schemes.

Divisions, namely Mannar Town, Nanaddan, Musali, and two Assistant Government Agent (AGA) Divisions, namely Manthai West and Madhu (see Figure 1.2). Under the five DS/AGA Divisions, there are 153 Grama Niladhari (GN) Divisions. However, the following areas are excluded at the inception of the Project from the implementation of surveys and Pilot Projects: (1) areas where UNDP's Low Risk Certificates (LRC) of landmines have not yet been issued, (2) areas covered by military facilities, and (3) areas defined as high security zones.

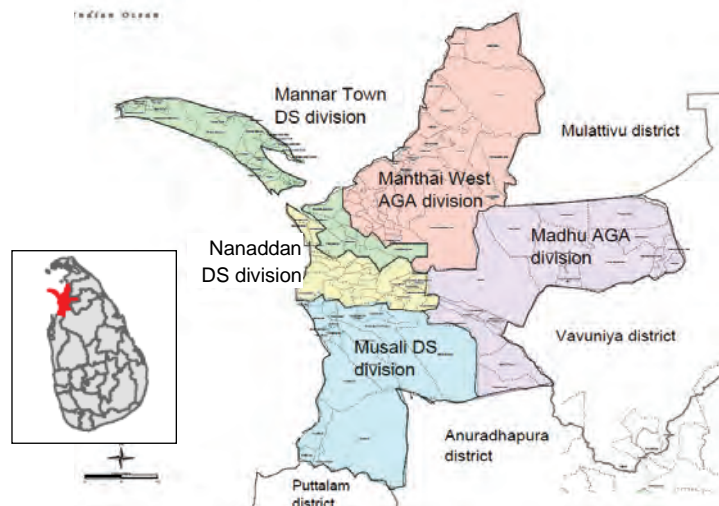


Figure 1.2 Map of Mannar District

In addition, the number of target communities for implementing the Pilot Projects was set at 10 GN Divisions, taking the size suitable for Japan's Official Development Assistance (ODA) and beneficiary population into account.

1.5 Project Period

The Project period to implement Pilot Projects and formulate the Road Map is 30 months, from April 2010 until September 2012.

The original Project period is 19 months, from April 2010 until October 2011. The period is, however, extended until September 2012, due to the delay in construction works implemented as the Pilot projects. The formulation of the Road Map was completed by the end of May 2012.

1.6 Organizational Structure of the Project

(1) Structure of the Project Implementation

The counterpart organization of the Project at the central level is the Ministry of Economic Development (MOED) (former Nation Building and Estate Infrastructure Development: MNB&EID⁵) and the one at the district level is the District Secretariat of Mannar. The organizational structures of the counterpart organizations of the Project are given below. The shaded posts are direct counterparts of the Project.

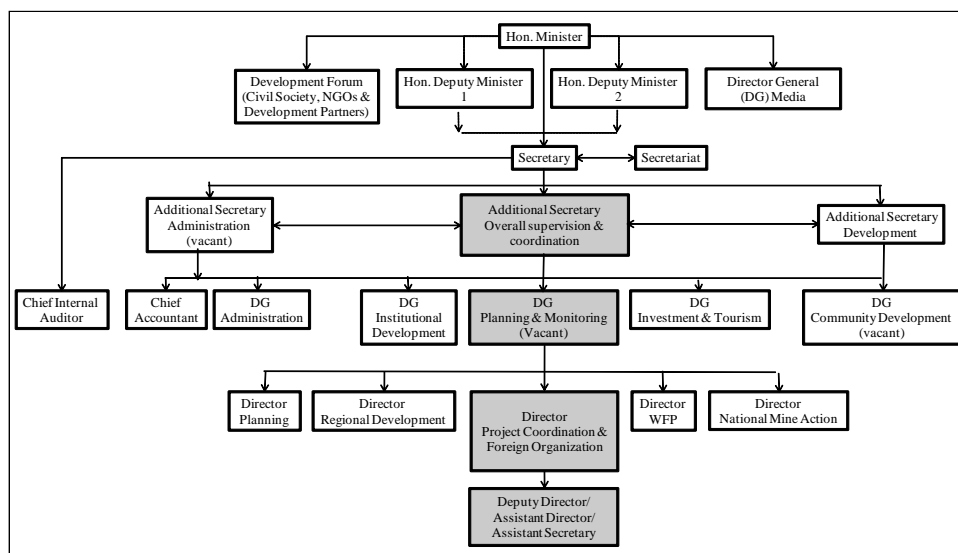
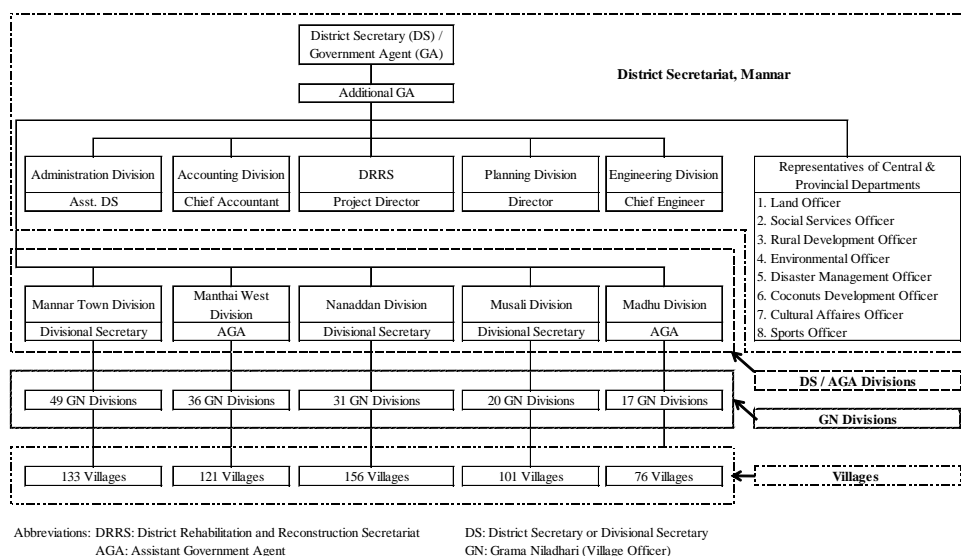


Figure 1.3 Organizational Structure of the Ministry of Economic Development⁶



Abbreviations: DRRS: District Rehabilitation and Reconstruction Secretariat
 DS: District Secretary or Divisional Secretary
 AGA: Assistant Government Agent
 GN: Grama Niladhari (Village Officer)

Figure 1.4 Organizational Structure of the District Secretariat of Mannar

⁵ After the general election in April 2010, the ministries were reshuffled and the Ministry of Nation Building and Estate Infrastructure Development (MNB&EID) was merged into the Ministry of Economic Development (MOED).

⁶ Posts below a Director General level that are not relevant to the Project are omitted from the figure. This figure shows the posts as of December 2011.

The following are the counterparts of the Project. They are high-ranking officers at the MOED, District Secretariat, Mannar and relevant government offices with which the Project Team concludes the Minutes of Understanding (MOU) on handing over the facilities rehabilitated/ reconstructed under the Project.

Table 1.1 List of the Counterparts

	Name	Field of Specialty	Affiliation	Designation
1	Mr. Nihal Somaweera	Planning & Development	Overall supervision & coordination, MOED	Additional Secretary
2	Mr. Alexi Gunasekera	Planning & Development	Project coordination & Foreign organization, MOED	Director
3	Mr. N. Sarath Ravindra	Administrator	District Secretariat, Mannar	District Secretary/ Government Agent
4	Mr. M. Paramathas	Administrator	District Rehabilitation and Reconstruction Secretariat (DRRS)	Project Director
5	Mr. S. Yahananthan	Planning	District Planning Division	Director
6	Mr. R.M.M Munasinghe	Engineer	District Engineering Division	District Engineer
7	Mr. S. Skanthakumar	Administrator	Manthai West AGA Division	Assistant Government Agent
8	Mr. F.C. Sathayajothy	Administrator	Madhu AGA Division	Assistant Government Agent
9	Mr. S. Varapiragasam	Chairman of elected body	Manthai West Pradeshiya Sabha	Chairman
10	Mr. Martin Dias	Chairman of elected body	Mannar Pradeshiya Sabha	Chairman
11	Mr. A.T. Anburaj Lambert	Chairman of elected body	Nanaddan Pradeshiya Sabha	Chairman
12	Mr. M. Jehanathan	Agriculture Officer	Department of Agriculture (DOA), Mannar	Deputy Director
13	Mr. G.S. Mangalathan	Cooperative Officer	Department of Cooperative Development, Mannar	Assistant Commissioner
14	Mr. B. Miranda	Fishery Officer	Department of Fishery and Aquatic Resources (DFAR), Mannar	Assistant Director
15	Dr. (Ms) K. Yogarajah	Veterinary Surgeon	Department of Animal Production and Health (DAPH), Mannar	Assistant Director
16	Mr. N. Sivalingam	Engineer	Department of Agrarian Development (DAD)	Assistant Commissioner
17	Mr. N. Krishnaruban	Engineer	Irrigation Department (ID) (Central), Murunkan	Irrigation Engineer

As a managerial structure of the Project, the National Steering Committee (NSC) is established at the central level and the District Steering Committee (DSC) is established at the district level. The NSC's functions are: (a) to monitor overall project progress, (b) to coordinate concerned ministries, and (c) to report progress of the Project and seek advice from the Presidential Task Force for Resettlement, Development and Security - the Northern

Province (PTF). The DSC’s functions are: (a) to monitor progress of each activity, (b) to review working plans such as selection of the target communities and pilot projects, and (c) to coordinate the concerned organizations. The members of these committees are illustrated in Figure 1.5.

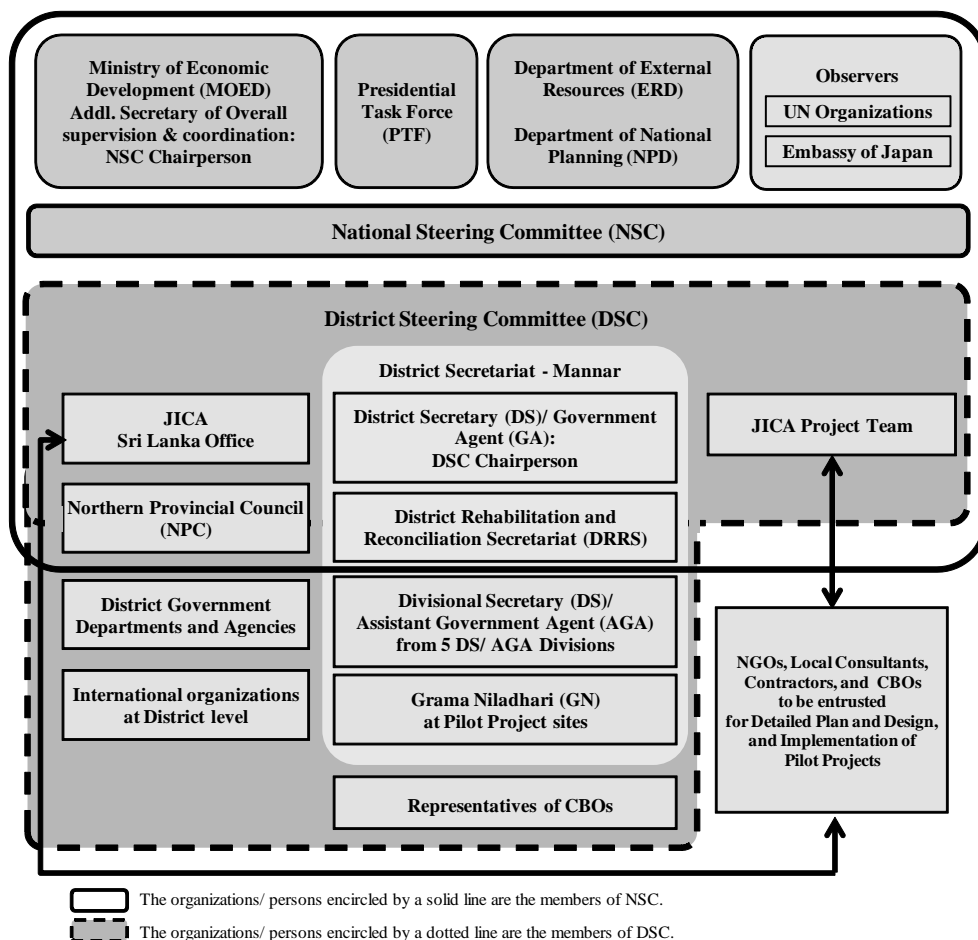


Figure 1.5 Managerial Structure of the Project

(2) The Project Team

The Project Team launched the work on 18 April 2010. The members of the Project Team and their expertise are given in Table 1.2.

Table 1.2 Members of the Project Team and their Expertise

No.	Name	Expertise
1	Yukinori SANO	Project Manager/ Community Development
2	Mayumi HACHISUKA-MATSUI	Community Infrastructure Planning 1 (Social Services)/ Support for the Community/ Consideration on the Vulnerable
3	Shinya TAKAHASHI	Community Infrastructure Planning 2 (Water Supply)
4	Teruhiko NIBE	Livelihood Support/ Livelihood Development 1 (Agriculture)
5	Ibrahim ALLAHPICHAY	Livelihood Support/ Livelihood Development 1 (Fishery)
6	N. A. DHARMASENA	Construction Supervision, Procurement, and Cost Estimate

No.	Name	Expertise
7	Akihito SAKURAI	Environmental and Social Considerations
8	Tomoko TAMURA	Social Survey
9	Takuya SAISHO	Social Consideration 1
10	Yoshinori IKEDA	Project Coordination/ Social Considerations 2
11	Kiyoko TERAHATA/ Hidemaro SAIGA/ Shigeru MORITA	Subcontract Management

1.7 Planned and Actual Schedule of the Project Implementation

The schedule of the Project implementation is shown in Figure 1.6⁷.

1.8 Structure of the Report

This report consists of seven (7) chapters including this chapter. It is written along the process of the Project implementation described in Figure 1.1 and 1.6. Chapter 2 mainly focuses on the conditions of the Project area, namely Mannar District, after the conflict terminated and resettlement of IDPs started. Taking the survey results and information gathered in Chapter 2 into account, the development visions, strategies and approaches to promote resettlement of IDPs are formulated. Details of the development visions, strategies and approaches, and the concept of the Road Map are presented in Chapter 3. Chapter 4 presents the implementation process and the achievement of the Pilot Projects, whose main purpose is to verify the effectiveness of the strategies and approaches proposed in the previous chapter. The effectiveness of the strategies and approaches is evaluated by the information gathered from the Baseline Survey and Endline Survey, and the results of the evaluation and lessons learned from the implementation of the Pilot Projects are presented in Chapter 5. Those lessons learned and the survey results are incorporated into the Road Map, which is presented in Chapter 6. Chapter 7 delivers the lessons learned and recommendations obtained from the implementation of the Project.

⁷ The planned schedule presented in this section is the original schedule shown in the Inception Report of the Project. The planned schedule was revised afterwards based on the agreement between the GOSL, JICA and the Project Team.

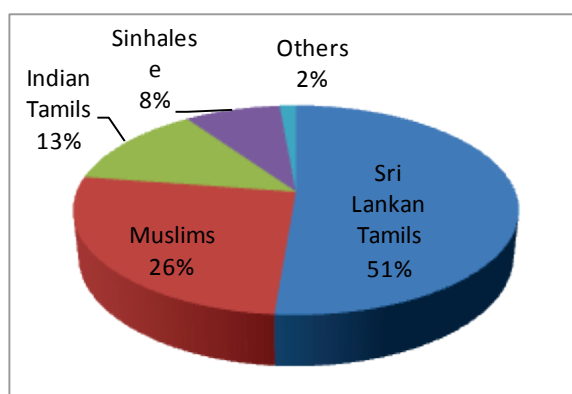
CHAPTER 2 CONDITION OF THE PROJECT AREA AFTER RESETTLEMENT OF IDPS

2.1 General Conditions of Mannar District after the Conflict⁸

2.1.1 Demographic and Natural Data

(1) Population and Area Extent

According to the 1981 Census conducted by the Department of Census and Statistics of Sri Lanka, the population of Mannar District was 106,235⁹. The following figure shows the ethnic composition of the population. The total area extent of the District was 2,002 km² and the average population density was 33 persons/ km² at the time of the above-mentioned Census.



Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Figure 2.1 Ethnic Composition of Mannar District in 1981

The population of the District as of the end of December 2009 was as shown in the following table.

Table 2.1 Population of Mannar District as of December 2009

Place of Residence	Population
Displaced	16,690
Economically Affected Non-Displaced	8,774
Resettled	68,497
Total	93,961

Source: Statistical Handbook 2010, Mannar District, District Planning Secretariat

⁸ Data and information presented in this chapter were mainly gathered during the initial survey conducted from May to November 2010.

⁹ Census of Population and Housing 2001, the Department of Census and Statistics, Sri Lanka (www.statistics.gov.lk/). No census was conducted in Mannar District after the 1981 census due to conflicts.

Taking the progress of resettlement into consideration, the District Secretariat of Mannar District estimates the population of Mannar District, which consists of (1) people residing in the District, (2) displaced persons from other Districts, and (3) those in India, to be 163,289 in 2011¹⁰.

Table 2.2 shows the area extent, number of households and population of the DS/ AGA Divisions of Mannar District as of the end of December 2009. The number of households and the population of Musali DS Division and Manthai West AGA Division only include the number of those who had resettled.

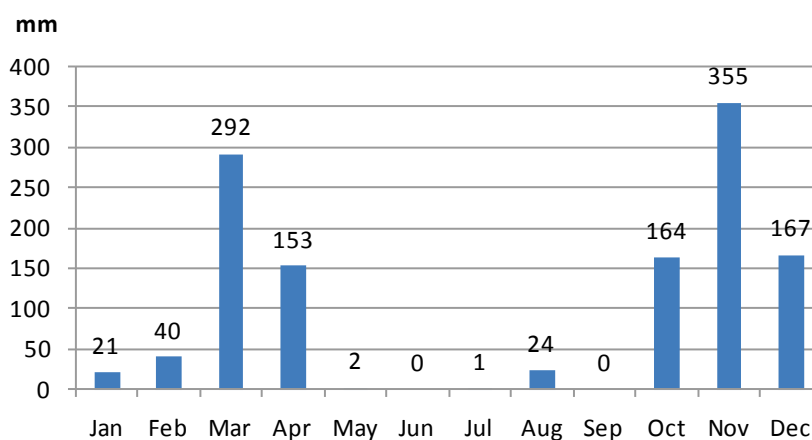
Table 2.2 Area Extent and Population of the DS/ AGA Divisions in Mannar District as of December 31, 2009

DS/ AGA Division	Km ²	No. of households	Population ¹¹
Mannar Town	227	15,121	54,345
Nanaddan	129	6,104	20,776
Musali	474	2,034	8,367
Manthai West	659	686	2,423
Madhu	513	2,450	8,050
Total	2,002	26,395	93,961

Source: Statistical Hand Book 2010, Mannar District, District Planning Secretariat

(2) Climate

Mannar District lies in the Dry Zone area and the climate is characterized by high temperature and low rainfall. The temperature ranges from 28°C to 33°C. The following figure shows the monthly total rainfall in 2008.



Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Figure 2.2 Monthly Rainfall of Mannar District in 2008

¹⁰ Source: District Planning Secretariat, Mannar District.

¹¹ "Population" consists of those who have been (1) displaced, (2) economically affected but not displaced, and (3) resettled.

(3) Topography and Soils

The land of Mannar District is relatively flat and of low elevation towards the interior. The land is gently undulating thus favoring the storage of rainwater in several small tanks. Five major soil groups were identified in the District, as shown in Table 2.3. Mannar Island and the area along the coast have sandy soil (Regosols). Saline and marshy land is seen in the coastal areas. There is a dark clay soil (Grumusols) in the center of the District, which is ideal for paddy cultivation. Towards the interior of the District, there is a well-drained deep red-yellow latosol and reddish brown earth. The area is suitable for cultivation of perennial crops, Other Field Crops (OFC) and paddy.

Table 2.3 Soils of Mannar District

Nature of Soil	Area Extent (ha)	Percentage
Red-yellow latosol	53,460	29%
Reddish brown	51,840	28%
Alkaline and saline	29,160	16%
Alluvial	25,920	14%
Grumusols-clay soil	22,680	12%

Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

(4) Vegetation

There is quite limited information on vegetation in Mannar District. The arid zone forests and shrubs consist of 65% of the total land area, followed by agricultural land (17%) and other land uses (18%). Forest areas are mainly found in Musali, Manthai West and Madhu DS/ AGA Divisions. The area consists of arid zone forest, patches of arid zone dry thorn scrub, arid zone pastures and maritime grasslands, numerous irrigation tanks, sand dunes, and coastal and marine wetlands.

(5) Flora

The arid zone forests and dry shrub land are the major vegetation types that can be observed in inland areas. The vegetation in thorn scrub consists of two distinct strata; a tree layer dominated by *Acacia planifrons*, *Salvadora persica* and *Tamarindus indicus*, and a shrub layer with species such as *Azima tetraacantha*, *Cassia auriculata*, *Dichrostachys cinerea*, and *Flueggea leucopyros*.

The open areas consist of arid zone pastures and grasslands, which are dominated by grasses (i.e. *Cynodon dactylon*) and sedges (i.e. *Cyperus rotundus*). These open areas are dynamic ecosystems that are transformed into seasonal water bodies during the rainy season.

The shallow seasonal water holes contain algal species and submerged vegetation such as

Najas marina. The single perennial tank in the area is home to floating plants such as *Nymphaea stellata* and *Nelumbo nucifera*. The patches of degraded mangrove in this area are dominated by species adapted to high-saline conditions (i.e. *Avicennia marina*). The shallow margins of lagoons are covered with patches of salt-marsh vegetation consisting of *Halosarcia indica*, *Salicornia brachiata* and *Suaeda* spp. The sand dunes and sandy sea-shore adjoining the lagoon support vegetation dominated by *Spinifex littoreus* and *Hydrophylax maritima*. The shallow lagoon has patches of sea-grass beds.

(6) Fauna

The noteworthy animal varieties of mammals, birds and reptiles are shown in **Appendix 1**. Terrestrial shrubs are the habitat of the mammals and terrestrial reptiles, and the catchment of the Giant's Tank is the ideal habitat for Asian Elephant. Numerous irrigation tanks provide an ideal habitat for aquatic birds and many kinds of migratory waders and waterfowls inhabit the coastal areas. Native fish harvested by local fishermen include Butter catfish (*Ompok bimaculatus*), Olive barb (*Puntius sarana*), Long-snouted barb (*Puntius dorsalis*) and Asian Stinging catfish (*Heteropneustes fossilis*).

(7) Protected Areas

Under the Flora and Fauna Protection Ordinance, as amended by Act Nos. 44 of 1964, 1 of 1970, 49 of 1993 and 22 of 2009, the Department of Wildlife Conservation classifies the protected areas in Sri Lanka into eight (8) categories, according to their objectives: 1) strict nature reserves, 2) national parks, 3) nature reserves, 4) jungle corridors, 5) refuges, 6) marine national parks, 7) buffer zones, and 8) sanctuaries.

There are three (3) sanctuaries in Mannar District, namely, Giant's Tank, Valankai and Madhu Road. The details of the three (3) sanctuaries are listed in Table 2.4 and shown in Figure 2.3.

Table 2.4 Sanctuaries in the Project Area

No.	Name of Sanctuary	Location	Characteristics
1	Madhu Road	Madhu area	Almost all the area is covered with forest land
2	Giants Tank	Catchment of The Giant's Tank	The shallow areas of the tank and the arid zone forests and dry scrubland in the surrounding area
3	Valankai	Along the coastline	Clusters of coastal and marine wetlands

Source: Forest Department of Sri Lanka

The Forest Ordinance No. 16 of 1907 (amended by Act No. 13 of 1966) and subsequent amendments make provisions for the establishment of forest reserves, conservation forests and for the protection of other state forests and their products. The forest reserves, conservation forests and other state forests are managed by the Forest Department. The

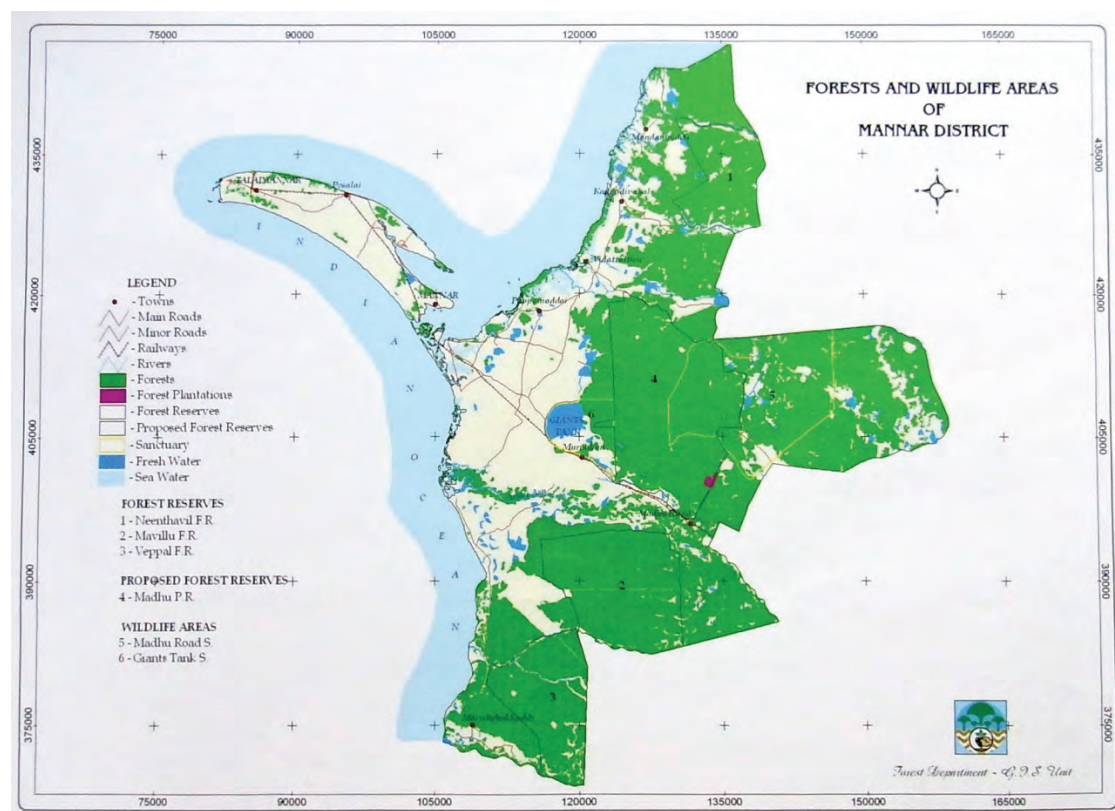
forest reserves in the Project Areas are listed in Table 2.5 and shown in Figure 2.3.

Table 2.5 Forest Reserves in the Project Area

No.	DS / AGA Division	Name of Forest	Extent (ha)
1	Mannar Town	N.A.	N.A.
2	Nanaddan	Veppal Forest Reserve	10,114.12
3	Musali	Mavillu Forest Reserve	437.07
4	Manthai West	Neenthavil Forest Reserve	7,720.35
5	Madhu	Madhu Proposed Forest Reserve	22,425.53
Total			40,697.07

N.A.: Not applicable

Source: Statistical Hand Book 2008 Mannar District, District Planning Secretariat

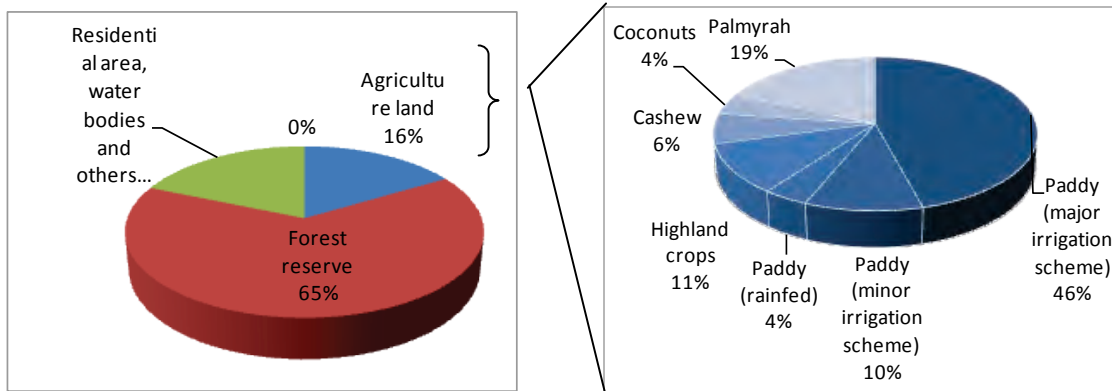


Source: Forest Department of Sri Lanka

Figure 2.3 Forests and Wildlife Areas of Mannar District

2.1.2 Livelihood and Land Use

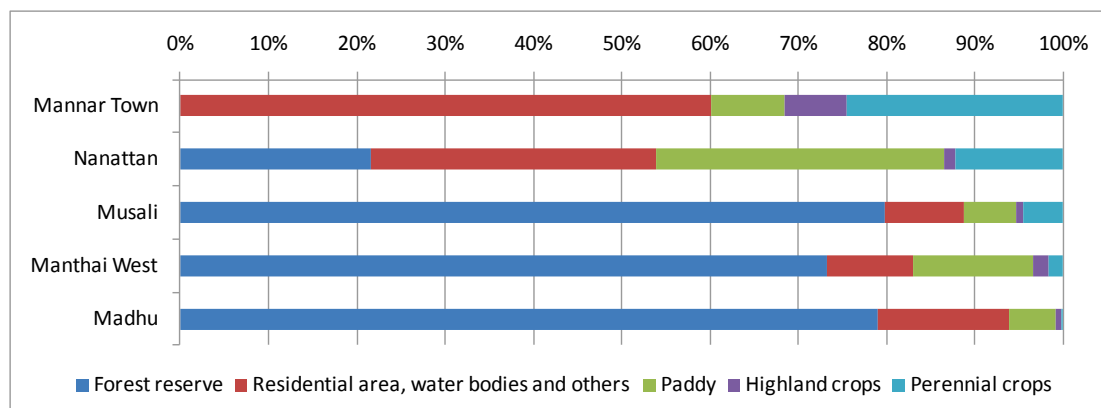
70% of the population of the District is engaged in cultivation, while 25% is engaged in fishing and 5% in other activities¹². The following figure shows the land use patterns of the District in 1997.



Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Figure 2.4 Land Use Pattern of Mannar District in 1997

Figure 2.5 shows the land use pattern of the DS/ AGA Divisions. More than 60% of the land of Mannar Town DS Division, which includes the Mannar Urban Council area, is used for residential purposes. The Division has limited land for agriculture and forestry. Nanattan DS Division has the highest percentage of paddy land among the DS/ AGA Divisions of the District. Most of the land of the other DS/ AGA Divisions, namely Musali, Manthai West and Madhu, is used as forest reserves. Among these three DS/ AGA Divisions, Manthai West AGA Division has the highest percentage of paddy land.



Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Figure 2.5 Land Use Pattern of the DS Divisions of Mannar District

¹² Source: Statistical Hand Book Mannar District 2009, District Planning Secretariat

2.1.3 Social Services and Related Infrastructure (Water Supply, Road and Transport, Electricity Supply, Health and Education)

(1) Water Supply

In Mannar District, water supply systems under the National Water Supply & Drainage Board (NWS&DB) are in (1) Mannar Town, (2) Erukalampiddy (Mannar Town DS Division), (3) Vankalai (Nanaddan DS Division) and (4) Thiruketheswaram (Mannar Town DS Division), and a few villages have water supply schemes. However, village water supply schemes have all been damaged by the conflicts. Village water supply schemes at Adampan and Vilattaltive in Manthai West AGA Division are totally destroyed. The identified water sources for drinking purposes at the village level are dug well, tube well and rain water harvesting.

Of these sources, the dug wells are most commonly and widely used in the target area for drinking and domestic purposes. The tube wells identified are the ones that were constructed by the previous JICA project, MANRECAP. All of the tube wells had been damaged during the conflict and are not currently usable. Rain water harvesting facilities have also been equipped at public facilities in the target areas. However, all of those are damaged and unusable.

Because of this situation, dug wells are virtually the only water source for drinking and domestic purposes in the area. In Manthai West AGA Division, most of the well water is more or less saline. In the coastal villages, the salinity of well water is higher than the allowable limit for drinking and drinking water is supplied by bowser by Pradeshiya Sabha.

(2) Road and Transport

Table 2.6 shows the length and status of rehabilitation of the “Class A” and “Class B” roads in Mannar District, which are maintained by the Road Development Authority of the Central Government. Figure 2.6 shows the locations of the roads. Among these roads, A14 and B299 have been under rehabilitation since June 2010.

Table 2.6 Length of “Class A” and “Class B” Roads and Status of Renovation

DS Division	Name of the roads	Route No.	From (km)	To (km)	Length (km)	No. of bridges	No. of culverts	Status of renovation as of June 2010
Mannar Town	1 Madawachchiya-Mannar-Talaimannar Road	A14	66.5	114.8	48.3	1	87	Work in progress. Completed except for 1.5Km near Talaimannar & 78 - 81Km.
	2 Navatkuly-Kerative-Mannar Road	A32	92.7	98.4	5.7	0	0	To be implemented by China Harbor Company
	3 Erukkalampiddy Causeway Road	B119	0	0.8	0.8	0	2	Completed
	4 Mannar Railway Station Road	B306	0	3.9	3.9	0	7	Planned but not yet done
	5 Mannar Market-St. Sebastian Road	B270	0	2.3	2.3	0	4	Planned but not yet done
	6 Nadukudhah Road	B301	0	2.4	2.4	0	2	Planned but not yet done
	7 Pallimunai Road	B352	0	1.3	1.3	0	6	Planned but not yet done
	8 Thallady-Arippu-Marichchukaddi Road	B403	0	0.8	0.8	0	0	Planned but not yet done
Nanaddan	1 Madawachchiya-Mannar-Talaimannar Road	A14	53.9	66.5	12.6	0	30	Planned but not yet done
	2 Murunkan Chilavathurai Road	B299	0	7.2	7.2	1	14	On going
	3 Thallady-Vankalai-Nanattan Road	B403	0.8	12.8	12.0	1	23	Planned but not yet done
	4 Thallady-Arippu-Marichchukaddi Road	B403	12.8	17.2	4.4	0	6	Planned but not yet done
Musali	1 Murunkan-Chilavathurai Road	B299	7.2	15.2	8.0	0	14	On going
	2 Thallady-Arippu-Marichchukaddi Road	B403	19.7	46.7	27.0	1	27	Planned but not yet done
	3 Nanattan-Arippu Road	B403	17.2	19.7	2.5	0	3	Planned but not yet done
Manthai West	1 Navatkuly-Karatu-Mannar Road	A32	55.7	92.7	37.0	0	0	To be implemented by China Harbor Company
	2 Mankulam-Vellankulam Road	B269	29.8	37.8	8.0	0	0	To be planned in future
Madhu	1 Madawachchiya-Mannar-Talaimannar Road	A14	43.4	53.9	10.5	5	21	Planned but not yet done
	2 Puliyaad Irakkam-Madhu Road	B378	0	10.8	10.8	1	11	Planned but not yet done
Total					205.5	10	257	

Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

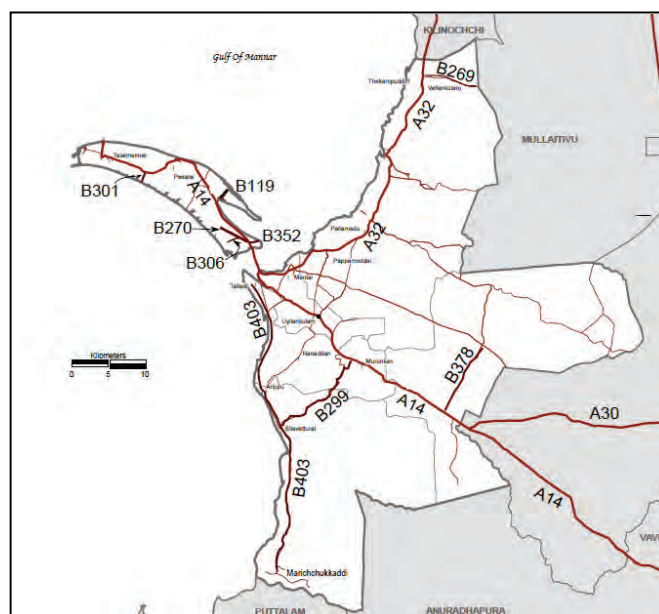


Figure 2.6 Map of the “Class A” and “B” Roads in Mannar District

Table 2.7 shows the “Class C” roads in the District, which are maintained by the Road Development Department of the Northern Provincial Council. Many of these roads are damaged and need rehabilitation. Some of these roads, such as the road from

Premanalankulam via Thambanai via Periyapadivirichchan to Madhu AGA Division and internal roads of Mullikulam in Musali DS Division have not been open to public transport due to security reasons. The Road Development Department usually maintains “Class D” roads in addition to those of “Class C”. However, there are no roads in Mannar District that are classified as “Class D”.

Table 2.7 Length and Number of “Class C” Roads

DS/AGA Divisions	Total Length (km)	No. of Roads	No. of Culverts	No. of Causeways	No. of Bridges
Mannar Town	63.55	25	86	1	6
Nanaddan	19.75	4	49	0	8
Musali	16.95	3	19	1	1
Manthai West	80.50	11	110	9	5
Madhu	75.05	7	61	8	2
Total	255.80	50	325	19	22

Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Table 2.8 shows the lengths of the roads that belong to the local authorities such as the Urban Council and Pradeshiya Sabha.

Table 2.8 Lengths of the Roads Under the Local Authorities

Local Authorities	Total length (km)
Mannar Urban Council	33.4
Mannar Pradeshiya Sabha	174.2
Nanaddan Pradeshiya Sabha	204.9
Musali Pradeshiya Sabha	198.7
Manthai West Pradeshiya Sabha	220.0
Total	831.2

Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

As a result of the Social Survey of the target villages conducted by the Project Team in May 2010, it was identified that most of the rural villages in Mannar District have the following issues with regard to transport services and traveling.

(a) Access to Bus Service¹³

There are several villages away from the main roads. In these areas, the villagers have to walk about 3 km from the village to ride a bus because the bus service is available only at the main road and there is no direct bus service to and from the village.

¹³ There are public and private bus services but no train service in the District.

(b) Frequency of Bus Service

There are very few bus services for the recent IDP returnees in Madhu AGA Division. The bus service is available only twice a day. There is no service at all on some days when the bus is under repair.

(c) Irregularity of the Bus Operation

The bus operation has not been regularized in the villages in Madhu and Manthai West AGA Divisions, where the villagers returned recently between January and March 2010.

(d) Damaged Roads

The damaged roads and the delay in the rehabilitation prevent the bus services from being regularized or increased.

(3) Electricity Supply

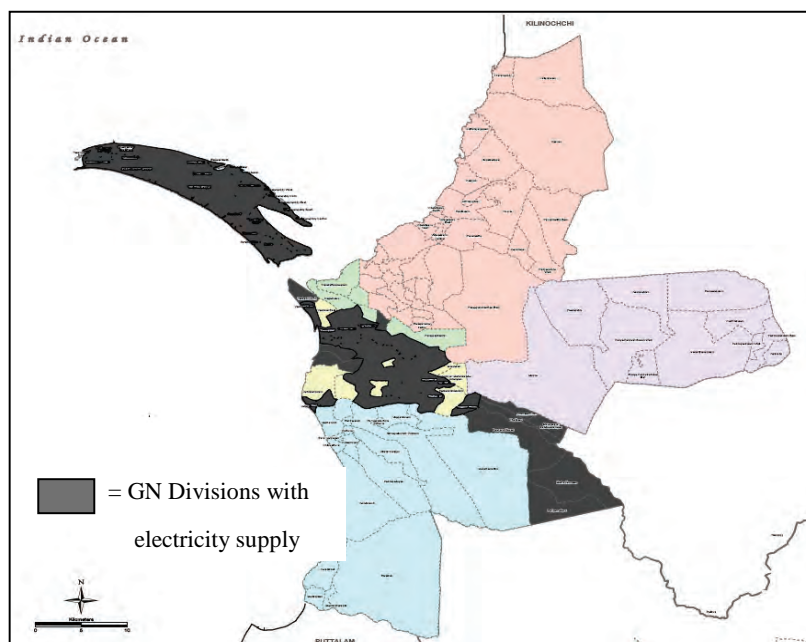
Mannar District is one of the most primitive areas in the country with regard to electrification¹⁴. According to the 2007 Annual Report of the Ceylon Electricity Board (CEB), the electrification rate of the country was 80%, while it was only 37% in Mannar District.

Figure 2.7 shows the GN Divisions, where more than 80% of the households have electricity supply as of April 2010. Table 2.9 shows the number of consumers of electricity in the DS/AGA Divisions in 2008. As the figure and table show, most of the GN Divisions in Mannar Town DS Division, some in Nanaddan DS Division and a few in Musali DS Division and Madhu AGA Division have electricity supply, while no one has electricity in Manthai West AGA Division. The percentages of households that have electricity supply out of the total number of households were 56% and 15% in Mannar Town and Nanaddan DS Divisions, respectively, as of the end of December 2008.¹⁵ The percentages of the same in Musali DS Division and Madhu AGA Division are difficult to define as the total numbers of households in 2008 in the Divisions are either unavailable or very small due to the displacement. In 2009 and 2010, installation work for electricity supply was implemented in several GN Divisions in Musali and Nanaddan DS Divisions, mainly for the households and commercial institutions. The number of electricity connections for the households in the District was increased to 11,525 as of April 2010 from 9,031 in December 2008.¹⁶

¹⁴ The electrification rates varied from 69% to 98% in the Districts of Western, Southern, Central, Sabaragamuwa, North Western and Central Provinces. The rates ranged from 50% to 69% in Uva and Eastern provinces. In the Northern Province, it was 60% and 62% in Jaffna and Vavuniya Districts, respectively, while there is almost no electricity supply in the Districts of Kilinochchi and Mullaitivu.

¹⁵ Mannar Town DS Division: $7,622 / 13,637 = 56\%$. Nanaddan DS Division: $951 / 6,366 = 15\%$.

¹⁶ Divisional-wise data for April 2010 was not available.



Source: Interview to the Divisional Secretary's Offices

Figure 2.7 GN Divisions with Electricity Supply – April 2010

Table 2.9 Electricity Supply in Mannar District – 2008 & 2010

DS/AGA Division Categories	Dec. 2008						Apr. 2010
	Mannar Town	Nanaddan	Musali	Manthai West	Madhu	Total	Total
Households	7,622	951	259	0	199	9,031	11,525
Industries	101	36	07	0	07	151	151
Commercial Centers	906	153	19	5	28	1,111	217
Religious Institutions	72	31	05	06	08	122	122
Street Lamps	507	22	0	0	10	539	539

Source of data on Dec. 2008: Statistical Hand Book 2009, Mannar District, District Planning Secretariat.

(4) Health

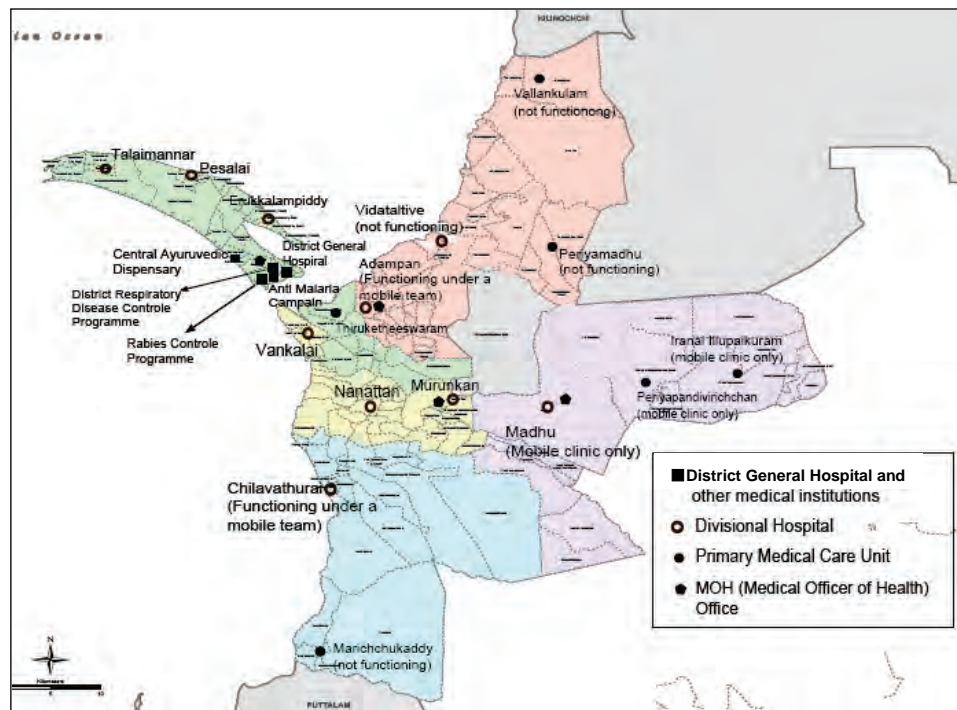
Figure 2.8 shows the medical institutions in Mannar District, including the District General Hospital, Divisional Hospitals, Primary Medical Care Units, Medical Officer of Health (MOH) Offices and other specialized units. Most of the institutions in Manthai West, Madhu and Musali DS/AGA Divisions had been closed for months or years during the conflict and displacement. As Figure 2.8 shows, some of the institutions where the villagers returned recently are not yet functioning or are only functioning under mobile medical teams.

Inadequacy of quarters to accommodate medical staff, in-patient medical wards and out-patient dispensary complexes are some of the serious problems with regard to the

medical institutions in Mannar District.

As a result of the Social Survey of the target villages conducted by the Project Team in May 2010, it was identified that most of the rural villages in Mannar District have the following issues with regard to medical services:

- (a) Maternity clinics are conducted outside under the trees as there are no proper buildings.
- (b) The nearest Primary Medical Care Unit has not been re-opened in the northern part of Manthai West AGA Division. The villagers have to travel 6-8 km to seek medical care, instead of traveling 3 km to the nearest Unit.
- (c) Mobile medical services are not conducted regularly.
- (d) In some villages in Madhu AGA Division, there are no maternity clinics or mobile medical services. The villagers have to go to the General Hospital in Vavuniya for medical services, which is 25 to 34 km away from the villages.



Source: Statistical Hand Book 2009, Mannar District, District Planning Secretariat

Figure 2.8 Map of Medical Institutions

The Mental Health Unit in the District General Hospital of Mannar has been undertaking mental health care in the District. Currently a doctor, a psychiatric social worker and three community psychiatric nursing officers work for the Unit. They have been working closely with NGOs and the education department in the area to identify people having problems in mental health and to provide them with medical services.

Currently, around 1,500 patients are registered with the Unit and around 600 are under medical care. According to the social worker of the Unit, the numbers of registration and those under medical care have not increased since the termination of the conflict. He considers it is not because the number of people having mental problems has not increased but rather that most such people do not come forward to seek medical care. The cultural background of the country often prevents the family of such people from visiting the Unit or the hospitals because they tend to keep those suffering from mental problems at home.

The school mental health program, which is conducted by the Unit with the collaboration with the Department of Education, contributed to identify children with mental stress or trauma. As a result of the program, the number of children who were referred to the District General Hospital has increased.

At the moment, there is no system or unit in the government to support rehabilitation of the physically handicapped people in Mannar District. NGOs in the area are mainly working to develop this with the support of the District General Hospital.

(5) Education

Table 2.10 shows the number of schools, students and teachers in the DS/AGA Divisions in Mannar District as of June 2010, along with the classifications of the types of schools.¹⁷

Table 2.10 Number of Schools, Students and Teachers as of June 2010

Zone	DS/ AGA Divisions	National Schools				Provincial Schools							
		1AB	No. of students	No. of teachers	Teacher/ student ratio	No. of schools					No. of students	No. of teachers	Teacher/ student ratio
						1AB	1C	II	III	Total			
Mannar Zone	Mannar Town	3	5,942	272	21.8	3	9	8	14	34	10,182	557	18.3
	Nanaddan	0	0	0		2	2	7	10	21	5,257	293	17.9
	Musali	0	0	0		0	2	6	3	11	1,432	92	15.6
	Subtotal	3	5,942	272	21.8	5	13	21	27	66	16,878	942	17.9
Madhu Zone	Mannar Town	0	0	0		0	0	2	1	3	168	13	12.9
	Manthai West	0	0	0		2	5	5	12	24	3,411	172	19.8
	Madhu	0	0	0		0	1	10	4	15	1,023	57	19.9
	Subtotal	0	0	0		2	6	17	17	42	4,602	242	19.0
Total		3	5,942	272	21.8	7	19	38	44	108	21,480	1,184	18.1

Source: The Office of Zonal Director of Education of Mannar and Madhu Zones

¹⁷ Types of schools:

Type 1AB: Schools with classes up to grade 13 including 'A' level science stream.

Type 1C: Schools with classes up to grade 13 without 'A' level science stream.

Type II: Schools with classes up to grade 11.

Type III: Schools with classes up to grade 5.

Most of the schools were recommenced soon after the resettlement. All the schools in the target GN Divisions were re-opened and are functioning as of June 2010. As a result of the Initial and Social Survey conducted by the Project Team in May 2010, it was identified that the schools in rural villages in the District have the following issues with regard to education:

- (a) School buildings and teachers' quarters were damaged fully or partly in most of the schools in Manthai West, Musali and Madhu DS/AGA Divisions. Currently, the students are studying under trees or in temporary buildings.
- (b) There is a shortage of teachers for the subjects of English, Mathematics and Science in most of the schools in the rural areas, and some schools are still to be opened.
- (c) Most of the schools do not have proper buildings and equipment for libraries, science labs, auditoriums, etc.
- (d) Most of the schools do not have a sufficient number of toilets.
- (e) Safe drinking water is not available in several schools.
- (f) There are no appropriate transport services for schooling. Bus services are very rare and not regularized. The school children currently use an army truck for busing in a target village.
- (g) Most of the preschool buildings in the villages were damaged. Preschool activity is currently conducted under the trees or in damaged buildings.

The Project Team also found that only a few works for reconstruction and repairs of the damaged school buildings and teachers' quarters have been started as of June 2010, although several NGOs and donor agencies plan to undertake the works.

The building of the Zonal Educational Office (ZEO) of Madhu Zone had been destroyed. Currently, the officers of ZEO are working in a building of a vocational training center built by Bridge Asia Japan (a Japanese NGO), which is not suitable for an office building.

2.1.4 Economic Activities and Related Infrastructure (Agriculture, Livestock, Irrigation, Fisheries, Cooperatives)

(1) Agriculture

Agriculture is a major industry in Mannar District, however, agriculture-related activities had deteriorated due to the prolonged conflicts. Although agriculture production partially recovered after the CFA in February 2002, it again declined after the heavy battles resumed in 2006.

The status of major components in agriculture, namely paddy, OFC, livestock and Farmer Organizations (FO) in Mannar District for the last several years is as follows.

(a) Paddy

During the period of the last 10 cropping seasons from 2004/05 Maha to 2009/10 Maha, the cultivation extent and production decreased after 2006 Yala to 2009 Yala. The last cultivation of 2009/10 Maha was the highest in yield and production, and second largest in extent of cultivation next to the 2004/05 Maha and 2005/06 Maha according to the Department of Census and Statistics as shown in the following table.

**Table 2.11 Paddy Cultivation Yield and Production in Mannar District
2004/5 Maha-2009/10 Maha**

	Gross Extent Sown (ha)				Gross Extent Harvested (ha)				Average Yield/ Net (kg/ha)				Total Production (ton)
	Major Tank	Minor Tank	Rain-fed	All Schemes	Major Tank	Minor Tank	Rain-fed	All Schemes	Major Tank	Minor Tank	Rain-fed	Avg. Yield	
2004/05 Maha	8,117	1,388	24	9,529	8,117	1,388	24	9,529	4,236	4,127		4,203	38,240
2005 Yala	958	135		1,093	939	132		1,071	4,141	3,815		4,101	4,194
2005/06 Maha	8375	1,334	6	9,715	8,040	1,280	6	9,326	4,251	3,234		4,108	36,584
2006 Yala ¹	43	5		48	43	5		48	4,100	3,777		4,067	185
2006/07 Maha	4830	837		5,667	4,637	805		5,442	3,924	3,584		3,874	20,130
2007 Yala	821	22		843	812	22		834	4,251	3,234		4,224	3,366
2007/08 Maha	4410	484		4,894	2,301	380		2,681	3,707	3,234		3,640	9,317
2008 Yala	920	64		984	828	58		886	4,288	4,288		4,288	3,626
2008/09 Maha	4937	416		5,353	4,937	416		5,353	3,707	3,234		3,670	18,758
2009 Yala ²				0				0					
2009/10 Maha	7412	681		8,093	7,412	681		8,093	5,403	5,403		5,403	41,755
Yala Average	686	57		594	656	54		568	4,195	3,779		4,170	2,843
Maha Average	5,993	750	6	6,744	5,465	712	6	6,179	4,198	3,738		4,139	25,309

Note: 1: Estimation 2: No cultivation

Source: Reorganized from "Paddy statistics- Extent, Sown, Harvested, Average Yield and Production (2004/5 Maha to 2009/10 Maha) by District", the Department of Census and Statistics

The Government provided the farmers in the District with substantial subsidies for paddy cultivation such as seed paddy, fertilizer and expenses for land preparation, which brought higher yields in the last Maha (2009-10) paddy cultivation compared to the results of the last several cultivation seasons. The subsidy scheme was applied mainly in the Rice Bowl area where farmers had returned earlier. Farmers in the area have cultivated in Yala (2010) in water-available fields. The subsidy scheme was applied in 2010/11 Maha for paddy areas in Manthai West and Madhu AGA Divisions.

(b) Other Field Crops (OFC)

Coconut, fruits and vegetables are cultivated at homesteads and in highland conditions. Chilli has the largest extent cultivated in Mannar District on average from 2005 to 2009 according to the Department of Census and Statistics, followed by groundnut and cassava.

Tables 2.12 and 2.13 show the cultivation extents and production of OFCs in Mannar District.

Generally after 2007, the crop cultivation extent decreased until 2009 during the conflict and accordingly production decreased as well. OFCs are mainly cultivated in Maha season. However, they are also cultivated in Yala season depending on water availability by irrigation. Yala cultivation extent is about half of Maha in general.

Table 2.12 OFC Cultivation and Production in Mannar District, 2005-2009

		Extent (ha)					Production (ton)				
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Green Gram	Yala	19	15	4	3		20	16	4	3	
	Maha	21	22	10	16	13	21	23	10	16	14
	Total	40	37	14	19	13	41	39	14	19	14
Cowpea	Yala	2		1	2		2		1	2	
	Maha	1	4	3	17	20	2	4	3	21	25
	Total	3	4	4	19	20	4	4	4	23	25
Black Gram	Yala	13	1				14	1			
	Maha	37	27	11	25	17	40	30	12	27	17
	Total	50	28	11	25	17	54	31	12	27	17
Groundnuts	Yala	56	15	11	11		61	16	12	12	
	Maha	55	65	33	8	35	60	41	41	9	38
	Total	111	80	44	19	35	121	57	53	21	38
Manioc (cassava)	Yala	25	16	10	10		256	164	101	106	
	Maha	35	38	19	15	17	300	344	167	161	236
	Total	60	54	29	25	17	556	508	268	267	236
Sweet Potatoes	Yala	4	1	3	2		40	10	25	18	
	Maha	6	5	4	2	3	9	7	34	15	30
	Total	10	6	7	4	3	49	17	59	33	30

Source: Reorganized from "OFC cultivation, Extent (ha) & Production (ton) - Year 2005 to 2009 by the District", the Department of Census and Statistics

Table 2.13 Condiment Crops in OFC Cultivation and Production in Mannar District, 2005-2009

		Extent (ha)					Production (ton)				
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Chilli (Green)	Yala	45	40	17	16		102	91	40	36	
	Maha	114	78	36	27	34	260	179	83	63	79
	Total	159	118	53	43	34	362	270	123	99	79
Red Onion	Yala	19	7	11	4		81	30	50	18	
	Maha	18	17	10	11	4	81	74	42	44	23
	Total	37	24	21	15	4	162	104	92	62	23
Big Onion	Yala	4	3	2			32	24	19		
	Maha	2	1			1	12	3			5
	Total	6	4	2		1	44	27	19		5

Source: Reorganized from "OFC cultivation, Extent (ha) & Production (ton) - Year 2005 to 2009 by the District", the Department of Census and Statistics

Among the perennial fruits and nuts, cashew has the largest extent followed by banana (plantain) and mango as shown in Table 2.14. During this period, cultivation extent and production of the perennial crops had also decreased as with paddy.

**Table 2.14 Perennial Fruit & Nut Cultivation and Production
in Mannar District, 2004-2008**

	Extent (ha)				Production (000 Nut)			
	2004/05	2005/06	2006/07	2007/08	2004/05	2005/06	2006/07	2007/08
Mangoes	72	77	34	44	1,198	1,298	470	876
Lime	23	23	13	14	133	153	106	123
Papaw	21	17	13	18	168	121	57	68
Plantain	100	104	81	68	57	59	52	40
Jack fruit	18	20	6	11	10	12	5	6
Cashew*	203	204	110	118	25	55	40	52
Pineapple		1	1	1		2	5	4
Passion fruit				2				20

Note: *: Production (ton)

Source: Reorganized form “Fruits Cultivation, Extent (Hector) & Production (000nut), Year2004/5 - 2007/8”, the Department of Census and Statistics

(c) Livestock

According to the livestock statistics (Table 2.15), the animal population did not change much during the conflict period before 2008. However, in 2008 almost all domestic animals decreased in number. During the meetings on agriculture with the Project Team, CBO members expressed that a large number of animals escaped in most of the villages due to displacement of the farmers in the area. Most of the goats and chickens disappeared except in some villages where the loss was comparatively less. After resettlement, the number of cattle is recovering by catching lost cattle in the jungle with official permission.

Table 2.15 Animal Population, Mannar District, 2003-2009

Unit: head

	2003	2004	2005	2006	2007	2008	2009
Cattle	22,000	23,000	23,500	24,700	24,900	24,050	24,530
Buffalo	1,160	2,100	2,100	2,100	2,100	2,100	600
Goat	7,160	7,780	9,340	9,540	13,760	8,140	8,470
Chicken	102,000	89,300	88,850	93,930	108,190	72,000	76,580
Swine	10	-	70	80	50	40	30
Duck		1,150	772	889	267	1,203	808

Source: Reorganized from “Animal population by District, 2003–2009”, Department of Census and Statistics

Milk production is an important livestock development in Mannar District. The major production areas are Nanaddan and Manthai West DS/ AGA Divisions. There are five

collecting points in Nanaddan DS Division and three points in Manthai West AGA Division at present. The following table shows the milk production in Mannar District.

Table 2.16 Milk Production in Mannar District, 2003-2010

Year	Milk (liter)
2003	205,066.0
2004	461,246.7
2005	N.A
2006	515,498.0
2007	365,190.0
2008	371,782.0
2009	538,860.0
2010	865,802.0

Source: Department of Animal Production & Health (DAPH), Mannar

The major reason for the decrease in production in 2007 and 2008 is that cattle were lost during the conflict period.

There are several Livestock Breeders Cooperative Societies (LIBCO) in Mannar District. Most of them were not active during the conflicts. Out of such LIBCOs, Murunkan LIBCO is actively operating activities, especially milk production-related activities with technical inputs from the Department of Animal Production and Health.

(d) The Role of Farmer Organizations

The Farmer Organization (FO), which is within the purview of the Department of Agrarian Development, functions as the focal point for the farmers in the area on the distribution of government subsidies and assistance in supply of seeds, fertilizer, chemicals, etc. and the registration of tractors through the Agrarian Development Centers (ADC). There were FOs in almost all the villages in Mannar District except in fishing villages and they have been re-organized since the resettlement of farmer communities commenced. However, their activities have not fully resumed since the facilities of the ADCs damaged due to the conflicts have not yet recovered.

(2) Irrigation

In Sri Lanka, irrigation is handled by three different organizations. One is the Central Irrigation Department under the Central Government, which covers irrigation schemes related to the rivers flowing by transcending the boundary of one province. The second is the Provincial Irrigation Department under the Provincial

Government, which is responsible for irrigation schemes related to the rivers in one province with the command area of one scheme greater than 80 ha of extent. The third is the Agrarian Development Department under the Central Government, which is responsible for small irrigation schemes of which the command area is below 80 ha.

Mannar District is historically famous for paddy cultivation because of the Giant's Tank and Akatimurippu Tank, both of which have Aruvi Aru (Malwattu Oya) as their water source, which originates in Anuradhapura District. These two tanks cover major parts of the paddy field in Mannar District except Madhu AGA Division. In particular, the command area of the Giant's Tank is famous as the Rice Bowl area, whose irrigable area is 9,894 ha. The quality of rice and unit yield in the area was one of the highest in Sri Lanka. Irrigation systems in Mannar District are unique in Sri Lanka as the tanks such as the Giant's Tank, Akatimurippu Tank, etc. feed irrigation water to feeder tanks and the feeder tanks directly preside over irrigation. The Giant's Tank serves water to 162 feeder tanks, and Akatimurippu Tank serves 39 feeder tanks. At the southern border of Mannar District with Puttalam District, the Modaragam Aru (river) provides irrigation water to Viyadikulam scheme in Musali DS Division, which is also under the Central Irrigation Department. Before 2010/11 Maha landmines in some area of the Scheme had been cleared and cultivation of approximately 500 acres had commenced.

The Provincial Irrigation Department is responsible for seven irrigation schemes in Mannar District. Most of the schemes except Thachanamaruthamadhu scheme, which is being rehabilitated under the Pro-Poor Economic Advancement and Community Enhancement Project (PEACE) with ODA loan assistance of JICA, are unattended due to landmine issues.

There are a substantial number of minor tanks in Mannar District, which are handled by the Agrarian Development Department.

(3) Fisheries

(a) Marine Fisheries

As indicated in Table 2.17, Mannar District, located in the north, covers a land area of about 1,985 km², inland waters of 11 km² and 163 km of coastline. Sri Lanka's continental shelf covers about 30,000 km²; the wider continental shelf area is found in the northern part of the island covering Jaffna, Mannar and Mullaitivu Districts. The shelf in Mannar and Jaffna Districts is much wider than the rest of the country's coast.

Table 2.17 Area and Length of Coastline of Mannar District

	Land Area (km ²)	Inland Waters (km ²)	Coastline (km)
Mannar District	1,985	11.0	163
Northern Province	6,702	224	486
SRI LANKA	62,705	2943.05	1,730

Source: Fisheries Statistics 2007, Ministry of Fisheries and Aquatic Resources Development (MFARD), 2008

The wider shelf in the north (Mannar and Jaffna Districts) supports significant demersal or bottom-dwelling fish compared with the east and the rest of the country. The shelf is known to provide a relative abundance of demersal fish resources, although large pelagic fish (such as tunas) are less abundant in Mannar and Jaffna Districts compared to other regions.

In 1983, fish production (excluding inland fisheries) of Mannar District was 19,040 tons, which contributed 34% to the Northern Province production (56,700 tons) and around 10% to Sri Lanka's total production of 184,740 tons. However, fish production fell and varied in the last 30 years due to the conflicts. Fish production in 2008 in Mannar District compared with other Districts in the North and Sri Lanka as a whole is shown in Table 2.18 below.

Table 2.18 Fish Production of Mannar District (2008)

Unit: t

Districts	Marine Production	Inland Fisheries & Aquaculture	Total Fish Production
Mannar	7,390	320	7,710
Jaffna	5,830	60	5,890
Kilinochchi	360	-	360
Mullaitivu	260	-	260
Vavuniya	-	260	260
Total (Northern Province)	13,840	640	16,038
Total (Sri Lanka)	274,630	44,490	319,120

Sources: Fisheries Statistics 2009, Department of Fisheries and Aquatic Resources (DFAR), MFARD

The diverse coastal habitats in Mannar District enrich the coastal biodiversity and help to sustain fisheries and other resources on which the livelihoods of thousands of fishermen depend. In addition, many of these habitats such as mangroves help in stabilizing the coast and act as buffers against coastal erosion. The extent of the various coastal habitats or ecosystems in the North is given in Table 2.19.

Table 2.19 Coastal Habitats in Mannar District

Unit: ha

Districts	Mangroves	Salt Marshes	Lagoons	Estuaries
Mannar	413	2813	1392	397
Kilinochchi	770	2422	6277	3781
Jaffna	1088	6524	9978	29613
Mullaitivu	428	1247	4612	3768
Total North	2699	13006	22259	37559

Source: Coastal Zone Management Plan, Sri Lanka – 2003

Major lagoons and estuaries located in Mannar District are listed in Table 2.20. Mannar lagoons/estuaries cover nearly 1800 ha.

Table 2.20 Names of Major Lagoons and Estuaries in Mannar District

	Name of Lagoon	Area (ha)		Name of Estuary	Area (ha)
1	Vidaltivu lagoon	491	1	Aruvi aru	273
2	Kaththalampiddi	438	2	Menal aru	63
3	Periya kalapu	364	3	Uppu aru	61
4	Vankalai lagoon	99			

Source: FAO Fisheries Sector Study of the North-East Province, August 2003

Lagoons have typical brackish water fish and invertebrate groups. Fishes include the grey mullet, milk fish (*Chanos chanos*), *Europlus*, *Tilapia* spp., *Gerridae*, rabbit fish, bony brems, etc. Crustaceans include the shrimps (*P. monodon*, *P. indicus*, *P. semisulcatus*, *Metapenaeus dobsoni*), and mud crab. Oysters and mussels, Beche de mer, etc. are also found in lagoons. Aquaculture operations in Mannar District are limited; the only known activity is that of crab-fattening.

(b) Inland Fish Resources

Fish resources in the inland reservoirs and tanks are dominated by the tilapia species, which constitute the bulk of the inland fish catch. The total extent of perennial tanks in Mannar District and other districts of the North are summarized below in Table 2.21. Tanks over 800 ha are classified as major tanks; those between 200-800 ha are classified as medium tanks and small tanks below 200 ha can either be perennial or seasonal tanks. Mannar District has about 12 major and medium tanks with a total area of 4,070 ha; the major tank in the District, namely the Giant's Tank, covers over 2,240 ha.

Table 2.21 Major and Medium Tanks in the North

District	No. of Major & Medium Tanks	Total Area (ha)
Mannar	12	4,070
Kilinochchi	8	5,793
Mullaitivu	13	4,107
Vauniya	11	7,055
Total	44	21,025

Source: FAO Fisheries Sector Study of the North-East Province, August 2003

(c) Fisheries Cooperative Societies (FCSs) and Their Role in Livelihoods

According to Assistant Commissioner Co-operative Development (ACCD) Mannar, as of December 2009 there are 31 registered FCSs with 8,101 members in Mannar District in the marine sector while there are seven registered freshwater FCSs organized among the fish farmers living close to the Giant's Tank. FCSs in Mannar District, due to historical reasons and non-politicization, have taken a firm root and operate in a real sense of "cooperation" and "self-reliance" in comparison with societies in other parts of the nation. The societies play an important role in relief and reconstruction during conflicts and settlement by accepting and coordinating assistance from international agencies, credit and saving, social services, etc. In spite of displacements of villagers, the societies maintained solidarity in their new environments (mostly in camps), kept their savings safely, and are used where and when necessary for basic daily needs during hard times. FCSs in Mannar District once had Rs 4.65 million in savings as of June of 2004 (available record at Ministry of Fisheries and Aquatic Resources Development: MFARD).

These societies have always been the window to various social and economic activities and the providers of services to the village inhabitants. Now the societies are regrouping and organizing themselves to seek out assistance and to assist people in leading normal lives and recovering the livelihood levels they had before. Three factors influence a society to be an ideal type of organization for use in improving the welfare of fishermen: material items (productive items and office buildings/facilities), membership and management style, and social solidarity. In our analysis of the FCSs in the target villages, the productive items (boats, equipment, nets) and building and facilities are the determinant factors for success of the organization.

(4) Cooperatives

The Cooperative sector, especially Multi-purpose Cooperative Societies (MPCSs) have been playing an important role in the supply of consumable goods including fuels to the people in the area in addition to the FCSs mentioned above.

In addition to the supply of goods, they have been engaged in processing and marketing of agriculture products. A rice mill with a capacity of approximately 1.0 ton per day was operated by an MPCS.

There used to be several agriculture-related cooperatives such as cooperatives on paddy seed production, breeding of cattle, goat, chicks, etc, however, they stopped their activities during the conflict.

2.2 Status and Progress of IDP Resettlement

2.2.1 Brief History of IDPs in the Northern Part of Sri Lanka¹⁸

Major displacements had happened from time to time due to the long-lasting conflict between the Government of Sri Lanka and the LTTE. The first displacement occurred at the time of riots in 1983, uprooting 100,000 people in Colombo alone and 175,000 people towards the outside of the country. Also, between 1987 and 1990, while the Indian Peace Keeping Force was deployed on a mission for the purpose of terminating the operation of the LTTE, tens of thousands of persons fled either to India or other parts of the country to escape the battles. In 1990, another major displacement took place during the LTTE domination of the region, as the LTTE forced back Muslims from the areas. After the collapse of peace talks with the LTTE in April 1995, the Government cleared Jaffna, which caused the evacuation of a large number of IDPs from Jaffna to Vanni. The battle continued until the Ceasefire Agreement (CFA) between the Government and the LTTE was signed under the mediation of the Norwegian government in February 2002. After the CFA was signed, A14 and A30 roads had become a borderline to demarcate the uncleared area from the Government (cleared) area in Mannar District.

The peace talks continued to be unsuccessful and the CFA was terminated in January 2008. With the progress of a military campaign in the North from 2006, those villagers based in Vanni started moving toward the North and became IDPs. Those areas included most of Manthai West and Madhu AGA Divisions, and some villages in Mannar Town and Nanaddan DS Divisions where all the villagers became IDPs. The Government also instructed all the residents from Musali DS Division to move out in order to carry out operations to clear the LTTE from 2007 onward. During this mission most of the Muslims fled to Puttalam District and the Tamils fled to Mannar Town and Nanaddan DS Divisions.

¹⁸ The number of IDPs are mainly based on 'Ethnic Warfare in Sri Lanka and the UN Crisis', William Clearance, Pluto Press, London (2007)

After terminating the CFA, the conflict between the Government and the LTTE resulted in the displacement of more than 260,000 people. Most of those displaced persons were accommodated in camps in Vavuniya.

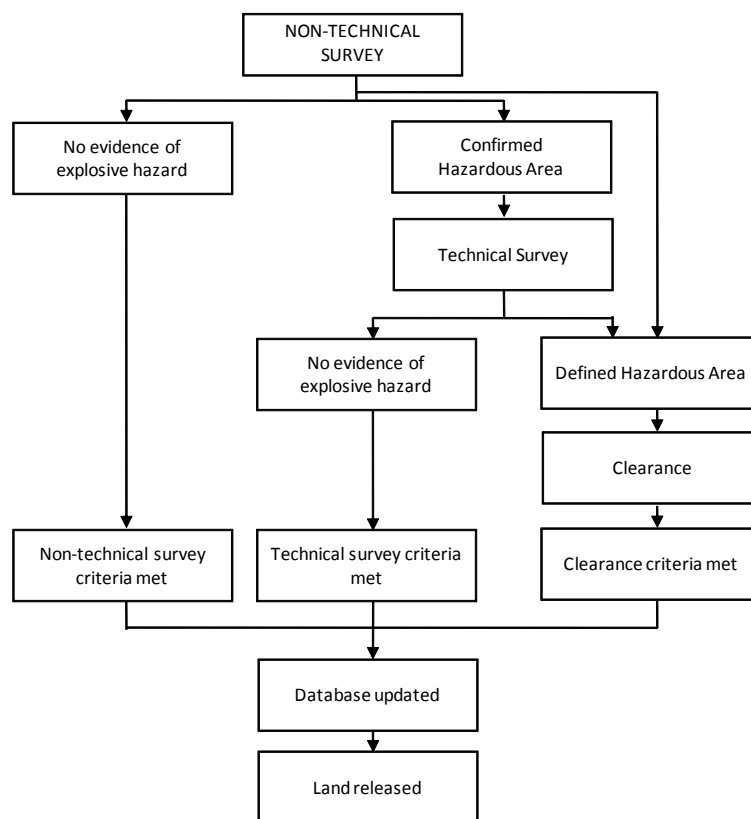
2.2.2 Landmines

Landmines/ Un-Exploded Ordnances (UXOs) are the major obstacles to be cleared prior to the process of resettling those IDPs back to their original homes. Through collaboration among the Government, the District Mine Action Office (DMAO) and demining agencies, the demining work has been under implementation with the following procedure¹⁹, also shown in Figure 2.9 in detail.

- (1) Suspected contaminated areas are prioritized for tasking by GA and other government authorities.
- (2) Tasks are assigned to demining agencies to commence the Non-Technical Survey (NTS) and demining, by the DMAO under UNDP.
- (3) The demining agencies start operations in the area in accordance with the Sri Lanka National Mine Action Standards.
- (4) Once the safety of the area is confirmed by NTS, by desk studies and other forms of non-technical studies including observations in the field and listening to villagers, the land is released²⁰. If the area is identified as contaminated by mines and UXOs, demining operations by the demining agencies commence, followed by the Technical Survey and actual clearing works where required.
- (5) The demining agency declares the demining task as completed and the DMAO conducts the final Quality Control Check.
- (6) The completion Survey Form is cosigned by the GA, the demining agency and the head of DMAO, which is treated as Low Risk Certificate (LRC).
- (7) Land is released for resettlement and livelihood development activities.

¹⁹ The procedure was quoted from 'Mine Clearance Task Cycle ' by the Government of Sri Lanka/ UNDP and modified based on the information collected by the Project Team.

²⁰ There were two types of official documents to certify the low risk areas of mines. One is the Non-Technical Survey Certificate (NTSC). The other is the Low Risk Certificate (LRC). According to UNDP, as of July 2010, NTSC is no longer issued, while the demining status map shows those released areas through NTS.



Source: UNDP presentation data

Figure 2.9 Land Release Process

The size of the tasks of demining works for each district in the Northern and Eastern provinces as of the end of November 2010 is shown in Table 2.22. Mannar District as a whole still bears the second largest task, following Mullaitivu. Most of the residential areas and paddy fields in Mannar District had been cleared of mines and UXOs except in some GN Divisions in Manthai West, Madhu AGA Divisions and Musali DS Division²¹ and IDPs have been resettling. After the completion of the demining work to a large extent in those prioritized areas, the focus has been shifting to the irrigation tank and other essential facilities for returnees' livelihoods. Challenges have been laid on the unidentified mine areas around those spots, whilst they are presently demarcated as Low Risk Areas released through the NTS by the DMAO.

²¹ As far as identified by UNDP, only Mulikulam, due to the existence of a High Security Zone, and part of Kondachchi remains undemined in Musali DS Division.

Table 2.22 Demining Status in Northern & Eastern Provinces

Districts	Completed Tasks					Ongoing Tasks					Planned Tasks
	Number of ERW cleared				Size of Task m ²	Number of ERW cleared				Size of Task m ²	Size of Task m ²
	AP	AT	UXO	Total		AP	AT	UXO	Total		
Ampara	0	0	0	0	0	0	0	0	0	0	0
Anuradhapura	742	0	1	743	0	670	0	5	675	1700000	0
Batticaloa	806	0	143	949	17440374	18	0	4	22	19673411	0
Jaffna	0	0	0	0	0	0	0	0	0	0	0
Kilinochchi	0	0	0	0	0	0	0	0	0	0	0
Mannar	28512	19	11846	40377	402186814	41247	12	2966	44225	410751173	176.03
Mullaitivu	1677	11	5232	6920	646141254	7835	15	1449	9299	514869775	0
Polonnaruwa	0	0	0	0	0	0	0	0	0	0	0
Trincomalee	121	2	656	779	644385	0	0	0	0	0	0
Vavuniya	139	0	338	0	597048319	0	0	0	0	0	0
Total	31997	32	18216	50245	1663461146	88815	96	5929	94840	946994359	176.03

Note: AP: Anti-personnel mine, AT: Anti-tank mine
Source: UNDP District Mine Action Office

2.2.3 Returnees' Movement

Since the Government had commenced the 'Accelerated Returns Programme' on 22 October 2009, the IDPs of Mannar District started to return to their original places according to the demining status, mainly from Manik Farm in Vavuniya (see Table 2.23 for the trend of the number of IDPs in camps).

Table 2.23 The Trend of the Number of IDPs in Camps

Date	2009				2010									
	28-Sep	23-Oct	19-Nov	31-Dec	22-Jan	25-Feb	26-Mar	29-Apr	20-May	29-Jul	26-Aug	8-Oct	2-Dec	
Vavuniya	238,056	205,736	129,103	102,403	101,646	93,926	78,335	73,022	60,900	38,026	32,707	25,051	20,153	
Mannar	1,399	917	2,276	2,096	1,950	1,533	184	185						
Jaffna	7,378	7,401	2,059	3,607	3,662	3,607	3,400	3,361	3,193	2,462	2,239	1,593	1,179	
Trincomalee	6,734	6,303	2,804											
Total	253,567	220,357	136,242	108,106	107,258	99,066	81,919	76,568	64,093	40,488	34,946	26,644	21,332	

Source: UNOCHA

Following the resettlement plan of the Government, the returns in Mannar District had started from resettling in Musali DS Division as Phase I, having shifted to the Rice Bowl area including parts of Musali, Mannar Town and Manthai West DS/AGA Divisions as Phase II, and gradually extended to other parts of Manthai West, Nanaddan and Madhu DS/AGA Divisions.

Table 2.24 shows the number of returnees from April 2009 to November 2010 in Mannar District. Since November 2009, the number of returnees has remained as high as 2,000 to 4,000 on average, hitting its peak in June 2010 with 7,600 returnees.

Table 2.24 The Trend of the Number of Returnees in Mannar District

Year 2009

D.S. Division	April		May		June		July		August	
	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Mannar	21	57	-	-	-	-	-	-	15	89
Nanattan	-	-	8	29	1	7	-	-	32	101
Musali	108	368	1	1	557	2,105	3	23	400	988
Madhu	-	-	-	-	1	3	2	7	-	-
Manthai West	-	-	-	-	-	-	-	-	-	-
Total	129	425	9	30	559	2,115	5	30	447	1,178

D.S. Division	September		October		November		December		Total	
	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Mannar	20	126	55	224	327	796	29	117	467	1,409
Nanattan	2	19	26	120	77	197	-	-	146	473
Musali	75	338	83	434	367	1,965	440	2,145	2,034	8,367
Madhu	2	2	1	1	-	-	-	-	6	13
Manthai West	-	-	1,310	4,403	445	1,308	615	2,139	2,370	7,850
Total	99	485	1,475	5,182	1,216	4,266	1,084	4,401	5,023	18,112

Year 2010

D.S. Division	January		February		March		April		May		June	
	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Mannar	32	187	-	-	24	80	-	-	18	49	118	399
Nanattan	65	211	-	-	13	35	6	28	37	135	62	236
Musali	348	1,231	214	864	78	310	14	51	789	3,093	983	4,433
Madhu	69	223	73	243	45	168	162	721	85	369	459	1,565
Manthai West	130	482	548	1,940	656	2,368	41	142	159	571	228	1,041
Total	644	2,334	835	3,047	816	2,961	223	942	1,088	4,217	1,850	7,674

D.S. Division	July		August		September		October		November		Total	
	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
Mannar	121	489	189	567	21	61	219	963	80	307	822	3,102
Nanattan	29	102	34	126	-	-	30	81	99	375	375	1,329
Musali	301	2,346	1,263	5,050	120	442	80	274	66	256	4,256	18,350
Madhu	133	428	191	457	116	350	346	1,328	305	1,245	1,984	7,097
Manthai West	240	959	101	401	213	922	103	362	95	414	2,514	9,602
Total	824	4,324	1,778	6,601	470	1,775	778	3,008	645	2,597	9,951	39,480

Note: F: Family, M: Family Member
Source: Mannar DRRS

A lion's share of the above number of returnees is from the camps in Vavuniya, whereas the total includes a relatively small portion of returnees from India. The overall situation of IDPs has been gradually rectified and the number of people in transitional states is diminishing towards the end²². In November 2010, the Government declared the end of official return process of IDPs from Manik Farm to Mannar District.

The number of returnees from India is shown in Table 2.25. Either spontaneously or with facilitation by the United Nations High Commissioner for Refugees (UNHCR)²³, 303 individuals in 2009 and 1185 individuals in 2010 returned from India, totaling 1488 returnees resettled in the District over the last two years.

²² According to the Mannar GA office, the population in transitional states was 11,786 in May 2010, which has decreased to 1,168 in October 2011.

²³ Both the spontaneous and the facilitated returnees receive non-food relief items from UNHCR upon their arrival, whereas the latter are also granted their air tickets.

Table 2.25 Refugee Returnees from India Since 1 January 2009 to Mannar District

Month	Mannar Town				Nanattan				Musali				Madhu				Manthai West				Grand Total	
	Spontaneous		Facilitated		Spontaneous		Facilitated		Spontaneous		Facilitated		Spontaneous		Facilitated		Spontaneous		Facilitated			
	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual	Family	Individual
2009 Sub total	52	127	14	40	31	89	6	22	8	21	0	0	0	0	1	4	0	0	0	0	112	303
January-10	6	8	2	7	1	1	0	0	3	8	0	0	0	0	0	0	0	0	0	0	12	24
February-10	19	37	3	16	6	22	3	14	3	14	0	0	1	4	0	0	2	7	0	0	37	114
March-10	11	19	2	9	6	12	7	21	1	2	0	0	0	0	0	0	1	1	0	0	28	64
April-10	13	30	0	0	7	16	4	6	0	0	0	0	1	5	0	0	1	1	0	0	26	58
May-10	19	46	5	22	4	13	2	7	4	17	0	0	0	0	0	0	2	2	0	0	36	107
June-10	11	27	8	25	11	26	3	13	1	4	0	0	1	1	0	0	3	3	0	0	38	99
July-10	30	87	2	4	8	18	6	21	3	11	1	7	1	3	0	0	4	12	0	0	55	163
August-10	9	22	4	16	9	21	4	19	1	6	0	0	0	0	1	5	3	3	0	0	31	92
September-10	16	40	5	16	10	28	0	0	2	2	0	0	3	6	1	3	2	2	0	0	39	97
October-10	10	26	11	42	4	8	16	55	2	7	3	12	0	0	0	0	0	0	0	0	46	150
November-10	13	28	9	27	3	5	8	23	2	7	3	10	1	2	1	4	2	3	0	0	42	109
December-10	5	15	11	38	2	3	8	33	0	0	2	12	0	0	0	0	1	1	2	6	31	108
2010 Sub total	162	385	62	222	71	173	61	212	22	78	9	41	8	21	3	12	21	35	2	6	421	1185
Grand Total	214	512	76	262	102	262	67	234	30	99	9	41	8	21	4	16	21	35	2	6	533	1488

Source: UNHCR

IDPs in Puttalam and other districts and refugees in India from Mannar District

According to Mannar DRRS, the number of IDPs in Puttalam and refugees in India from Mannar are estimated to be 2,345 and 14,602 respectively, as shown in Table 2.26.

Table 2.26 IDPs in Puttalam and Other Districts and Refugees in India from Mannar (May 2011)

DS/AGA Division	Refugees in Puttalam and Others		Refugees in India		Total	
	Family	Individual	Family	Individual	Family	Individual
1 Mannar Town	360	1,364	1,103	4,469	1,463	5,833
2 Nanattan	28	92	701	3,350	729	3,442
3 Musali	32	110	46	398	78	508
4 Madhu	36	105	494	2,605	530	2,710
5 Manthai West	174	674	643	3,780	817	4,454
Total	630	2,345	2,987	14,602	3,617	16,947

The number of returnees from India was expected to rise because of the ferry service that had recommenced in June 2011 for the first time in 30 years, and UNHCR started utilizing in October 2011, in addition to the existing support with the flight. However, the service has been crippled over the discussion on management of its catering service in November 2011 and the number of returnees has remained the same as previous years as of the end of November 2011. It is pointed out by UNHCR that the survey shows refugees' interests in returning to Sri Lanka and thus the number of returnees could increase as soon as the ferry service recommences.

Population trend in Mannar District between 1981 and 2011

As shown in Table 2.27 and Figure 2.10, the population in Mannar District had remained around 100,000 from 1981 until 2007, and then drastically dropped to 75,000 in 2008 due to the resumption of the conflict. The termination of the conflict and the progress of demining works boosted the return process from Manik Farm, Puttalam and other districts, recovering the population to 125,000 by December 2010, and 157,706 by October 2011.

Table 2.27 Population in Mannar District 1981, 2000-2011

D.S.Division	1981	2000	2001	2003	2004	2005	2006	2007	2008	2009	Dec.2010	Oct.2011
Mannar	48,722	39,156	40,560	46 248	48,672	48,434	47,600	51,249	51,579	54,345	50,196	72,872
Manthai West	23,924	19,618	18,847	22 102	22,332	22,583	18,954	26,741	**	7,850	19,622	21,104
Nanaddan	19,919	18,758	18,525	19 249	19,268	19,143	18,235	21,200	21,669	20,776	26,767	27,877
Musali	13,670	2,851	3,080	3 937	4,509	5,864	6,195	**	**	8,367	9,760	11,730
Madu	-	16,284	16,953	7 282	7,354	7,912	12,687	4,498	2,507	2,623	18,360	24,123
TOTAL	106,235	96,667	97,965	98 818	102,135	103,936	103,671	103,688	75,755	93,961	124,705	157,706

Source: 1981, 2000-2009 from the Northern Provincial Council and Dec. 2010, Oct.2011 from the Mannar DRRS

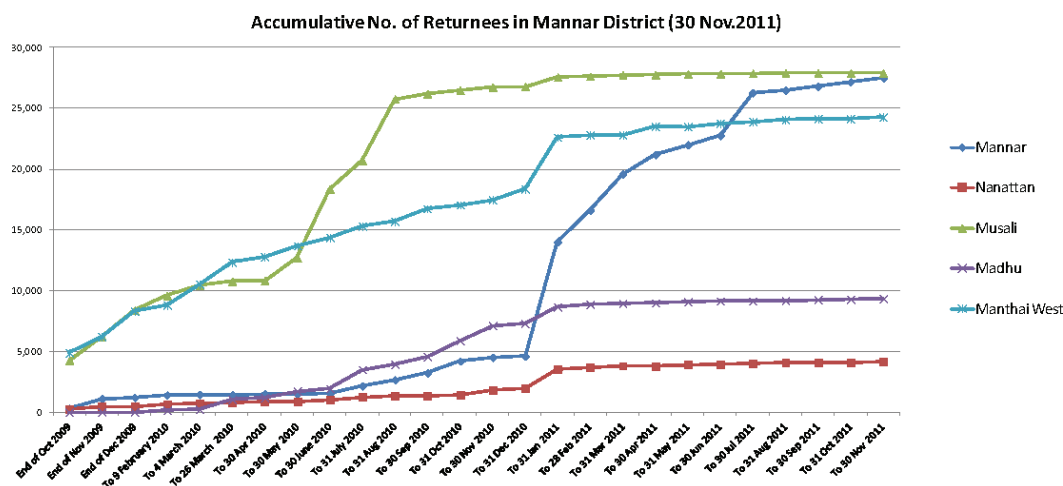


Figure 2.10 Number of Returnees in Mannar District

2.3 Security Situation

There have been no major armed incidents in Mannar District since the LTTE was totally defeated in May 2009. The JICA Sri Lanka office obtained an approval from the PTF and the Ministry of Defense (MOD) for the Project Team to enter and work in the ex-uncleared area as soon as the Team mobilized in Sri Lanka in April 2010 since all organizations involved in emergency humanitarian relief to IDP returnees in the ex-uncleared area had been required to obtain the approval for implementing activities in and entering the area. There was no restriction on carrying out surveys in the area after mobilization.

However, since July 2010, all organizations²⁴ involved in various emergency humanitarian relief works in the ex-uncleared area have been instructed to obtain new approvals from the MOD through the MOED and PTF²⁵. Although the period of MOD clearance was extended from about two weeks at the beginning to three months at present, the process of renewing the clearance still requires considerable time, which slows down the progress of the Project. The Project Team has to pay attention to the clearance for not only the Japanese Team members and Sri Lankan Project staff but also cooperating organizations such as NGOs and the local consultants who are entrusted a portion of the Project work. The Project activities were adversely affected by the above-mentioned change of the procedure. However, the prompt approvals from the MOD have helped the Project to reduce the impact. The continuing support for the Project from the PTF, MOD, MOED as well as the JICA Sri Lanka office would be much appreciated.

In the ex-uncleared area, the SLA checks vehicle movements and activities implemented by various organizations as security precautions. The Project Team has kept good relations with the Army commanders including those at the Tallady Camp by reporting all the Project activities and travel of the people concerned in advance in addition to MOD approval on staff movement to the area in general. The Project obtained the general consent from the Tallady Camp to take equipment and materials used for the Project works into the ex-uncleared area, provided an approval is taken on each occasion. There has been no substantial delay of activities due to the transactions.

2.4 Socio-economic Framework of the DS/ AGA Divisions

2.4.1 Socio-economic Classification

Table 2.28 shows the summary of the socio-economic status as well as degree of external assistance of the DS/AGA Divisions, which was classified according to the sectors described mainly in Sections 2.1.3 and 2.1.4 of this report. For easy reference, the status of each sector was classified as “◎”, “○” and “△” as explained in the note of the table.

²⁴ Urgent humanitarian assistance to IDP returnees conducted by UNHCR, WFP, etc. and the demining agencies are the exceptions to the new rules.

²⁵ This procedure was officially lifted by the MOD on 13 July 2011.

Table 2.28 Scoring of the General Status of the DS/ AGA Divisions

DS Divisions	Mannar Town	Nanaddan	Musali	Manthai West	Madhu
Water supply	⊙	⊙	○	△	△
Road and transport	⊙	⊙	△	△	△
Electricity	⊙	○	○	△	△
Health	⊙	○	△	△	△
Education	⊙	○	○	○	△
Economic activities	⊙	⊙	○	△	△
External assistance	⊙	⊙	⊙	△	△

Note:

- ⊙ Most of the villages in the area have sufficient services/in appropriate or active status
- About half of the villages in the area have sufficient services/in appropriate or active status
- △ Most of the villages in the area have insufficient services/in inappropriate or inactive status

Source: The JICA Project Team

(1) Mannar Town and Nanaddan DS Division

As Table 2.28 shows, Mannar Town and Nanaddan DS Divisions are in a better situation in general. This is mainly because most of the villages in these Divisions had belonged to the Government-controlled area during the conflict as well as in the present, thus most of the villagers in the area have not been displaced or compelled to leave from their home towns for the last several years although they were also affected by the conflict in various ways. The basic infrastructure or public services have not been destroyed or interrupted and the villagers had more opportunities to receive services and development assistance from the Government, as well as from non-government and foreign institutions. They had been able to engage in their economic activities without interruption.

However, there are a few villages in these Divisions that are located along the border of the Government-controlled area and the former uncleared area. These villages were seriously affected by the conflict.²⁶ Basic social infrastructure, such as water, roads, housing and others had not been developed in these villages due to frequent displacement. These villages can be classified as a “pocket area” in these Divisions.

Except for the villages in the pocket area, basic human needs were fulfilled in general in the villages of Mannar Town and Nanaddan DS Divisions. The villages are at the stage of attaining further economic development through improvement of productivity, processing, marketing, etc. The pocket area is in need of urgent assistance for rehabilitation and reconstruction.

²⁶ Villages such as Parapankandal in Mannar Town DS Division and Cheddiyarmagan Kaddaiadampan in Nanaddan DS Division.

(2) Musali DS Division

As mentioned earlier, the total population had been displaced or moved to other Divisions in the District, such as Mannar Town and Nanaddan DS Divisions, in September 2007. However, the damages of displacement are smaller than those in Manthai West and Madhu AGA Divisions, as the period of displacement was shorter and the degree of devastation of houses and public buildings was lower. In Musali DS Division, the resettlement had commenced in June to August 2009, which was earlier than in the above-mentioned two Divisions; therefore, the basic social infrastructure, such as water, electricity, roads, health and education had been already rehabilitated in some villages.

As mentioned above, in Musali DS Division, the resettlement started earlier, and the returnees had started paddy cultivation in the last Maha season in 2009. Fishing activities had also started in several villages, where fishing vessels and gear were provided by DFAR and other donor agencies. The housing status in most of the villages is better than that in Manthai West and Madhu AGA Divisions, as most of the houses were repaired after the resettlement or had not been damaged very seriously during the displacement.

The entire Muslim population in the Division had fled to Puttalam District and other districts of the country in 1990 by an order of the LTTE. Some of the population had resettled in their home villages in Musali DS Division after 20 years, while some are still on the way to being resettled.

The villagers in the Division had received a variety of emergency relief assistance. Now, they are seeking assistance for rehabilitation, reconstruction and development, in areas such as water supply and livelihood improvement.

(3) Manthai West AGA Division

The whole population of Manthai West AGA Division was compelled to move toward Kilinochchi and Mullaitive Districts in 2008 and after the defeat of the LTTE the people had been staying in IDP transition camps in Vavuniya District. The resettlement of the population started in October 2009. The resettlement started during February to March 2010 in the northern part of the Division. There are several villages in the Division where resettlement has not yet started as demining has not been completed.

The villagers lost almost all their property and productive assets such as houses, water supply system, tools and equipment for farming, fishing vessels and gear, etc. during the last displacement. The public buildings, such as schools, preschools, community halls, office buildings and others, were severely damaged as there were heavy battles between the SLA and the LTTE in the area.

Though the villagers in the Division had received a variety of emergency relief assistance, it is not sufficient. For example, temporary houses were constructed only in several villages, therefore many villagers are still living in temporary sheds constructed with Galvanized Iron (GI) sheets and poles. The villages in the coastal area do not have a source of safe drinking water, as the underground water is saline. Some villages had water supply systems that were destroyed during the displacement. In these villages, water is supplied by bowsers by NGOs or UN organizations. However, the supply is irregular and the water quality is sometimes not satisfactory. Further implementation of emergency relief work, especially provision of temporary houses, as well as assistance for reconstruction and rehabilitation, such as for livelihood restoration and water supply, are the most urgent requirements in the Division.

(4) Madhu AGA Division

In 11 GN Divisions out of the total 17 in Madhu AGA Division, the entire population was compelled to move to Kilinochchi and Mullaitive Districts in 2007. As of the end of April 2010, the resettlement had begun in only four GN Divisions, out of the above-mentioned 11 GN Divisions, because the demining work had not been completed in the areas. Even in these four Divisions, where resettlement was started, demining had been completed only in residential areas and some paddy fields.

Like in Manthai West AGA Division, the villagers in Madhu AGA Division had lost almost all their property and productive assets during the last displacement. The public buildings were severely damaged. There were very limited amounts of emergency assistance provided to the area so far, such as cleaning of wells and supplies of drinking water by bowsers. Public transport and health services have not yet been regularized. The villagers would have found it difficult to start farming in the 2010/11 Maha season, as the paddy fields, irrigation tanks and canals had not been completely demined.

Acceleration of emergency relief work, especially provision of temporary houses and improvement of water supply, as well as assistance in regularizing public services, such as bus services and re-opening of primary medical care units, renovation of roads and other public buildings, are the most urgent requirements in the Division. Acceleration of de-mining of paddy fields and irrigation facilities are also needed urgently for the villagers to restart cultivation soon.

2.4.2 Socio-economic Framework

Based on the information gathered and above-mentioned classification, a socio-economic framework such as development potentials and disincentives at the DS/ AGA Division level are analyzed as shown in Table 2.29.

In Mannar District, 70% of the population is engaged in cultivation, 25% in fishing while the remaining 5% is involved in other activities²⁷. It is apparent from these figures that development potentials lie in the agriculture and fishery sectors.

Table 2.29 Socio-economic Framework of DS/ AGA Divisions in Mannar District

DS/ AGA Division	Main Livelihood	Development Potentials	Disincentives to Development
Mannar Town	Fisheries Paddy Trade	<p>Potential of fishing operation near the Adams Bridge is very high.</p> <p>The fishery-related industries have potential to be developed. Small-scale factories such as fish canning factories, ice factories and fish mills were once being operated but were interrupted by the conflict. Reconstruction of those industries will contribute to the local economy.</p> <p>Improvement of quality of dry fish production would increase income of fishing families.</p>	<p>Access to loan facilities and opportunities for training programs to impart updated techniques of relevant fields are scarce.</p> <p>Irrigation tanks have not been properly maintained, so that water is not sufficient, especially in the latter part of Maha season and for Yala cultivation.</p> <p>There are not many inputs for improvement of fisheries industry for ocean and inland. Resource conservation in the coastal fisheries has not yet been introduced. And aquaculture skill in coastal and inland fisheries shall yet be disseminated.</p>
Nanaddan	Paddy Fisheries	<p>Paddy cultivation and animal husbandry has a potential in this District. Agriculture- and animal husbandry- related activities such as rice mills and milk production could be developed.</p>	<p>There is a dispute between fishermen in Sri Lanka and India as for the fishing near Adams Bridge. This shall be settled by Government-Government base consultation.</p>
Musali	Fisheries Paddy	<p>The fishery-related industries as well as agriculture-related industries have potential to be developed.</p> <p>Restoration of cashew plantation would be a potential.</p>	
Manthai West	Fisheries Paddy OFC	<p>Fishing communities are still in the process of recovery from the conflict. However, the potential of the fishery resources in coastal areas and lagoons as well as inshore and offshore is great. Especially the demersal species such as groupers, snappers, prawn, crabs, sea cucumber are attractive to traders for domestic market as well as export. The potential of inland fishery is also high as many water bodies represented by Giant's Tank and 161 minor tanks are available.</p> <p>The Rice Bowl area was once one of the advanced paddy production areas in the country. Restoration of paddy production as well as post-harvest facilities will contribute to the improvement of farmers' livelihoods as well as the local economy. If exploitation of rivers such as Parangi Aru and Pali Aru is materialized and improvement of minor tanks is implemented, agriculture in the area could help peoples' lives and economy of the area.</p> <p>Livestock had once been practiced by the farmers and milk production was substantial before the conflicts. Since there are a lot of</p>	<p>Due to repeated displacement, people lost their assets for economic activities.</p> <p>Almost all social as well as economic infrastructures have been destroyed during the conflict. Without rehabilitation/ reconstruction of those facilities including fishing facilities, rice mills, recovery of livestock, etc., IDPs are not able to improve their lives and livelihoods.</p>

²⁷ Source: Statistical Hand Book Mannar District 2009, District Planning Secretariat

DS/ AGA Division	Main Livelihood	Development Potentials	Disincentives to Development
		<p>potential pasture lands, livestock could be developed for improvement of peoples' livelihoods.</p> <p>Fruit and OFC cultivation have high potential in the area. Cultivation of chilli and onion, of which substantial quantities have been imported from India, has a high potential.</p>	
Madhu	Paddy OFC	<p>Natural resources such as timber are untapped.</p> <p>If exploitation of rivers such as Parangi Aru is materialized and improvement of minor tanks is implemented, agriculture in the area could help improve peoples' lives and economy of the area.</p> <p>The potential of inland fishery is also high as many water bodies are available in the area.</p>	

2.5 Review of the Past Projects/ Assistance for IDPs

Even when the period is confined to only after the Ceasefire Agreement (CFA) was signed in 2002, there have been a significant number of projects/ assistance of various scales to support IDPs in Mannar District.

While some projects have achieved good results in upgrading the living conditions of the IDPs, some have not achieved the expected goals. Some of the important lessons learned from the past experiences of supporting the IDPs are as follows:

- (1) **Need of the strategy for sustainable development:** Some of the projects had no or inadequate strategies on how to lead the IDPs to the stage of sustainable development. As a result, those projects were less elaborated to avoid the dependency syndrome and made the resettled communities more dependent on the assistance.
- (2) **Attention to the process:** Less attention was paid to the process than to the inputs and outputs of the activities, so that the capacity of the target people/ organizations has not been developed as expected, because capacity-development needs continuous monitoring of the process to give it the appropriate support.
- (3) **Importance of collaboration with the Government institutions:** Collaboration with the Government administrative/ technical institutions was weak, so that no activities have been sustained after completion of the projects even though the projects had achieved good results during the project period.

2.6 Rehabilitation Plan for the North and Assistance for IDPs

2.6.1 Rehabilitation Plan for the North

Since June 2009, an accelerated program called *Vaddakkin Vasantham (Northern Spring)* has been planned and carried out by the Presidential Task Force (PTF) to resettle families within a short space of time. The objectives of the program are:

- Rapid resettlement of the displaced people as quickly and safely as possible to their places of origin;
- Provision of better facilities than they previously had by way of basic infrastructure and services to pick up life and move on;
- Provision of livelihood facilities.

Joint Plan for Assistance for the Northern Province (JPA) 2011 was issued in February 2011 by the Government of Sri Lanka (GOSL), UN agencies and national/ international NGOs. The objective of the JPA 2011 was to identify the priority activities that must be undertaken during 2011, and to facilitate international assistance so that the people of the Northern Province can recover, rebuild and return to a normal life. The ultimate aim of such work is to ensure the long-term, sustainable development of the Northern Province within the shortest timeframe possible.

According to the JPA 2011, the GOSL, while creating a safe environment for the people of Vanni to return to their places of origin, also envisaged an extensive development program. A two-pronged approach was formulated to target resettlement and fast-track development of the Northern Province, giving the greatest possible attention to its implementation. These components included (a) humanitarian assistance through a series of relief and early recovery measures to facilitate the resettlement process; (b) rehabilitation of much-needed infrastructure, which included provision of permanent shelter, supply of safe drinking water, rehabilitation of main highways and sub roads, railway lines, major and minor tanks, irrigation systems and improvements to hospitals and schools.

Joint Plan for Assistance for the Northern Province (JPA) 2012 was issued in the early part of 2012. The JPA 2012 targets the most vulnerable people made up of different categories of IDPs, the recently resettled, and voluntarily repatriating refugees, with the focus on capacity-building to strengthen Government provision of basic services in the resettlement areas.

Development Priorities of Sri Lanka was prepared by the Department of National Planning and shared with donors in May 2011. It includes economic, social and environmental

aspects in development priorities for the next 10 years, which means up to 2020. It is a plan for the entire county, not just for the North, but targets in each sector presented in the paper need to be referred to in the rehabilitation/ reconstruction and development activities in the North since it includes national targets throughout the country, including the North.

2.6.2 Administration of Mannar District in Relation to Reconstruction

Provincial Councils were established in Sri Lanka in accordance with the 13th Amendment of Constitution in 1987. Devolution of authority on development activities was made from the Central Government to the Provincial Government, especially the North East Provincial Council (NEPC). Most of the development-related departments, except a few departments directly connected to the Central Government such as Irrigation (Central) and Agrarian Development, are under the Northern Provincial Council (NPC), which was de-merged from the NEPC in 2006. Therefore, the development planning of Mannar District is, in principle, coordinated by the NPC.

Planning, implementation and monitoring, and evaluation of the District-level projects for rehabilitation and development are discussed and directed by the District Coordinating Committee (DCC) in meetings to be held quarterly and co-chaired by the Minister of Industry and Commerce at present and the Governor of the Northern Province, and attended by all the implementing agencies including departments, UN agencies, NGOs, etc. It may be suggested to strengthen the Committee with respect to the planning of projects to be implemented in the District and the coordination with the NPC.

GA functions as a secretariat of the DCC with support from the District Planning Secretariat. The District Agriculture Committee is a sub-committee of the DCC. It has been observed that the District Planning Secretariat functions well on monitoring the project implementation, however, the function of planning would need to be strengthened.

Planning, implementation and monitoring, and evaluation of the Division-level projects for rehabilitation and development is discussed and directed by the Divisional Coordinating Committee in meetings to be held monthly. The Committee consists of Members of Parliament (MP) and members of the Provincial Council, local authorities (Council and/or Pradeshiya Sabha) of the area, and divisional heads of the departments, and is chaired by a senior MP. The results of the Committee meetings are brought to the District Coordinating Committee.

The framework of the structure of the Central, Provincial, District and Divisional institutions for development projects is illustrated in the following figure.

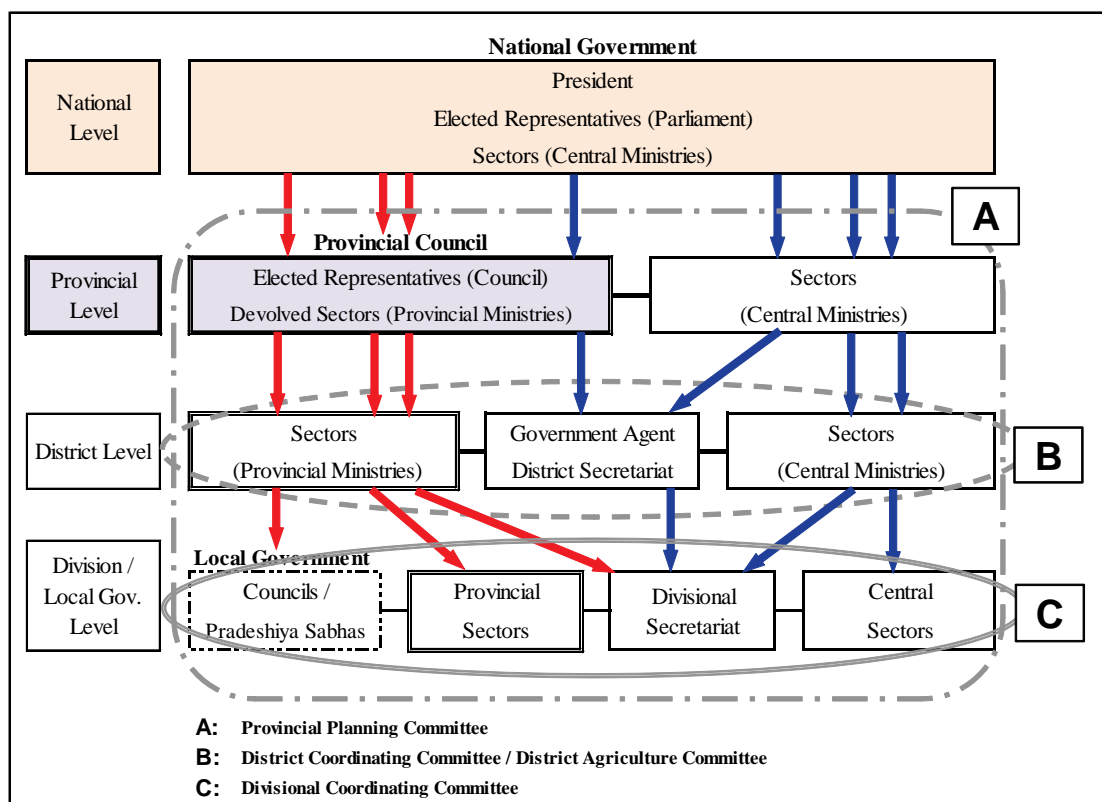


Figure 2.11 Framework of the Government Structure

The NPC coordinates with the Ministry of Finance and Planning for financial allocation of the Government Fund and foreign aid projects after deciding the projects to be implemented in the districts of the Northern Province. Although at the time the Project was commenced the function of the Provincial Council was weak and the PTF played a major role to implement rehabilitation activities for IDPs, the designated function of the Provincial Council for development activities has been gradually restored.

As commonly observed in post-conflict societies, shortage of skilled personnel in administration is a serious issue in Mannar District. Although the staff has been working hard for the IDPs, this deficit sometimes hinders the effective provision of social services.

2.6.3 Brief Outline of Ongoing Assistance by the Government, Other Donors and NGOs in Mannar District

Emergency Humanitarian Assistance and Demining

After defeating the LTTE in May 2009, the Government immediately expedited rehabilitation of infrastructure including roads in Mannar District under the Waddakkin Wasantham (Northern Spring) Action Plan.

On the other hand, resettlement of people detained in the camps back to their original

villages commenced in October 2009 in parallel with the progress of landmine clearance. Emergency humanitarian relief of food, shelter, utensils, agriculture tools, etc. has been rendered to those IDP returnees by the various UN agencies such as UNHCR, World Food Programme (WFP), and International Organization for Migration (IOM).

Demining has been continuously carried out by the SLA and demining organizations such as Sarvatra, Horizon, and Swiss Foundation for Mine Action in Mannar District.

Rehabilitation/ Reconstruction Activities

The second stage of assistance after emergency humanitarian relief, such as rehabilitation of village infrastructure and livelihoods, has been planned and implemented by various organizations besides the Government's own efforts.

UNDP has carried out community development projects including rehabilitation of houses and village infrastructure in two villages in Manthai West AGA Division. FAO has provided seeds and fertilizer to farmers to resume agricultural activities.

“Community Livelihood in Conflict Affected Areas Project” (it is called “Re-awakening Project” or RAP) is funded by The World Bank with the Government, whose activities are (1) village rehabilitation and development, (2) essential rehabilitation and improvements to selected major irrigation schemes, (3) cluster level livelihood support activities, and (4) institutional capacity building and project implementation support.

Also, “Emergency Northern Recovery Project (ENReP)”, funded by the World Bank, was commenced in December 2009. It consists of (1) emergency assistance to IDPs, (2) cash-for-work program, (3) rehabilitation and reconstruction of essential public and economic infrastructure, (4) project management, oversight, monitoring and evaluation, and special studies.

The Asian Development Bank (ADB) provided the supplementary loan for the North East Community Restoration and Development Project (NECORD) II. The project aims to be the Government's overall relief and rehabilitation program for the Northern Province by improving the living conditions and well-being of communities that have been affected by the conflict, particularly communities that contain significant proportions of internally displaced people.

In addition, there have been many international and Sri Lankan NGOs involved in the support for the IDP returnees in Mannar District.

Housing

The Government of India has committed to construction of 50,000 houses for IDPs as a fully grant-funded project. While the bulk of this project will focus on the needs in the Northern Province, it will also cover some areas of the Eastern and Central Provinces. A pilot project to construct 1,000 houses in all five districts of the Northern Province began on 27 November 2010. The assistance will include construction of 38,000 houses and repair of 5,000 houses under the owner-driven model for IDPs where owners have to build or repair their own houses, and construction of 6,000 houses under the agency-driven model for vulnerable sections of IDPs. As of December 2011, no houses have been fully completed under this project in Mannar District.

The North East Housing Reconstruction Program (NEHRP) is a project designed by the Government of Sri Lanka and the International Development Association (IDA) to support the reconstruction and rehabilitation of houses in the conflict-affected region of the Northern and Eastern Provinces through "Owner Driven Construction Strategy". NEHRP proposed to reconstruct 49,675 housing units in war-affected areas from 2004 to 2011. This will cover only 17% of the needs²⁸.

Major ongoing assistance as of March 2011 is listed and attached as **Annex 3**.

²⁸ Information from NEHRP Web site (<http://nehrp.com/index.html>).

PART II: PREPARATION FOR FORMULATION OF THE ROAD MAP

CHAPTER 3 CONCEPT OF THE ROAD MAP

The Project Team has tried to grasp the present situation of IDPs and Mannar District by (1) gathering sector-wise data and information, (2) collecting data and information on progress of return and resettlement of IDPs, (3) conducting socio-economic classification of and formulating a socio-economic framework of DS/ AGA Divisions, (4) reviewing the past projects/ assistance on IDPs, and (5) looking through the rehabilitation plans of the Government and other donors. Based on the findings and lessons learned from the above-mentioned surveys, the following strategies, approaches and basic concept of the Road Map are formulated.

3.1 Strategies and Approaches

Under the strategies mentioned in Section 1.3.3, the following approaches to facilitate the resettlement process are framed as explained from Section 3.1.1 to 3.1.3²⁹. These approaches are verified through implementation of the Pilot Projects, which will be explained in the following chapter. These strategies and approaches are also the basis of the Road Map as shown in Figure 3.1. The lessons learned from the verification process will be incorporated into the Road Map.

²⁹ In this report, “strategies” means the direction of assistance, whereas “approaches” means more concrete measures under the strategies, to facilitate the resettlement process.

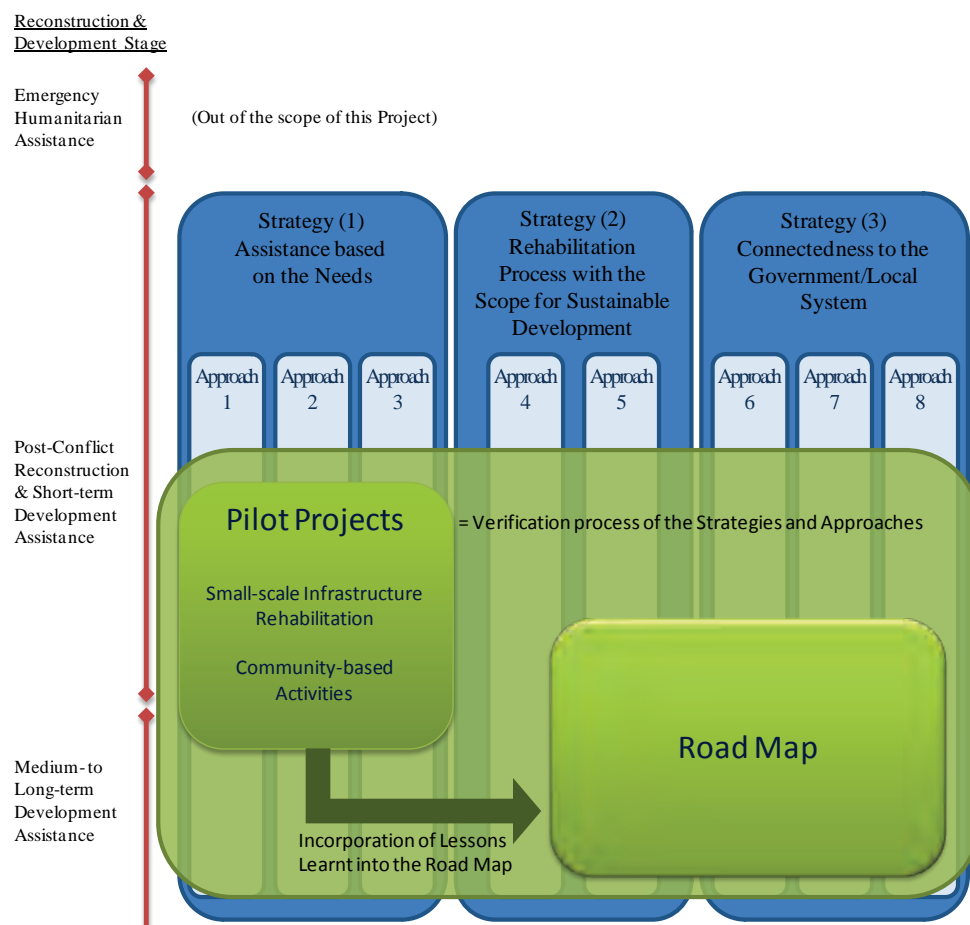


Figure 3.1 Framework for Promotion of IDPs' Resettlement Under the Project

3.1.1 Strategy (1): Assistance Based on the Needs

(1) Approach 1: Assessment of the Needs and Priorities According to the Progress of Resettlement and Reconstruction Activities

Since the situation of the target area changes according to the progress of resettlement and reconstruction activities, needs and priorities of activities should be considered in accordance with the reconstruction/ development stage. For the implementation of Pilot Projects, needy communities where the progress of rehabilitation is delayed have been selected as target communities. To share peace dividends fairly among communities and to not widen the socio-economic disparity, it is important to select needy communities where the progress of rehabilitation is delayed.

(2) Approach 2: Classification of the Target Areas According to the Characteristics

To capture the needs of the target areas appropriately and to propose the Road Map based on the needs, classification of Mannar District according to the characteristics of the areas including development potentials and disincentives has been done. As for the verification process, target villages for Pilot Projects have been classified into four clusters.

(3) Approach 3: Identification of Development Potentials and Disincentives

To promote socio-economic reconstruction, activities to realize the potentials and mitigate the disincentives should be planned. Communities' resources and capacity for development activities are also assessed as development potentials and disincentives. For the development of a practical Road Map, a deeper analysis has been done on development potentials and disincentives of Mannar District identified in Section 2.4.2, through additional research and verification through the Pilot Projects.

3.1.2 Strategy (2): Rehabilitation Process with the Scope for Sustainable Development

(1) Approach 4: Promotion of Self- and Mutual-help Activities

Trainings for livelihoods and income generation activities implemented as the Pilot Projects are aimed at promoting self-help attitudes towards the sustainable development. Introduction of a revolving loan fund scheme of providing fishing crafts and equipment to the fishing communities and group saving activities are expected to foster a mutual-help attitude among the community members. With the verification through implementation of the Pilot Projects, utilization of self- and mutual-help systems are proposed in the Road Map.

(2) Approach 5: Strengthening of CBOs

CBOs are expected to be the focal points of development activities in a community. To subserve self-reliance of community people, it is necessary to strengthen CBOs' capacity to plan and implement their development activities. The roles of CBOs and way of strengthening have been verified in the Pilot Projects and are reflected in the Road Map.

3.1.3 Strategy (3): Connectedness to the Government/Local System

(1) Approach 6: Involvement of Various Stakeholders

To strengthen the connectedness to the government system, it is necessary to involve various stakeholders, especially the government officers and local governments. For the implementation of the Pilot Projects, government officers, those working in Mannar District as well as officers of the central and provincial government field offices, have been identified and closely collaborated with. Moreover, the Memorandum of Understanding (MOU) has been concluded with the relevant local governments, mainly Pradeshiya Sabhar, on handing over of community infrastructure constructed under the Pilot Project. With the lessons learned from the Pilot Projects, a concrete approach to involve various stakeholders is proposed in the Road Map.

(2) Approach 7: Utilization of Local Methods

For the successful implementation of the Road Map, it is valid to utilize the familiar methods which have been accepted by the government and people. In the Pilot Projects, some methods, such as needs identification of the community with the Community Action Plan (CAP)³⁰ method and community contract method, have been utilized. They have been verified and modified, if necessary, to be applicable for the development of broader areas under the Road Map.

(3) Approach 8: Assistance in Line with the Development Plan of the Government of Sri Lanka

To propose the practical Road Map, it is developed in line with the Development Plan of the Government of Sri Lanka and Mannar District, which may include infrastructure development such as a road network to connect the District and other parts of the country, and electricity supply.

3.2 Basic Concept of the Road Map

3.2.1 Objective of Formulation of the Road Map

As discussed in (2) *Rehabilitation process with the scope for sustainable development* of 1.3.3, even in the rehabilitation/ reconstruction phase it is significant to incorporate approaches to fulfill the mid- to longer-term development needs of IDPs into any assistance so as to ensure their resettlement and self-sustaining lives. In this respect, the Road Map aims to present the effective approaches and necessary measures taken in the transition from humanitarian assistance and long-term development to promote resettlement of IDPs and rehabilitation/ development of socio-economic activities in Mannar District, with the scope for sustainable development.

The progress of rehabilitation/ reconstruction of socio-economic activities, however, varies even in a District according to the socio-economic situation of the community, which means that necessary measures to promote their resettlement also differ. Therefore, the Road Map is formulated, aiming not to return to a certain time in history, but to propose what are to be addressed for a smooth shift towards sustainable development.

³⁰ Community Action Planning is a participatory methodology, which consists of a series of structured workshops organized for community members. In the workshops, the community is directly involved in the decision-making process of the development program in their village through identifying and prioritizing their needs, and designing their own Action Plan with solutions. The Action Plan as an outcome of the workshops is called Community Action Plan (CAP), which is followed by a variety of issue-specific meetings and implementation of activities based on the plan.

3.2.2 Contents of the Road Map

The Road Map includes the development visions (see Section 3.2.4), analysis of the development potentials and disincentives to reconstruction/ development, priority projects and action plan.

3.2.3 Target Area and Year

The target area is Mannar District and the target year of the Road Map is 2020.

As mentioned earlier, the Project aims to bridge the gap between humanitarian assistance and long-term development activities by presenting the Road Map for the reconstruction and development phase, targeting 2020.

3.2.4 Development Visions for the Road Map

The overall development vision towards the target year of 2020 is set as follows:

Enabling environments for IDPs and areas in Mannar District to realize their potentials are created, and measures to facilitate sustainable development are reinforced, in order for them to shift smoothly from the rehabilitation/ reconstruction phase to mid- to longer-term development.

Under this overall development vision, more concrete visions are set as follows:

- Vision 1. The lives of the IDPs are reconstructed based on their needs, and socio-economic activities are implemented on the initiative of the IDPs in a self-sufficient manner, and,
- Vision 2. The local industry to contribute to improvement of livelihoods and living standards of the resettled communities is rehabilitated and developed.

To realize the above-mentioned development visions, the following objectives need to be achieved.

Objectives to be achieved for Vision 1

1. The livelihoods of the IDPs are ensured.
2. Access to basic social and economic infrastructure with its services is ensured.
3. Capacity of the resettled communities/ organizations such as CBOs to plan and carry out socio-economic activities is developed.

4. Public services to promote reconstruction of lives, livelihoods and self-sustaining socio-economic activities of IDPs are strengthened.
5. Social inclusion of socially vulnerable persons and social unity in a community is promoted.

Objectives to be achieved for Vision 2

In mainly the agriculture and fisheries sectors, which are the major industries in Mannar District:

1. Economic infrastructure is developed.
2. A stable input supply system is established.
3. Technologies utilized in the local industry are enhanced.
4. Effective financial systems are established.
5. Effective marketing and distribution systems are established.
6. Public services are enhanced to promote development of local industry.

3.2.5 Framework of the Road Map

Figure 3.2 illustrates the framework of the Road Map. The Road Map consists of two parts, namely the “Village-wise Development Plan”, whose goal is the development of Vision 1, and the “Sector-wise Development Plan”, whose goal is the development of Vision 2 mentioned in Section 3.2.4 above.

It is expected that the “Village-wise Development Plan” and the “Sector-wise Development Plan” will reinforce each other and maximize their effects: when the “Village-wise Development Plan” is carried out and livelihoods such as agriculture and fisheries are restored at a community level, communities can be contributors to the local industry by supplying raw materials to or purchasing commodities from it. When the “Sector-wise Development Plan” is carried out and the local industry is rehabilitated and developed, it is expected to contribute to the improvement of livelihoods and living standards of the resettled communities by purchasing agriculture- and fishery-related products from the communities or in other ways.

The Road Map will be proposed in Chapter 6 of this report.

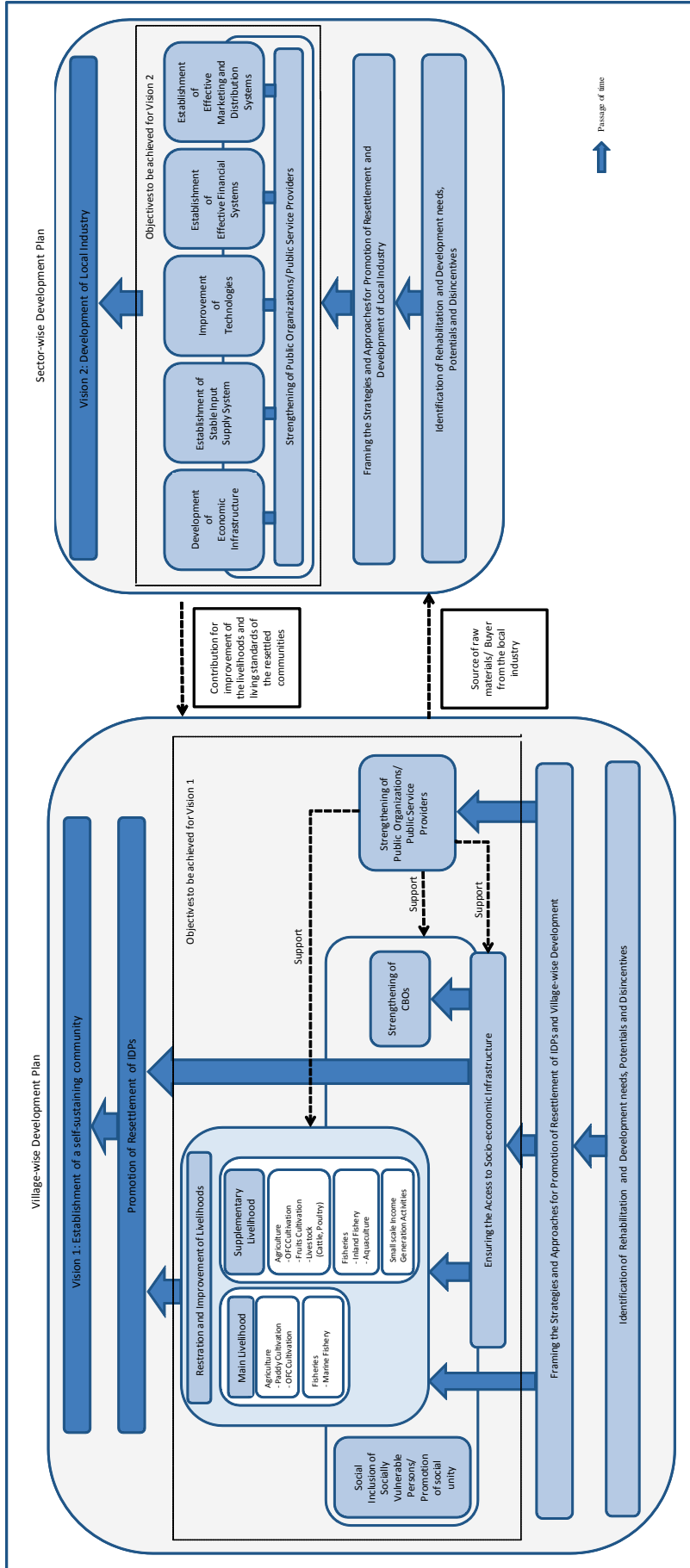


Figure 3.2 Framework of the Road Map

CHAPTER 4 IMPLEMENTATION OF THE PILOT PROJECTS

4.1 Implementation Process of the Pilot Projects

Figure 4.1 shows the implementation process of the Pilot Projects. Each process except the Basic Survey and analysis of the Project area, which are explained in Chapter 2, will be explained in the following sections.

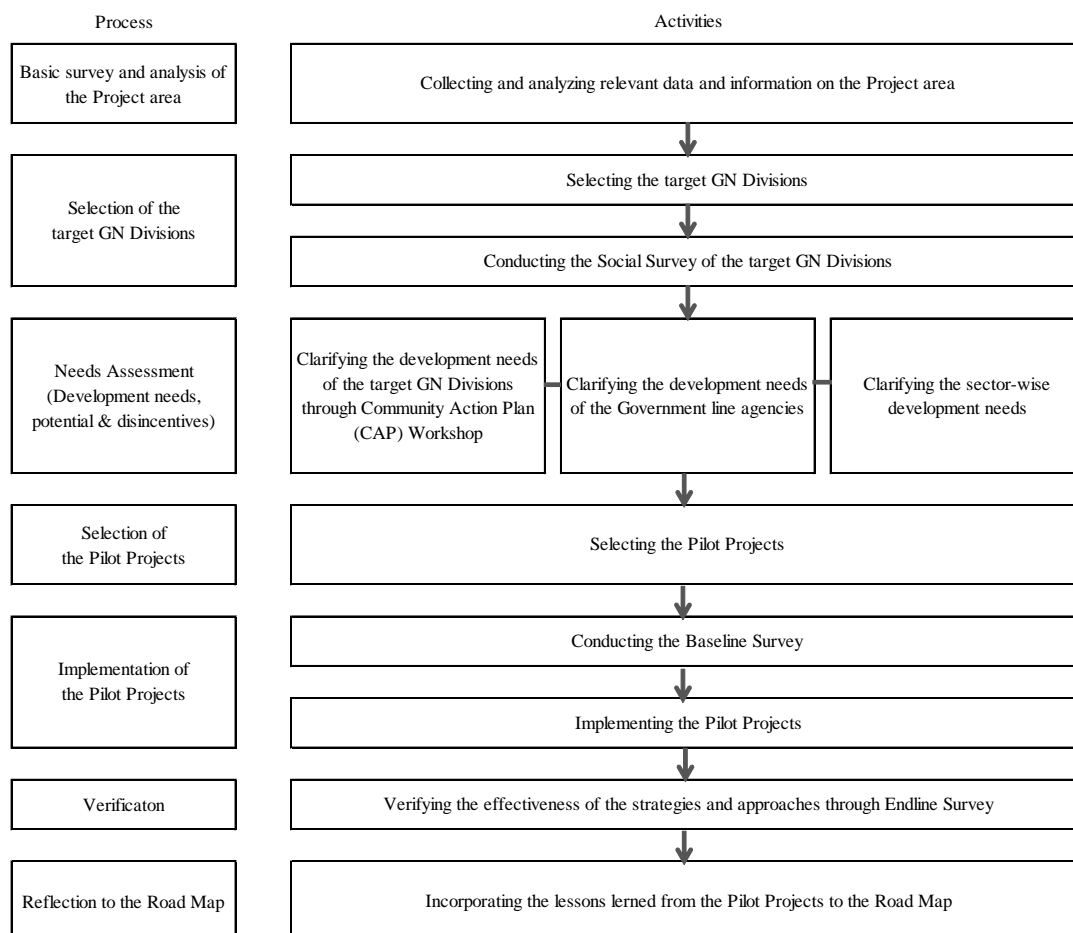


Figure 4.1 Implementation Process of the Pilot Projects

4.2 Selection of the Target GN Divisions (corresponding to Approach 1 mentioned in Section 3.1)

4.2.1 Criteria and Procedure of Shortlisting the Target GN Divisions

First, a shortlist of the nominated GN Divisions was made for the selection of the target GN Divisions. For shortlisting, the following criteria were set:

- (1) The villages where the Non-Technical Survey Certificate (NTSC) or the Low Risk Certificate (LRC) was issued and the resettlement of IDPs had been started³¹
- (2) Number of households of the GN Division is greater than 65³²
- (3) GN Division that has no or very limited safe drinking water³³
- (4) GN Division that does not have electricity supply to more than 80% of the households

It was also found that there are some families who stay in their home villages in Mannar District only during the cultivation seasons and go back to the displaced district during off-seasons. There are also some families in which a husband has resettled in the village but the wife and children remain in the displaced district.³⁴ It will be difficult for the Project to identify the beneficiaries in the case where a village has a considerable number of the above-mentioned “non-committed” or “moving” families. Therefore, those GN Divisions that the District and Divisional Secretariats consider have the most resettlers who are “non-committed” or “still moving” were excluded from the short list³⁵.

Figure 4.2 shows the above-mentioned procedure for the shortlisting. Accordingly, 26 GN Divisions in total were shortlisted as shown in Table 4.1.

³¹ There are very few GN Divisions where the NTSC or the LRC was issued to the entire GN Division. Most of the Divisions were partly demined, leaving the jungle area to be demined in the future or to remain uncleared. Therefore, the criterion for the shortlisting with regard to the demining status was determined to select the villages, not the GN Divisions, where NTSC or LRC was issued and resettlement of the IDPs had been started.

³² The minimum number of households was decided as 65 so that at least 300 people ($65 \times 4.5 = 293$) in a village will benefit (average number of household members was estimated as 4.5).

³³ If a village does not have any source of safe drinking water and depends on water supply by bowser, it is classified as “no water”. If a village (around 30-50 households) shares one or two sources of safe drinking water, it is classified as “yes, but very limited”

³⁴ Most of such families are Muslims who fled to Puttalam District in the 1990s. It is reasonable for them to take some more time to be resettled, because they had lived about 20 years in the places of displacement in Puttalam. Some of them appreciate the better public services they have in Puttalam, such as water, electricity, health and education. The second generation is sometimes reluctant to be resettled as they were born in the places of displacement and do not have any sense of attachment to the home villages.

³⁵ In addition to the opinion of the officers of the District and Divisional Secretariats, opinions of the staff of UNDP and NGOs working in Mannar District were taken into consideration.

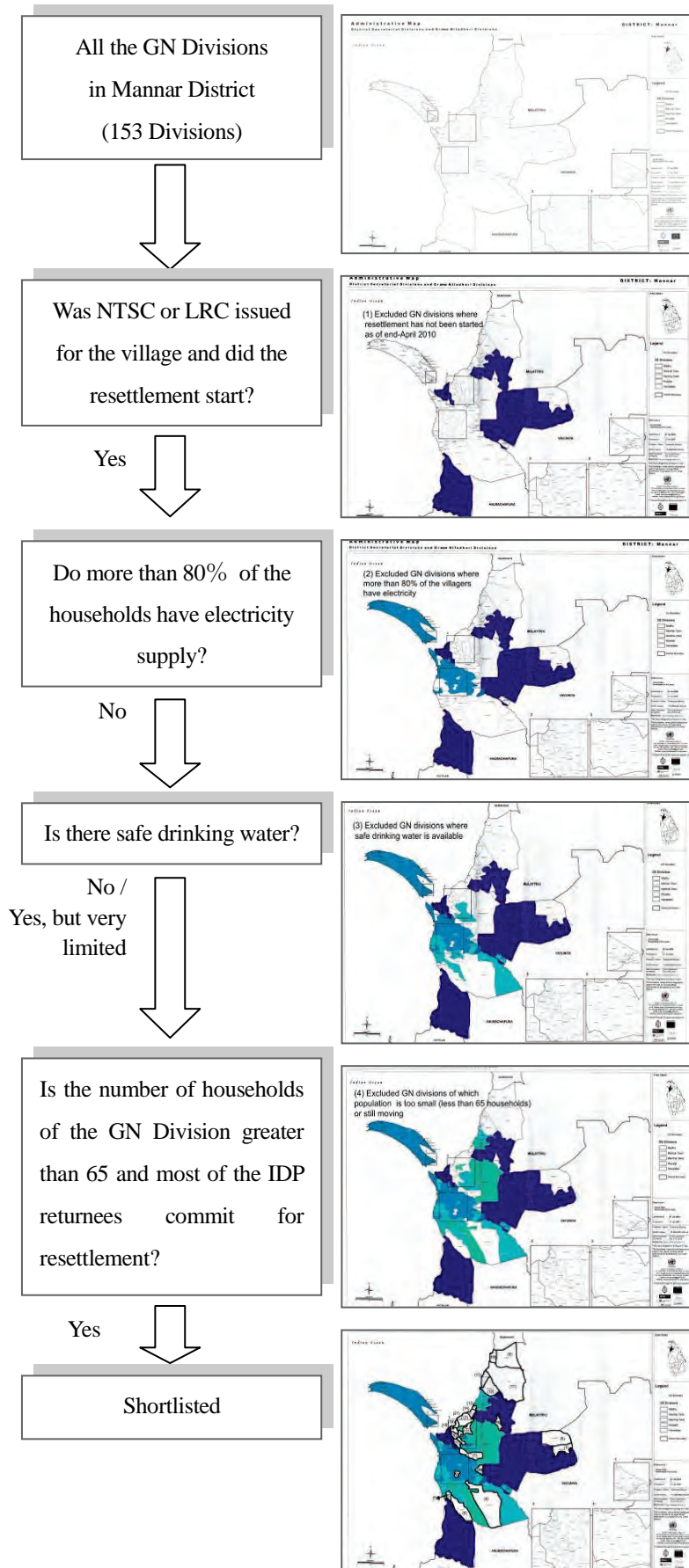


Figure 4.2 Procedure of the Shortlisting of the GN Divisions

Table 4.1 Shortlist of the GN Divisions

DS/ AGA Divisions	Shortlist No.	GN No.	GN Division	Electricity Supply	Piped Water Supply	Safe Drinking Water	Number of Households
Mannar Town	(1)	MN 96	Parapankandal	No	No	Partly	224
Nanaddan	(2)	MN 109	Valkaipettankandal	No	Partly	Partly	562
	(3)	MN 126	Cheddiarmagan Kaddaiadampan	No (Work started)	No	Partly	71
Musali	(4)	MN 139	Maruthamadhu	70% Yes	No	No	154
	(5)	MN 147	Koolankulam	70% Yes	No	Partly	323
	(6)	MN 148	Kokkupadayan	45% Yes	No	No	131
Madhu	(7)	MN 40	Palampiddy	No	No	Partly	178
	(8)	MN 43	Vilathikulam	No	No	Partly	65
	(9)	MN 44	Parasankulam	No	No	Partly	102
Manthai West	(10)	MN 01	Vellankulam	No	No	No	133
	(11)	MN 02	Thevanpiddy	No	No	No	197
	(12)	MN 03	Pali Aru	No	No	No	235
	(13)	MN 04	Illuppaikadavai	No	No	No	148
	(14)	MN 05	Anthonyarpuram	No	No	No	126
	(15)	MN 06	Vidaltivu West	No	No	No	119
	(16)	MN 11	Vidaltivu North	No	No	No	108
	(17)	MN 15	Kaya Nagar	No	No	No	104
	(18)	MN 18	Pappamoddai	No	No	No	91
	(19)	MN 19	Veddaiyamurippu	No	No	No	68
	(20)	MN 21	Maligaithiddal	No	No	No	70
	(21)	MN 22	Adampan	No	No	No	162
	(22)	MN 23	Palaikuly	No	No	No	166
	(23)	MN 24	Nedunkandal	No	No	Partly	99
	(24)	MN 25	Somapuri	No	No	Partly	138
	(25)	MN 27	Kannaddy	No	No	No	206
	(26)	MN 33	Palay Permakaddu	No	No	Partly	210

Source: Prepared by the Project Team based on the statistical data of DRRS

4.2.2 Initial Survey of the Shortlisted GN Divisions

An initial survey for 26 GN Divisions in the shortlist was conducted from April to May 2010.

The following were the study items of the initial survey.

- (1) Number of villages in the GN Division
- (2) Number of households and population
- (3) Land extent and population density
- (4) Conditions of infrastructure for basic human needs (water, electricity and others)
- (5) Other infrastructure for basic human needs (health clinics, hospitals, school, community halls, preschool buildings, etc.)
- (6) Ethnic composition
- (7) Religion
- (8) Economic infrastructure (farmland, irrigation, markets, rice mills, anchorage, agriculture service centers, etc.)

- (9) Registered CBOs (FO, RDS, WRDS, etc.) and their activities
- (10) Brief history of the villages
- (11) Major industries (agriculture, animal husbandry, fisheries and others)
- (12) Land usage pattern
- (13) Number of women-headed households
- (14) Recent and ongoing rehabilitation assistance

See **Appendix 2** for the report of the initial survey.

4.2.3 Socio-economic Classification of the Shortlisted GN Divisions

The Project Team made an analysis and classified the shortlisted GN Divisions according to the socio-economic conditions clarified by the initial survey. The items used for the classification are as follows:

- (1) Number of villages
- (2) Number of households, population, number of women-headed households
- (3) Ethnicity and religions
- (4) Major income sources
- (5) Time of the last resettlement
- (6) Conditions of Basic Human Needs (BHN) infrastructure, such as availability and sources of safe drinking water
- (7) Condition of houses and toilets
- (8) Conditions of economic infrastructure, such as irrigation facilities, fishing vessels and gear, livestock, etc.
- (9) Recent and ongoing external assistance

See **Annex 4** for the results of the socio-economic classification of the shortlisted GN Divisions.

4.2.4 Selection of the Target GN Divisions

As a result of the initial survey, socio-economic classification and discussions with the stakeholders, 11 GN Divisions shown in Table 4.2 and Figure 4.3 were selected for the target GN Divisions of the implementation of the Pilot Projects.

Table 4.2 List of the Target GN Divisions and the Villages of the Project

	GN Division	Name of Village
01	Parapankandal (243)	Periyakulam (111)
		Sirukkulam (123)
		Adaikalamodda (7)
		Palaithalvu (2)
02	Cheddiyarmagan Kaddaiadampan (71)	Cheddiyarmagan Kaddaiadampan (71)
03	Vilathikulam (65)	Vilathikulam (60)
		Ampadda Illupaikulam (5)
04	Parasankulam (111)	Parasankulam (29)
		Sinna Valayankaddu & Periya Valayankaddu (82)
05	Vellankulam (141)	Sewa Village (31)
		Ganeshapuram (75)
		Vellankulam (35)
06	Thevanpidy (203)	Thevanpidy (83)
		Puthukadu (120)
07	Pali Aru (255)	Pali Aru (85)
		Moonrampiddy (155)
		Theththavaady (15)
08	Illupaikadavai (153)	Illupaikadavai (114)
		Padakuthurai (0)
		Kaddaduvayal (4)
		Muthaliyarkamam (5)
		Parankikamam (30)
09	Anthonyarpuram (129)	Anthonyarpuram (129)
10	Nedunkandal (101)	Nedunkandal (101)
11	Kannaddy (206)	Kannaddy (66)
		Chalampan (53)
		Naduvarambu (77)
		Maruthonduvan Velakulam (10)

(): Number of households as of end-April 2010

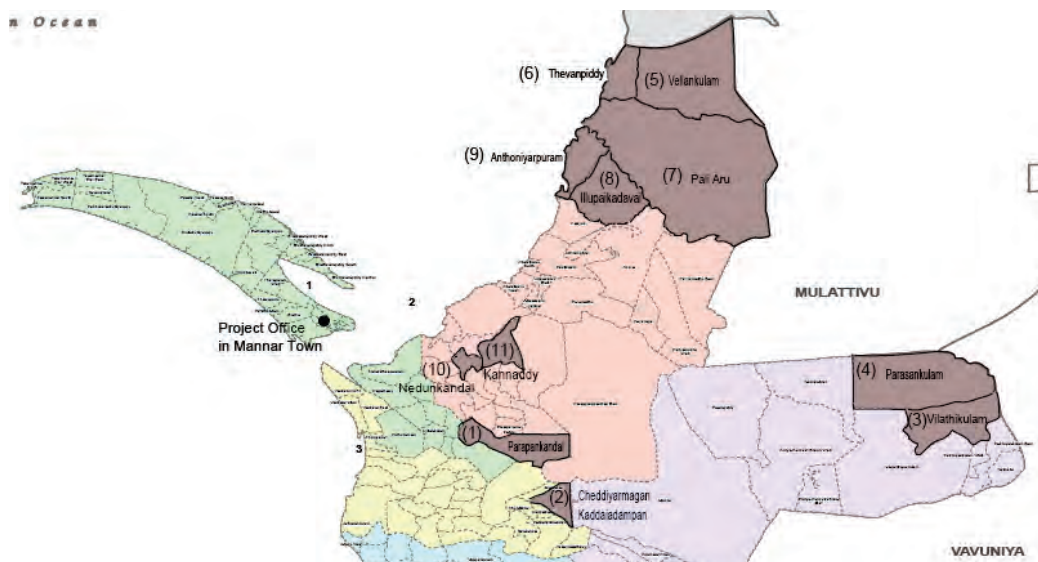


Figure 4.3 Map of the Target GN Divisions of the Project

4.2.5 Detailed Social Survey of the Selected GN Divisions

The Social Survey of the villages in the target GN Divisions was carried out in May 2010. The objective of the Social Survey was to understand the socio-economic conditions of the villages in the GN Divisions.

The following methodologies were adapted to the Survey: interview of the key stakeholders in the villages, focal group discussion and walk-through survey.

The main questions of the Survey were as follows:

- Household, population, ethnicity, religion
- History of village and availability of traditional culture
- Impact of conflicts (landmines, ex-combatants, widows, orphans and other socially vulnerable people, etc.)
- Progress and perspective of IDP return and resettlement, the causes of acceleration and disturbances of IDP return and resettlement
- Natural conditions and land use
- Land holding system, presence of landlords and landless residents/ farmers
- Livelihood and status of employment
- Major products, production quantities, production methods
- Marketing methods of products
- Conditions of market and social infrastructure (access, transport, time requirement, etc.)
- Public and social services (water, electricity, telephone, road, etc.)
- Health care and education
- CBOs and other organizations and their activities
- Present conditions and plans of assistance in promoting resettlement and rehabilitation by NGOs and other donors

See **Appendix 3** for the report of the Social Survey.

4.3 Assessment of the Needs to Promote Resettlement of IDPs (Approach 1)

After the selection of the target GN Divisions and the Social Survey, needs to promote resettlement of IDPs are assessed through Community Action Plan (CAP) Workshops with resettled IDPs and discussions with other stakeholders such as the government officers.

The main needs identified are as follows.

- (1) Rehabilitation of livelihoods such as agriculture and fisheries
- (2) Water for drinking and agricultural purposes
- (3) Reconstruction of houses
- (4) Support for income generation activities including a revolving fund to start the activities
- (5) Renovation/ reconstruction of social and economic infrastructure

Women of women-headed households have their special needs such as securing a means of livelihood and funds for their children’s education. Financial as well as psychosocial support is necessary for the women who experienced a severe emotional shock and have no means of livelihood.

4.4 Issues, Development Potentials and Disincentives (village-wise and sector-wise)

Based on the outcome of the Social Survey and the needs of communities and the government agencies mentioned earlier, issues, potentials and disincentives to promoting resettlement of IDPs and reconstruction/ development of the villages/target GN Divisions were analyzed by the Project Team as described below.

4.4.1 Socio-economic Classification and Development Potentials and Disincentives of the Villages of the Target GN Divisions (Approach 2 and 3)

As shown in the following table, socio-economic classification of the villages of the target GN Divisions was conducted according to the major livelihoods of the villages clarified by the Social Survey to understand the characteristics of the villages.

Table 4.3 Socio-economic Classifications of the Target Villages

DS/A GA	GN Division (Nos. of H.H) Population	Name of the village	Livelihood					
			Paddy	OFC	Animal Husbandry	Inland fishing	Sea fishing	Daily Labor
Mannar Town	Parapankandal (243) Population: 803	Periyakulam	☉ ①60% ②Started ③1acre ④200 acres ⑤Maha & Yala	○	○	○ Not started	No	○
		Sirukkulam	☉	○	○	○ Not started	No	○
		Adaikalamoddoi	①30% ②Started ③1acre ④400 acres ⑤Maha & Yala	○	○	○ Not started	No	○
		Palaihalvu	④400 acres ⑤Maha & Yala	○	○	○ Not started	No	○
Nanaddan	Cheddiyamagan Kaddaiadampam (71) Population : 227	Cheddiyamagan Kaddaiadampam	☉ ①55% ②Not Started ③1/2acre ④433 acres ⑤Maha	○	○	○ Not started	No	○

DS/A GA	GN Division (Nos. of H.H) Population	Name of the village	Livelihood					
			Paddy	OFC	Animal Husbandry	Inland fishing	Sea fishing	Daily Labor
Maddhu	Vilathikulam (65) Population : 214	Vilathikulam	☉					
		Ampadda Illupaikulam	①100% ②Not Started ③1/2acre ④400 acres ⑤Maha	○	○	No	No	○
	Parasankulam (111) Population : 416	Parasankulam	☉					
Sinna Valayankaddu & Periya Valayankaddu		①63% ②Not Started ③1acre ④384 acres ⑤Maha	☉	○	No	No	○	
Mannai West	Vellankulam (141) Population : 492	Vellankulam	☉					
		Sewa Village	☉					
		Ganeshapuram	①52% ②Not Started ③1acre ④24 acres ⑤Maha	☉	No	No	No	☉
	Thevanpiddy (203) Population : 817	Thevanpiddy	○					
		Puthukadu	①100% ②Not Started ③1/2acre ④25 acres ⑤Maha	No	○	No	☉ Started	○
	Pali Aru (255) Population : 909	Pali Aru	No	☉	○	No	No	☉
		Moonrampiddy	No	No	○	No	☉ Started	☉
		Theththavaady	☉					
	Illupaikadavai (155) Population : 511	Illupaikadavai	○					
		Padakuthurai	①100% ②Not Started	○	○	No	☉ Started	○
		Parankikaman	③1.5acre ④31 acres ⑤Maha					
		Kaddaduvayal Muthaliyarkaman	☉					
	Anthoniyarpuram (126) Population : 524	Anthoniyarpuram	○					
		Anthoniyarpuram	①0% ②Not Started ③0 ④0 ⑤Maha	No	○	No	☉ Started	○
Nedunkandal (101) Population : 324	Nedunkandal	☉						
Kannady (206) Population : 713	Kannaddy	☉						
	Kannaddy	①70% ②Started ③2 acres ④250 acres ⑤Maha & Yala	○	○	No	No	○	
	Chalampan	☉						
	Neduvarambu	①91% ②Started ③5 acres ④300 acres ⑤Maha & Yala	○	○	No	No	○	
Velakulam	Neduvarambu	☉						
	Velakulam	①40% ②Started ③2 acres ④500 acres ⑤Maha & Yala	No	No	No	No	○	
Velakulam	Velakulam	☉						
	Velakulam	①20% ②Started ③1 acre ④200 acres ⑤Maha & Yala	○	○	No	No	○	

Note: Paddy ① % of paddy farmers owning paddy land ② Cultivation started or not? ③ Average paddy land owned by a farmer ④ Total paddy land in the village ⑤ Cultivation seasons

Furthermore, major potentials and obstacles for development of the target villages were identified.

The following are the major potentials for development common to all the target villages:

- (1) More concentration on economic activities if the villagers obtain proper houses and access to safe drinking water.
- (2) Recommencement of agriculture activities by obtaining necessary productive assets.
- (3) Recommencement of meetings and development activities by villagers by using the renovated public buildings.
- (4) Improvement of efficiency of transport by renovation of main access roads and internal roads.
- (5) Improvement of food security and livelihoods by promotion of backyard poultry, home gardening and self-employment.

The following are the major obstacles for development common to all the target villages:

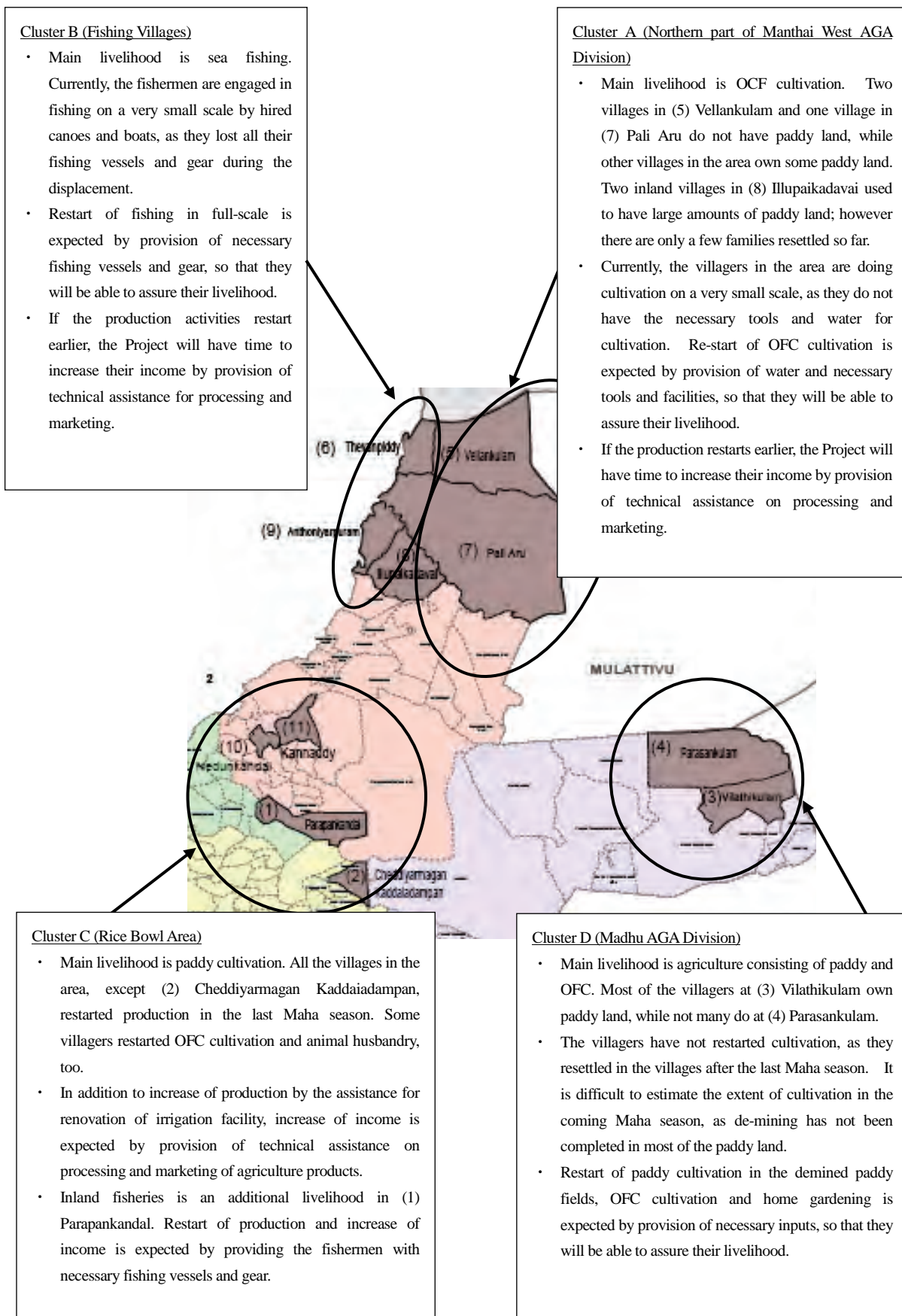
- (1) The villagers cannot concentrate on economic activities as they do not have proper houses and access to safe drinking water.
- (2) Villagers lost most of their productive assets, such as tools and equipment for cultivation and livestock.
- (3) It is difficult to have meetings among the villagers as most of the public buildings were damaged.
- (4) Main access roads and internal roads are damaged or too narrow and make transport of agro inputs/products and schooling difficult in the rainy season.
- (5) Many families lost the breadwinners during the conflict and do not have any sources of income.

In addition to the above-mentioned potentials and obstacles, the villages have specific potentials and obstacles for development as shown in the following table.

**Table 4.4 Major Potentials and Obstacles for Development
Specific to Each Target Village**

DS/ AGA Division	GN Division	Name of the village	Major potentials for development	Major obstacles for development	
Mannar Town	Parapankandal	Periyakulam	* Increase productivity of paddy cultivation by renovation of irrigation tanks and canals.	* No sufficient water in the irrigation tank, especially latter part of Maha season * FCS is not willing to use 30 nos. of canoes donated by GOSL, as they are 18", but not 21", which they used to use.	
		Sirukkulam	* Enhancement of income by re-commencement of inland fisheries.		
		Adaikkalamoddoi			
		Pakithalvu			
Naraddan	Cheddiyarmagan Kaddaiadampan	Cheddiyarmagan Kaddaiadampan	* Increase of paddy production by raising the height of the bund of the canal.	* Overflow of water of Giant Tank inundates paddy fields and destroy crops.	
Madhu	Vilathikulam	Vilathikulam		* Only a few acres of land can be cultivated, as tank and canal are damaged. * Tank and canal cannot be renovated immediately, as demining of the area has not been completed. * No sufficient water for OFC cultivation, which is a main income source for the villagers who do not own paddy land.	
		Ampadda Illuppaikulam	* Re commencement of paddy production by renovation of irrigation tank, bund and canal.		
	Parasankulam	Parasankulam	* Re commencement and promotion of OFC cultivation by obtaining water.		
		Sinna Valayankaddu & Periya Valayankaddu			
Mannar West	Vellankulam	Vellankulam	* Creation of paddy fields in Adampankulam by completion of Pali Aru diversion scheme. * Re commencement of marketing of fruits and vegetables by construction of a market complex.	* Pali Aru diversion scheme cannot be completed soon, as demining of the canal area from Pali Aru to Adampankulam has not been completed. * No market to recommence marketing of fruits and vegetables.	
		Sewa Village	* Re commencement and promotion of OFC cultivation by obtaining water.	* No or insufficient water for OFC cultivation, which is a main income source as they do not have paddy land.	
		Ganeshapuram	* Re commencement and promotion of OFC cultivation by obtaining water.	* No or insufficient water for OFC cultivation, which is a main income source as they do not have paddy land.	
	The vanpiddy	Thevanpiddy	* Re commencement of fishing activity in full-scale by obtaining fishing vessels and gears.	* The villagers engaged in fishing in a small scale by hiring boats and nets as they lost most of the assets during the displacement.	
		Puthukadu	* Improvement in marketing of fish by construction of a bridge/ causeway over the river in lagoon.	* Need a long time and energy to bring the catch to the sales point as they have to walk along the lagoon water.	
	Pali Aru	Pali Aru	* Creation of paddy land by completion of Karayankannaddy tank scheme with diverted water from Pali Aru. * Re commencement of OFC cultivation by obtaining water.	* The villagers do not have any paddy land. * No or insufficient water for OFC cultivation, which is a main income source as they do not have paddy land.	
		Moonrampiddu	* Re commencement of fishing activity in full-scale by obtaining fishing vessels and gears.	* The villagers engaged in fishing in a small scale by hiring boats and nets as they lost most of the assets during the displacement.	
		Theththavaady	* Re commencement of paddy cultivation by removing of the bund constructed by SLA. * Re commencement of OFC cultivation by obtaining water.	* The villagers cannot do any cultivation as the feeder canal to the tank is blocked by a bund constructed by SLA. * No or insufficient water for OFC cultivation	
	Illuppaikadavai	Illuppaikadavai	Illuppaikadavai	* Re commencement of fishing activity in full-scale by obtaining fishing vessels and gears.	* The villagers engaged in fishing in a small scale by hiring boats and nets as they lost most of the assets during the displacement.
			Padakuturai		
			Parankikaman		
		Kaddaduwayal	* Increase of paddy production by renovation of tanks and canals (Kaddaduwayal)	* No sufficient water for paddy cultivation as tanks and canals are damaged.	
Anthonyarpuram	Anthonyarpuram	* Re commencement of fishing activity in full-scale by obtaining fishing vessels and gears.	* The villagers engaged in fishing in a small scale by hiring boats and nets as they lost most of the assets during the displacement.		
Nedunkandal	Nedunkandal	* Increase of paddy production by renovation of tank and canals. * Value addition to the paddy cultivation by construction of a rice mill.	* No sufficient water for paddy cultivation as tanks and canals are damaged. * Selling paddy instead of rice as the rice mill in the villager was destroyed.		
Kannaddy	Kannaddy	Kannddy	* Increase of paddy production by renovation of tank and canals.	* No sufficient water for paddy cultivation as tanks and canals are damaged.	
		Chalampam	* Increase of paddy production by renovation of tank and canals. * Creation of additional income by improvement of production, processing and marketing of dairy farming.	* No sufficient water for paddy cultivation as tanks and canals are damaged. * The villagers produce around 200L of milk/ day, although they used to produce 500L of milk and did processing, too.	
		Neduvarambu	* Increase of paddy production by renovation of tank and canals.	* No sufficient water for paddy cultivation as tanks and canals are damaged.	
		Maruthonduvan Velakulam	* Increase of paddy production by renovation of tank and canals.	* No sufficient water for paddy cultivation as tanks and canals are damaged.	

Based on the surveys and analysis of the villages of the target GN Divisions, the target villages were classified into four clusters according to the livelihood, potentials and disincentives for development as shown in the following figure.



**Figure 4.4 Classifications of the Target Villages
According to the Types of Livelihood, Potentials and Disincentives for Development**

4.4.2 Social and Economic Infrastructure (Approach 1 and 2 from 4.4.2 to 4.4.6)

(a) Social Infrastructure

Renovation/ reconstruction of social infrastructure is expected to promote resettlement of IDPs and unity among the community people in the process of renovation/ reconstruction and operation and maintenance.

The following table shows the issues/problems and expected effects of renovation/ reconstruction of major social infrastructure.

Table 4.5 Issues/ Problems and Expected Effects of Renovation/ Reconstruction of Major Social Infrastructure

Damaged Infrastructure	Issue/ Problem	Expected Effect of Renovation/ Reconstruction
Community Center/ Multi-Purpose Hall	There are no places for social activities such as CBO meetings, ceremonies, or tuition classes for children.	Renovation/ reconstruction of the buildings will provide a solid foundation for reactivation of CBO activities.
Road	Damaged inter-village roads as well as internal roads have made it difficult to transport agro inputs/ products to and from the market, and to send children to school in the rainy season.	Renovation of the damaged roads will promote agriculture-related economic activities and students' attendance at schools.
Preschool	There are no places for preschool education and a day nursery.	Preschool education can be resumed by renovation/ reconstruction of the buildings. In addition, preschool may function as a day nursery and will encourage women with small children to attend trainings and be engaged in a cottage industry at home.
Primary School	Primary school buildings are totally or partially damaged (for example, buildings with no roofs, no desks and chairs).	Renovation/ reconstruction of the buildings will provide a better environment for education.
Teachers' Quarters	The buildings are totally or partially damaged and teachers have to travel to the schools from their home villages. It causes frequent cancellations of classes.	Renovation/ reconstruction of the buildings will provide a better environment for accommodation for teachers and children's education.
Water Supply	See Section 4.4.3 below	

(b) Economic Infrastructure excluding Agriculture and Fisheries-related Infrastructure³⁶

Renovation/ reconstruction of economic infrastructure is expected to contribute to the revitalization of the regional economic activities and the improvement of livelihoods of the villagers in the target villages. The following table shows the issues/problems and expected effects of renovation/ reconstruction of major economic infrastructure.

Table 4.6 Issues/ Problems and Expected Effects of Renovation/ Reconstruction of Major Economic Infrastructure

Damaged Infrastructure	Issue/ Problem	Expected Effect of Renovation/ Reconstruction
Multi-Purpose Cooperative Society (MPCS) Facilities	In rural areas such as Manthai West and Madhu AGA Divisions, there are very few private shops that supply villagers with basic needs. Therefore, villagers have to travel far to purchase necessary daily goods.	MPCS shops will improve the lives of IDP returnees by providing daily needs, and have the potential to be centers of marketing the products that the villagers will produce in the future.
Rice Mills	Rice mills in the area are all damaged by the conflicts and villagers take their harvested paddy to Vavuniya and Aruradhapura to sell paddy and buy rice. That indicates that they have been wasting their money and time and lost opportunities to earn an additional income. There are a few small rice mills in the Rice Bowl area (Cluster C in Figure 4.4), but they can only mill paddy for individual farmers for their own consumption.	Rice mills operated on a commercial basis will not only restore villagers' livelihoods, but will also give a bigger impact to the regional economy, especially in the Rice Bowl area (Cluster C) because value will be added to the farm products within the region.
Market Facilities	There are no market facilities in the rural areas such as Manthai West AGA Division. It's difficult for the farmers to find a market where they can sell their farm products.	Vellankulam of Vellankulam GN Division in Manthai West AGA Division is at a junction of A-32 Highway and the road connecting Mankulam, where a future Northern Provincial Capital is planned. Accordingly, reconstruction of the market facilities at Vellankulam will give a positive impact to the farmers in the area to promote production of fruits and OFC. GA has allocated the adjoining land for petrol shed and tourist facilities by the Tourist Board.

³⁶ Agriculture- and Fisheries-related infrastructure will be discussed later in Sections 4.4.4 to 4.4.6.

4.4.3 Water Supply

(1) Direction of Assistance in Water and Sanitation Sector

Development steps from the emergency relief/ humanitarian assistance immediately after the conflict, through rehabilitation/ reconstruction, toward medium- to long-term development is illustrated in Figure 4.5.

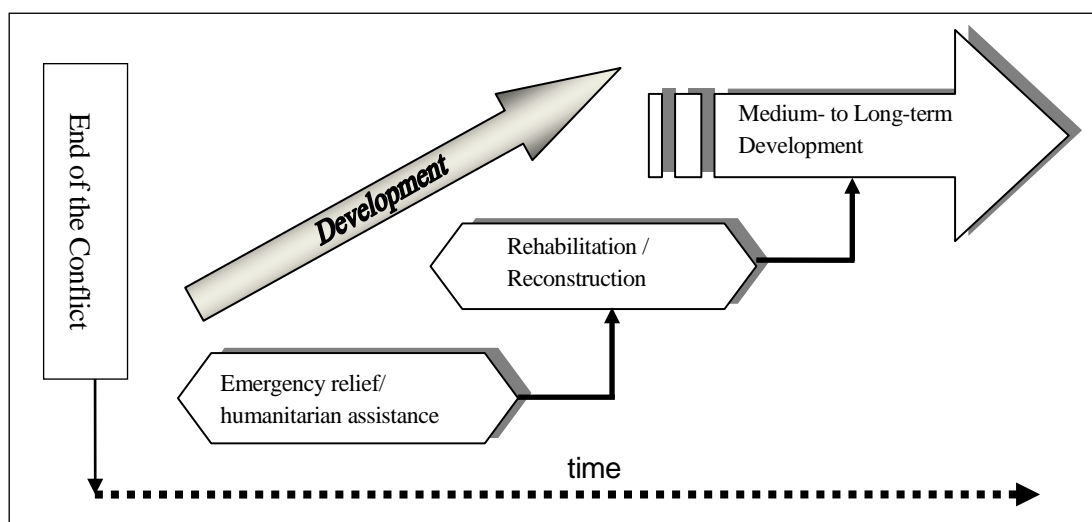


Figure 4.5 Steps in Reconstruction/ Development Phase

Activities considered to be necessary in each stage are summarized in Table 4.7. As a whole, activities in the “emergency relief/ humanitarian assistance” stage are considered to have already been put in place in the target villages of the Project, resulting in having reached the “original level” of water supply condition in the pre-conflict time. In this sense, the target villages have already reached the rehabilitation/ reconstruction stage. Therefore, the Pilot Project under the Project should be directed toward the activities categorized in the “medium-, long-term development stage.”

Table 4.7 Options for Water Supply Scheme in Accordance with the Stages from Emergency Relief/ Humanitarian Assistance through Rehabilitation/ Reconstruction to Medium to Long-term Development

Stages to Development	Time			
	Emergency relief/ humanitarian assistance	Rehabilitation /Reconstruction	Medium-term development	Long-term Development
Villages				
Coastal villages with no drinkable water sources		- To supply water by bowser - To install rainwater harvesting	- to improve the bowser supply facilities - or, to install a regional piped-water-supply scheme with public taps with reliable water source	- to have a regional piped-water-supply scheme with house-connections
Coastal villages with a few drinkable water sources		- To supply water by bowser, - To clean dug-wells - To install rainwater harvesting	-To improve the bowser supply facilities - or, to install a regional piped-water-supply scheme with public taps with reliable water source	- to have a regional piped-water-supply scheme with house-connections
Villages in Rice Bowl area	To supply water by bowsers	- To supply water by bowser, - To clean dug-wells - To install rainwater harvesting	- If water quality is safe, to improve dug-wells - If water quality is not safe, to install regional piped-water-supply scheme with public taps, with reliable water sources. Other adjacent villages to the study villages have to be considered as well.	- to have regional piped-water-supply schemes with house-connections for all of the Rice Bowl villages.
Villages in the Hilly area (Western)		- To supply water by bowser, -To clean dug-wells - To install rainwater harvesting	- to improve dug-wells, - or, to install a piped-water-supply scheme with public taps in each village	- to have a piped-water-supply scheme with house-connections in each village
Villages in the Hilly area (Inland)		- To supply water by bowser, -To clean dug-wells - To install rainwater harvesting	- to improve dug-wells, - or, to install a piped-water-supply scheme with public taps in each village	- to have a piped-water-supply scheme with house-connections in each village

Note: Options shaded have already been put in place or are in progress by other organizations.

(2) Seawater Intrusion

It is an absolute necessity that a study on the mechanism of seawater intrusion to prevent contamination to the groundwater aquifer in the District be conducted.

(3) Recommended Options for GN Division

Based on the present water use conditions, natural conditions (water source) and present activities of other organizations, possible options for water supplies in each GN Division are evaluated. The detailed results of the evaluation are presented in **Annex 5** for further information and the summary is presented in the table below.

Table 4.8 Recommended Options and Priorities Regarding Water Supply

AGA Division DS/	GN Division	Name of Village	Drinking Water Supply				
			Activities		Urgency	Sustainability (Implementation /O&M)	Priority
			Options	Assessment/Proposal			
1. Mannar Town DS	1. Parapankandal	1. Periyakulam 2. Adaikalamoddoi	Water distribution delivered by bowsers from a tube well near the Giant's Tank	One tube well near the Giant's Tank, procurement of water bowsers and distribution of water receiving tanks	B	B	B
		3. Sirukkulam	Water distribution through a piped system from a tube well near the Giant's Tank	One tube well near the Giant's Tank, one elevated tank, transmission/ distribution pipe, public taps	B	A	A
		4. Palaithalvu	---	---			
2. Nanaddan DS	2. Cheddiyarmagan Kaddaiadampam	1. Cheddiyarmagan Kaddaiadampam	Water distribution from reliable water sources through a piped system	One tube well in the village:- - An elevated tank - Distribution line Public taps	B	A	A
3. Madhu AGA	3. Vilathikulam	6. Vilathikulam 7. Ampadda Illupaikulam	Water distribution through a piped system from tube wells	One tube well in the village; plus:- - An elevated tank - Distribution line - Public taps	A	A	A
		4. Parasankulam	9. Parasankulam 10. Sinna Valayankaddu & Periya Valayankaddu	Water distribution through a piped system from tube wells in each village	One tube well may be provided; plus:- - An elevated tank - Distribution lines - Public taps	A	
4. Manthai West AGA	5. Vellankulam	10. Sewa Village 11. Ganeshapuram	Water distribution from reliable water sources through a piped system	Rehabilitation of the existing water supply system including the tube wells constructed by the ex-JICA Project, MANRECAP	B	A	A
		12. Vellankulam	A WB project- ENReP has been committed to a water supply scheme for Thevanpidy. Vellankulam will be included in this ENReP scheme.	NWS&DB of Vavunia has agreed to the inclusion of Vellankulam in their scheme.	-	-	-
	6. Thevanpidy	13. Thevanpidy 14. Puthukadu	ENReP has been committed to a water supply scheme for these villages.	No further proposals are required.	-	-	-
	7. Pali Aru	15. Pali Aru	ENReP has been committed to a water supply scheme for these villages.	Hand-pump to be installed to the existing tube wells provided by MANRECAP	-	-	-
16. Moonrampiddy 17. Theththavaady		Water supply scheme from reliable water sources by bowser	Construction of one tube well and a pumping station in Ganeshapuram area, procurement of bowsers, and providing water receiving tanks,	A	B	B	

DS/ AGA Division	GN Division	Name of Village	Drinking Water Supply				
			Activities		Urgency	Sustainability (Implementation /O&M)	Priority
			Options	Assessment/Proposal			
						Water supply scheme through pipe line from reliable water sources	Extension of Thevanpiddy Water Supply Scheme to these two villages is recommended.
4. Manthai West AGA	8. Illupaikadavai 9. Anthoniyarpuram	18. Illupaikadavai 19. Padakuthurai 20. Kaddadvayal 21. Muthaliyakamam 22. Parankikamam 23. Anthoniyarpuram	Water supply scheme from reliable water sources <u>by bowsers; or,</u>	Construction of one tube well and a pumping station in the western hilly area, procurement of bowsers, and provision of water receiving tanks.	A	B	B
			Water supply scheme from reliable water sources <u>through a piped system</u>	Construction of one tube well and pumping station in the western hilly area, construction of transmission lines from the water source to the villages, one elevated tank, distribution lines and public taps in each village.	B	C	C
	10. Nedunkandal	24. Nedunkandal	The WB project- ENReP has been committed to a water supply scheme for Adampan neighboring to Nedunkandal. This WB project- ENReP Adampan water supply scheme will include Nedunkandal village.	NWS&DB agreed to include this village into ENReP scheme.	-	-	-
	11. Kannaddy	25. Kannaddy 26. Chalampan 27. Naduvarambu 28. Maruthonduvan Velakulam	Water distribution from reliable water sources <u>by bowsers</u>	One tube well at a point of Giant's Tank, procurement of water bowsers, and distribution of water tanks	B	B	B
			or, Water distribution from reliable water sources <u>through a piped system</u>	Construction of tube wells in the areas near the Giant's tank, elevated tank, transmission/distribution pipe public taps	C	B	B

The results of the dug well inventory survey, water quality testing and water Source are attached as **Appendix 4**.

4.4.4 Agriculture

(1) Issues and Development Potentials

(a) Paddy cultivation

Resettled farmers had to clear paddy land covered by weeds and bushes grown during the displacement to prepare land for cultivation and to procure inputs for paddy cultivation though assistance by various organizations and some subsidy schemes for which expenses were provided by the Government.

Also, quality seed paddy has not been available in adequate quantities in the resettled areas after resettlement. However, the needs of quality seed paddy vary in degree among clusters of the Project target areas as follows:

Rice Bowl area (Cluster C): Before the conflict, the Rice Bowl area was one of the advanced paddy production areas in the country as the unit yield was high and paddy seeds produced in the area were exported to the other areas. The farmers in the Rice Bowl area returned to their home villages a few months earlier than those in other target areas and had started paddy cultivation in 2009/10 Maha and continued with 2010 Yala cultivation with the government subsidy scheme. Paddy seeds were provided by FAO through the Department of Agriculture and some were purchased from shops by farmers themselves. However, the amount of the paddy seeds was not sufficient.

Northern part of Manthai West & Madhu AGA Divisions (Cluster A and D): Other northern parts of Manthai West AGA Division except coastal fishing villages did not start paddy cultivation in the last Maha 2009/10. For the farmers in the area, the 2010/11 Maha season could have been the first cycle of cultivation with the government subsidy scheme as most of the paddy lands in the area are cleared of landmines and jungle. Madhu AGA Division is in a similar condition to Manthai West AGA Division. A limited number of farmers and extent may have been ready to cultivate in the 2010/11 Maha season.

It is important for farmers to reproduce seeds from the quality seeds by themselves for future paddy farming. The produced seeds are to be utilized for at least 3-4 cropping cycles.

(b) OFC cultivation (home gardening)

OFC cultivation in homesteads and highlands was popularly practiced not only in the Project target area but also in the entire District. However, considerable numbers of perennial crops had been destroyed or abandoned during the conflict period and planting materials of annual crops such as seeds were not easily prepared due to displacement. In addition, farming machinery and tools for OFC cultivation such as water pumps had been lost during that period.

The potential for home gardening is high in the area for restoration of livelihoods of IDP returnees since the production of vegetables and fruits could improve their diets. Home gardening is also considered as the primary support for the women-headed households and families with the disabled as it can be managed in the homestead with little labor and provides food for home consumption as well as additional income from the produce.

Needs of planting materials such as fruits and other perennial crops are high throughout the target villages. Restoration and effective use of the nursery farms, which were previously established

by the ex-JICA project, MANRECAP and totally destroyed in the conflicts, will meet the needs. CBOs in the area are familiar with nursery work. These nursery farms are expected to contribute to the future planting supply in the District.

(c) Livestock

Poultry is expected to meet the urgent needs of livestock reactivation throughout the villages in the target area. It also provides effective support for women-headed households and other socially vulnerable people in addition to home gardening. PTF also encourages promotion of poultry in the North.

Farmers requested to start milk production especially in the Rice Bowl area (Cluster C) and Madhu area (Cluster D) during the agriculture meetings and they also requested quality cows crossing with Jersey type. Goats had also been lost in the District during the conflict period. Goat rearing is suitable in the dry conditions in the highland area. Goats in the Project area are mostly the local type and the improved type from India is seldom seen in the field.

The office of the Assistant Director of the Department of Animal Production and Health proposed an artificial insemination (AI) unit at the village level equipped with basic instruments for AI as well as motorcycles and trainings for field practitioners during the discussion at the initial stage of the survey.

(d) Agrarian Development Center and Fertilizer Store

The Agrarian Development Center (ADC) with Fertilizer Store has provided extension services of agriculture and livestock. It provides farmers with inputs such as fertilizer, seeds and chemicals, and farm machinery to be hired. Therefore, it is an essential facility for farmers depending upon agriculture activities for their livelihood. Reactivation of the function of the ADC will have a great impact on agriculture activities in the target area resulting in upgrading farmers' agriculture skills and increasing their productivity.

(2) Directions to Assistance

Activities considered necessary in each stage are explained below and summarized in Table 4.9.

Table 4.9 Summary of Transitions in Agriculture Sector

Cluster	Step			
	Emergency Humanitarian Assistance		Reconstruction and Short-term Development	Medium- to Long-term Development
	Most Urgent	Urgent		
A (Northern part of Manthai West	<u>Paddy:</u> -Provision of registered seed for self-seed paddy production	<u>Paddy:</u> - Rehabilitation of irrigation system - Rehabilitation of	<u>Paddy:</u> - Reinstallation of farming machinery and tools - Irrigation facilities for	<u>Paddy:</u> - Paddy is produced in effective & economical means

Cluster	Step			
	Emergency Humanitarian Assistance		Reconstruction and Short-term Development	Medium- to Long-term Development
	Most Urgent	Urgent		
AGA Division)	<ul style="list-style-type: none"> - Training program on seed paddy production and paddy cultivation <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Provision of set of OFC planting material for home gardening - Establishment of Nursery for produce planting material in Sewa village - Training program in OFC cultivation and nursery technique <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Recovering number of domestic animals is carried on - Chick-rearing station is to be established for rearing day-old chicks to be month-old chicks for issuing the plan and other farmers in future - Month-old chicks are to be issued to planned women-headed families and families with disabled 	<p>potential paddy land is recovered to before the displacement</p> <ul style="list-style-type: none"> - Farming machinery and tools are reinstalled - O&M of irrigation facility by FO <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Selection of potential commercial crops - Propagation of planting material of selected crops in the nursery - Cultivation and post-harvest training for selected crops are conducted <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Backyard chicken rearing is improved as setting up chicken cages and suitable feeding system - Cattle for milking is also improved as setting cattle-seed and suitable feeding system in farm management - Artificial insemination (AI) service for improvement of cattle quality is commenced in major milk production area 	<p>stable paddy cultivation</p> <ul style="list-style-type: none"> - Activate paddy cultivation in Pali Aru - Reconstruction of rice in Illupaikadavai <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Selected potential crops are planted by planting material from the nursery - Organization of FO or production group for commercial crop production - Training program in commercial crop production, marketing and management <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Higher productive poultry as hybrid layer and broiler through their experience - Expansion of AI service to meet the demand - Commencement of animal health care in major milk production areas - Integrated technical dissemination - Strengthening milk producer groups to receive effective AI and animal health services 	<ul style="list-style-type: none"> - Paddy farming system is formed in integrated cropping system <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Function of the organization is enhanced on financial management and market information - Cropping system is improved considering other farm management as paddy and livestock for effective OFC production <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Integrated backyard poultry considering other farming activities as paddy and OFC to increase efficiency of management - Dissemination of integrated cattle care for milk production should be continuously carried out
B (Fishing villages)	<p><u>OFC:</u></p> <ul style="list-style-type: none"> - Set of OFC planting material is issued for home gardening - Training program for OFC cultivation and nursery technique is conducted <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Month-old chicks are to be issued to planned women-headed families and families with disabled 	<p><u>OFC:</u></p> <ul style="list-style-type: none"> - Production is increased and crops are diversified in home garden according to the needs - Other potential crops such as cashew nut is introduced in available land <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Backyard chicken rearing is improved as setting up chicken cages and suitable feeding system as using fishery products for protein source 	<p><u>OFC:</u></p> <ul style="list-style-type: none"> - Technique and management of home gardening is improved - Poultry is combined into home gardening - Feasibility of cashew nut cultivation is to be carried out <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Backyard chicken is carried out with home gardening - Some beneficiaries may be interested in higher productive poultry as hybrid layer and broiler 	<p><u>OFC:</u></p> <ul style="list-style-type: none"> - Technique and management is continuously improved in combined with poultry - Cultivation of cashew nuts is increased when it is feasible - Training program for processing of nut extracting is conducted <p><u>Livestock:</u></p> <ul style="list-style-type: none"> - Integration of backyard chicken, home gardening and fishery should be promoted
C (Rice Bowl area)	<p><u>Paddy:</u></p> <ul style="list-style-type: none"> - Issuing 2kg register seed for self-seed paddy production - Training program is conducted on seed paddy production and paddy cultivation <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Set of OFC planting material is issued for home gardening to women-headed family and family with disabled 	<p><u>Paddy:</u></p> <ul style="list-style-type: none"> - Irrigation system is recovered - Quality seed paddy produced and utilized in own field - Reinstall farming machinery and tools - FO leads O&M of irrigation facility <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Potential commercial crops are to be selected - Planting material of 	<p><u>Paddy:</u></p> <ul style="list-style-type: none"> -Seed paddy producer associations produce seed paddy - Reconstruction of rice mill - Increase in available farm machinery and tools <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Selected potential crops are planted by planting material from the nursery - FO or production group for commercial crop 	<p><u>Paddy:</u></p> <ul style="list-style-type: none"> - Paddy is produced in effective & economical means - Paddy farming system is formed in integrated cropping system <p><u>OFC:</u></p> <ul style="list-style-type: none"> - Function of the organization is enhanced on financial management and market information - Cropping system is

Cluster	Step			
	Emergency Humanitarian Assistance		Reconstruction and Short-term Development	Medium- to Long-term Development
	Most Urgent	Urgent		
	<ul style="list-style-type: none"> - Training program for OFC cultivation and nursery technique is conducted <u>Livestock:</u> - Recovering number of domestic animals is carried out - Chick-hatching farm is to be established to provide chicks in the District - Chick-rearing station is to be established for rearing day-old chicks to month-old chicks for issuing the plan and other farmers in future - Month-old chicks are to be issued to planned women-headed families and families with disabled 	<ul style="list-style-type: none"> selected crops are propagated in the nursery - Cultivation and post-harvest training for selected crops are conducted <u>Livestock:</u> - Backyard chicken rearing is improved as setting up chicken cages and suitable feeding system - Cattle for milking is also improved as setting cattle-seed and suitable feeding system in farm management - AI service for improvement of cattle quality is commenced in major milk production area 	<ul style="list-style-type: none"> production is organized - Training program for commercial crop production, marketing and management is conducted - Planting material for potential crops is to be arranged for supplying from the nurseries <u>Livestock:</u> - Some farmers may be interested in higher productive poultry as hybrid layer and broiler through their experience - AI service should be expanded to meet the demand - Animal health care should be commenced in major milk production areas - Integrated technical dissemination should be carried out - Strengthening milk producer group should be done to receive effective AI and animal health services 	<ul style="list-style-type: none"> improved considering other farm management as paddy and livestock for effective OFC production <u>Livestock:</u> - Integrated backyard poultry considering other farming activities as paddy and OFC for increased efficiency of management - Dissemination of integrated cattle care for milk production should be continuously carried out
D (Madhu area)	<ul style="list-style-type: none"> <u>Paddy:</u> - Issuing 2kg register seed for self-seed paddy production - Training program is conducted on seed paddy production and paddy cultivation <u>OFC:</u> - Set of OFC planting material is issued for home gardening - Nursery for producing planting material is established in Parasankulam - Training program for OFC cultivation and nursery technique is conducted <u>Livestock:</u> - Recovering number of domestic animals is carried on - Chick-rearing station is established for rearing day-old chicks to month-old chicks for issuing the plan and other farmer in future - Month-old chicks are to be issued to planned women-headed families and families with disabled 	<ul style="list-style-type: none"> <u>Paddy:</u> - Irrigation system is recovered - Potential paddy land is recovered to before the displacement - Training program is continuously conducted - Farm machinery and tools are reinstalled - FO leads O&M of irrigation facility <u>OFC:</u> - Potential commercial crops are to be selected - Planting material of selected crops are propagated in the nursery - Cultivation and post-harvest training for selected crops are conducted <u>Livestock:</u> - Backyard chicken rearing is improved as setting up chicken cages and suitable feeding system - Cattle for milking is also improved as setting cattle-seed and suitable feeding system in farm management 	<ul style="list-style-type: none"> <u>Paddy:</u> - Training program is continuously conducted - Farming machinery and tools are reinstalled - Stable paddy cultivation becomes possible by renovating irrigation facility <u>OFC:</u> - Selected potential crops are planted by planting material from the nursery - FO or production group for commercial crop production is organized - Training in commercial crop production, marketing and management <u>Livestock:</u> - Higher productive poultry as hybrid layer and broiler through their experience - Expansion of AI service to meet the demand - Commencement of Animal health care in major milk production areas - Integrated technical dissemination - Strengthening milk producer groups to receive effective AI and animal health services 	<ul style="list-style-type: none"> <u>Paddy:</u> - Paddy is produced in effective & economical means - Paddy farming system is formed in integrated cropping system <u>OFC:</u> - Function of the organization is enhanced on financial management and market information - Cropping system is improved considering other farm management as paddy and livestock for effective OFC production <u>Livestock:</u> - Integrated backyard poultry - Dissemination of integrated cattle care for milk production

4.4.5 Irrigation

Meetings, workshops and walkthrough surveys were carried out to understand the present situations of irrigation tanks in the 11 target GN Divisions. At the same time meetings were carried out with relevant departments in charge such as the Irrigation Department (Central), Irrigation Department (Provincial) and Agrarian Development Department. The list of irrigation tanks in the target GN Divisions is shown in Table 4.10.

Table 4.10 Details of Irrigation Schemes for Selected GN Divisions

DS / AGA Division	GN Division	Name of Village	Name of Irrigation Tank
Mannar Town	Parapankandal	Periyakulam	Periyakulam Tank
		Sirukkulam	Sirukkulam Tank
Nanaddan	Cheddiyarmagan Kaddaiadampan	Cheddiyarmagan Kaddaiadampan	Cheddiyarmagankulam
Madhu	Vilathikulam	Vilathikulam	Vilathikulam
	Parasankulam	Parasankulam	Parasankulam
Manthai West	Vellankulam	Vellankulam	Adampankulam
	Thevanpidy	Puthukadu	Puthukadu
	Pali Aru	Pali Aru	Karayankannadi
		Theththavaady	Theththavaady
	Illupaikadavai	Illupaikadavai	Illupaikadavai
		Muthaliyarkaman	Muthaliyarkaman
		Parankikaman	Parankikaman
	Anthonyarpuram	Anthonyarpuram	Anthonyarpuram
	Nedunkandal	Nedunkandal	Nedunkandal Tank
	Kannady	Kannady	Kannady Tank
Chalampan		Chalampan Tank	
Neduvarambu		Neduvarambu	
Maruthonduvan Velakulam		Velakulam	

Source: Prepared by the Project Team

Most of the above tanks had not been functioning in the last decades due to lack of maintenance and irrigation water has not been available for irrigation. Out of these tanks, some irrigation tanks, mainly in the Rice Bowl area (Nedunkandal and Kannady GN Divisions), are functioning with a little water though it is difficult to control the water due to lack of structures.

The results of the needs assessment of the irrigation sector are categorized as “common” for the irrigation facilities irrespective of the irrigation offices concerned and “specific” for the specific irrigation offices as tabulated in Table 4.11.

Table 4.11 Issues and Future Works in Irrigation

Present Issues	Urgent Works for Rehabilitation	Longer Term Works for Upgrading and Development
1. Common for All Irrigation Facilities under 3 Departments		
<ul style="list-style-type: none"> Mines are not cleared at not only tank bund but canals and irrigable areas. Access route to bund and structures are covered by bushes. Bunds are eroded. Sluice structures are deteriorated due to no repair and maintenance for longer period, and too old. Spillways either have no structure or are deteriorated without attending for a long period. Weeds are grown on the bunds and canals. Canal structures are not available or are deteriorated. 	<ul style="list-style-type: none"> Mines shall be cleared urgently. Bushes and weeds on access roads shall be cleared. Bunds shall be rehabilitated including clearing weeds. Sluice structures shall be repaired if possible, otherwise to construct new. Spillway structures shall be repaired or newly constructed depending on discharge estimated. Canals shall be rehabilitated including repair of structures after clearing weeds. FO who is in charge of operation and maintenance (O&M) shall be organized properly and training for skill and management shall be conducted including contribution of funds. 	<ul style="list-style-type: none"> Structures of sluice and spillway of tanks shall be upgraded including provision of water measuring devices. Canal structures with water measuring facilities shall be properly constructed. Strengthening of FO for O&M shall be carried out continuously. Preparedness for disaster management shall be disseminated to FOs and beneficiaries.
2. Irrigation Facilities for Irrigation Department (Central)		
<ul style="list-style-type: none"> Overall management in relation to the Giant's Tank is not functioning. 	<ul style="list-style-type: none"> Overall water management of the Giant's Tank scheme shall be restored first for Maha. 	<ul style="list-style-type: none"> Water management system for Yala shall be totally restored and disseminated to FOs.
3. Common for Irrigation Facilities of Departments of Provincial Irrigation and Agrarian Development		
		<ul style="list-style-type: none"> Watershed management shall be planned and implemented by FO under guidance by the Departments.

Based on the above identification, the “Urgent Works for Rehabilitation” shall be attended by the Project as a part of the Pilot Projects of Small-scale Infrastructure Rehabilitation.

In addition, it was discussed on various occasions that a study and measures to prevent seawater intrusion at river outlets is required in order to obtain full utilization of freshwater for irrigation purposes.

4.4.6 Fisheries

(1) Issues in Target Villages

Five target villages relevant to fisheries were selected for the implementation of the Pilot Projects. The five villages are Thevanpidy, Anthoniyarpuram, Moonrampiddy and Illupaikadavai in Manthai West AGA Division, and Parapankandal in Mannar Town DS Division. The issues encountered by the fishing communities on returning to their respective villages are described below. This necessitated emergency assistance to resolve the issues.

- (a) Loss and damage of almost all fishing crafts, equipment and gear of the target villages during conflicts and displacements are seriously affecting the fishing families who had devoted most of their effort to capture fisheries (fishing and collection). As a result the villagers are deprived of income earnings that contribute to livelihood support and household budget expenditures on food, clothing and health care, etc.
- (b) Without productive assets (fishing boats, engines and gear) for catching and harvesting, and other means of income generation, the inhabitants are the most vulnerable to social issues (poverty).
- (c) Destruction and damage to the physical infrastructure of Fisheries Cooperative Societies (FCS), namely office buildings, meeting halls, and facilities for social and economic activities are seriously affecting the reorganization to pursue social and economic activities (see Table 4.12). The reorganization of FCSs is important, as they are the windows to various economic activities and providers of services to the village inhabitants. It is the policy of the Government and donors that any assistance to the villages is always provided through FCSs and relevant societies in the villages.
- (d) In regard to inland fisheries, farmers of the focal villages (Periyakulam and Sirukkulam of Parapankandal GN Division) conduct fishing in the Giant's Tank during off-seasons to augment their income. Their fish landings that depend on regular stocking of fish fingerlings have declined in recent years resulting in loss of income earnings from fish catch. The National Aquatic Development Board (NAQDA), the authority in charge of stocking the tank, has not carried out regular fingerling stockings due to the conflict as well as insufficient quantity of fry/fingerlings at its breeding and production centers. NAQDA's capacity for production and distribution is also limited in terms of physical and financial resources.

Table 4.12 Status of the FCSs in Target Villages

DS/ AGA Division	Manthai West				Mannar Town
GN Division	Thevanpidy	Pali Aru	Illupaikadavai	Anthonyarpuram	Parapankandal
Target Villages	Thevanpidy	Moonrampiddy	Illupaikadavai	Anthonyarpuram	- Periyakulam - Sirukkulam
Fishing Population	779	409	298	328	803
FCS Registration Date	May 20, 1989		June 19, 1989	2006	1997
FCS Registration No.	MN/246	MN/272	MN/245		MN/285
Membership					
- Male members	- 157 (Before 172)	- 153 (Before 304)	- 75 (Before 125)	- 133 (Before 92)	- 87 (Before 93)
- Female members	- 21 (9)				- 30
Financial Assets					
Savings (Before displacement)			Rs. 6.0 lakhs	Rs. 1.3 lakhs	Rs. 17,890
Physical Assets					
1) Land	Own, 25 perches	Own	Own (0.75 acre)	No, has applied	No, has applied
2) Office building	Yes, (partially destroyed)	Yes, destroyed	Yes, destroyed	No, using RDS building	No, using RDS building
3) Meeting room/	Yes, destroyed	Yes, destroyed	Yes, destroyed	No	No
4) Fish collection/ handling	No, on beach (wadi)	No, under a tree	No	No	No

DS/ AGA Division	Manthai West				Mannar Town
GN Division	Thevanpidy	Pali Aru	Illupaikadavai	Anthonyarpuram	Parapankandal
shed				No	
5) Fresh fish store	No	No	No	No	No
6) Dry fish store	No	No	No	No	No
7) Ice store	No	No	No	No	No
8) Fuel store	Yes, destroyed	Yes, destroyed	Yes, destroyed	No	No
9) Engine/gear store	Yes, destroyed	Yes, destroyed	Yes, destroyed	No	No
10) Net repair yard	No	No	No	No	No
11) Resting shed	No	Yes, net repair too	Yes, net repair too	No	No
12) Dry fish preparing/ salting	Yes, net repair too	No	No	No	No
13) Fish transport vehicle	No	No	No	No	No
14) Water tank	Yes, destroyed	Yes, destroyed	No	No	No
15) Bakery	No	No	Yes, building Destroyed	No	No
Economy Activities and Social Services					
1) Fish marketing	No	Yes	No	Yes,	Yes, open tender
2) Fishing nets sales	Yes	Yes	Yes	No	No
3) Fuel sales	Yes	Yes	Yes	Yes	No
4) Savings & loans	Yes	Yes	Yes	Yes	Yes
5) Revolving fund	Yes	Yes	Yes	Yes	No
6) Others (Bakery & Grocery)	No	Yes (grocery)	Yes (Bakery)	No	No
7) Other services					
- Salaries to teachers	No	Yes	No	No	Yes
- Drinking water supply	Yes	Yes	No	No	No
- Phone services	No	No	No	No	No

Remarks:

- (1) Status as surveyed during the early phase of the Project study (May/June 2010)
- (2) Changes in FCS membership noted in a survey conducted in November 2010, whereby around 23% increases in Thevanpidy, Anthonyarpuram and Parapankandal; a decline of 50-56% in Moonrampidly and Illupaikadavai. The survey also indicated the FCSs have re-organized and resumed collection of member fees and regular meetings, and also having savings (1 lakh to 3 lakhs) in the bank.

(2) Development Potential

- (a) The four focal coastal villages are located along a wider continental shelf, and have stretches of mangroves and lagoons that are rich in varieties of demersal species (groupers, snappers, prawns, crabs, sea cucumber (beach de mer), etc.) that are in high demand in domestic and international markets. Fishing activities in the coastal areas and lagoons are important means for income and livelihood of the community. These demersal species are attractive to fish traders and assemblers working in collaboration with processing factories, therefore fishing is a major contributor not only to income generation but also to export earnings.
- (b) The fishery resources potential in the inshore and offshore waters are even greater. The fishermen had no access to these resources, as their fishing has been limited to the coast, lagoons and mangrove areas. The army and navy had restricted fishing activities during the conflicts. Another obstacle hindering the exploitation of fishery resources is the lack of improvements of the fishing crafts and equipment.
- (c) The Giant's Tank, with an area of around 2,244 ha, is a potential source for freshwater fish production. Around 1,000 farmers (of 11 Freshwater Fishermen Cooperative Societies) conduct fishing during off-seasons to augment their incomes. However, the potential for the water body is not adequately exploited due to irregular stocking of fingerlings. In addition to stocking of local fish species, fingerlings of Indian major carp and Chinese carp need to be stocked periodically to support the community living around the tank.

Likewise, there are a number of water bodies in Mannar District with the potential for freshwater fish production that have been neglected for a long time by not implementing a development program of stocking of fingerlings and organizing community-based fish culture production.

(3) Disincentives

- (a) The target fishing villages have not been considered or provided for even with minimum fishery infrastructure in tandem with development in other parts of the country. Except for the provision of fishermen resting sheds (under NECORD), there is a total neglect or lack of consideration to provide some essential infrastructure such as sheds for fish landing, marketing, boat and engine repair, storerooms for engines and fuel. Therefore, the activities of fish landing and marketing are not organized and not concentrated under one roof. Lack of proper fish receiving and handling facilities at landing sites contributes to unsanitary fish handling on shore (beach), post-harvest losses of fish, etc.
- (b) Neglect in fisheries development in these villages has confined the fishermen to target fishing operations in the coastal resources for a long time, especially with the use of traditional crafts and low engine horsepower. It can be expected that there is heavy pressure on the coastal fisheries resources.
- (c) Thevanpidy is located about one kilometer away from the sea (or beach) and has a stretch of mangrove and a small stream between the village and the beach from where the fishermen go out to fish daily, and also where their fishing boats and gear are kept. They have to wade through the stream and walk to the beach with their fishing gear and engines. This situation puts constraints on them and fish traders with cooler vans who are reluctant to come regularly and on time for the landed fish catches. In such circumstance, the fishermen have to directly market their catches to Mannar town, by which time the catches lose their freshness and fetch lower prices.
- (d) Losses in productive assets, damages of the physical structures and poor financial conditions of the FCSs are affecting reorganization and recovery of the societies as well as opportunities for income generation.

(4) Fisheries Situation of the Target Villages for Rehabilitation/ Reconstruction

The selected four coastal fishing villages for the Pilot Projects in Manthai West AGA Division, namely Thevanpidy of Thevanpidy GN Division, Moonrampiddy of Pali Aru GN Division, Illupaikadavai of Illupaikadavai GN Division and Anthoniyarpuram of Anthoniyarpuram GN Division, are in the Vidaltivu Fisheries Inspectors Division. Periyakulam/Sirukkulam village, where communities conduct inland fishing, is located close to the Giant's Tank in Parapankandal GN Division of Mannar town DS Division.

The fisheries situation is as described in the preceding paragraphs, namely (1) issues in target villages; (2) development potential and (3) disincentives. To summarize, four fishing villages in Manthai West AGA Division are traditional fishing villages, whose inhabitants predominantly depend on fisheries for their livelihoods (refer to Table 4.13) and income. Fishing activities are seriously affected due to damage and loss of productive assets (fishing boats and gear) during the conflicts and displacements of entire villages. On the other hand, the inhabitants of Parapankandal GN Division are farmers who conduct fishing in the Giant's Tank during the off-season, and are classified as freshwater fishermen or fish farmers. These fish farmers too had suffered losses and damage to fishing boats and nets. In late 2009, NAQDA provided 30 canoes (vallams) and nets to FCSs to be distributed among its member fish farmers.

**Table 4.13 Number of Families Engaged in Livelihood Activities
(as of end of April 2010)**

Target Village Livelihood	Thevanpidy 203HH	Moonrampiddy 155HH	Anthonyarpuram 129HH	Illupaikadavai 144HH
Paddy cultivation	15	0	116 (in leased land)	0
OFC cultivation	0	0	0	6
Livestock farming	60	4	16	4
Marine fishing	196 (before) 177 (now)	217 (before) 50-60 (now)	137 (before) 129 (now)	175 (before) 75 (now)
Inland fishing	—	0	—	—
Hunting	—	0	—	—
Daily work/labor	30	12	22	20
Others (in any)	13	—	—	5 (toddy tappers)

Remarks: (a) "before" refers to the last displacement.

(b) "now" refers to returnees during the early phase of the Project survey (May/June 2010).

(c) Fishermen have begun fishing using hired boats/canoes or by other means such as mosquito nets.

(d) HH refers to Households.

Source: Social Survey of the Project

A brief characterization of the target villages is shown in Table 4.14, and it provides the status and issues encountered by the fishing communities.

Table 4.14 Brief Characterization of the Target Fishing Villages

DS/ AGA Division	Manthai West				Mannar Town
GN Division	Thevanpidy	Pali Aru	Illupaikadavai	Anthonyapuram	Parapankandal
Target Villages	Thevanpidy	Moonrampiddy	Illupaikadavai	Anthonyapuram	- Periyakulam - Sirukkulam
Location of villages	Less than 1 km from sea coast; separated by stream & mangroves	Close to beach	Close to beach	Close to beach	Close to Giant's Tank
Distance from Mannar town	About 60 km	50 -55 km	35 - 40 km	About 45 km	20 - 25 km
Fishing Crafts Used	- OFRP (with OBE 15 horsepower); size 18 feet - Canoes (motorized with OBE 9 horsepower, and non-motorized); size 22 – 25 feet				- Canoe with outrigger (size 18 feet)
Fishing Gear Used	-Gill nets -Stake nets -Crab nets & traps	-Gill nets -Stake nets -Crab traps & nets	-Gill nets -Stake nets -Crab traps & nets	-Gill nets -Stake nets -Crab traps & nets	- Gill nets - Cast nets - Traps
Fishing Landing & Handling Facilities	None	None	None	None	None
Fish Production (2006) Fish Production (2007)	98,511 kg 119,268 kg	304,880 kg 298,160 kg	80,414 kg 86,570 kg	84,042 kg 91,495 kg	Stocking program carried out only for Giant's Tank, but it is not regularly done. No catch statistics collected; according to interviews daily catches vary from 1,000 to 2000 kg per village (during fishing season).
Issues/Constraints	<ul style="list-style-type: none"> - All productive assets (boats, engines, etc.) damaged or lost. - Using hired/leased canoes, engine and gear. - As a result of using hired/leased fishing crafts and gear, the fishermen are very much dependent on fish traders (from whom they have hired or leased) and are forced to sell their catches at lower prices; the fishermen are at a disadvantaged position in price negotiation. 				<ul style="list-style-type: none"> - No fishing activity now though community has received canoes, nets and bicycles with fish boxes from NAQDA. - Fingerling stocking has not been regular mainly due to conflicts. - A recent stocking of 150,000 fingerlings failed and escaped according to the community.
Main Issue of Thevanpidy Fishing Village	<p>Main issue</p> <ul style="list-style-type: none"> - Landing site is on the beach, which is about 1 km away from village that is separated by a stream and stretches of mangroves. Movement of fishermen possible during low tides. - This impedes movement and makes accessibility to landing site (beach) extremely strenuous for fishermen to carry their catches, gear, etc. daily to home for safekeeping. Boats are left on the beach. - Irregular visits or reluctance of fish traders with mini-cooler vans to visit due to lack of accessibility to the landing site. - Daily fish catches had to be directly marketed by fishermen (in absence of fish traders), resulting in loss of value (as fish price falls due to drop in freshness). 				

Source: Prepared during the early phase of the Project survey (May/June 2010)

(5) Directions to Assistance to Target Fishing Villages (Including Inland Fishing in the Giant’s Tank)

IDPs returning to the target fishing villages are primarily in fishing communities whose main source of income is from fisheries (fishing and post-harvest activities) as described in the preceding paragraphs. This income earning contributes greatly to livelihood support and household expenditures on food, clothing, health care, etc. Likewise the fish-farmers around the Giant’s Tank who augment their incomes through off-season fishing have also lost their fishing boats and nets.

In view of the prevailing situation of the fisheries sector, the recovery or re-generation shall have to transition in steps starting with emergency/humanitarian assistance as Step 1, rehabilitation/reconstruction as Step 2, and finally medium- to long-term development as Step 3 as delineated below.

Table 4.15 Summary of Transitions in the Fisheries Sector Relevant to Target Villages

Target Villages	Step 1		Step 2	Step 3
	Emergency and Humanitarian Assistance		Rehabilitation and Reconstruction	Medium to Long Term Development
	Time →			
[Marine] - Thevanpidy - Moonrampiddy - Anthoniyarpuram - Illupaikadavai	- Provision of productive fishing equipment (fishing craft, gear, nets) - Acquiring fishing boats & engines through lease or hire. - Rehabilitation of damaged FCSs’ buildings. - Provision of training on dry fish.	- Conducting fishing & sales of fish catches - Re-organization of FCSs reorganized and activating some social & economic activities (savings, revolving loans, etc.) - Value addition to dried fish & income improvement.	- Continue the supply of necessary numbers of fishing crafts & equipment to sustain the recovery process. - Encourage revolving loan scheme that would benefit the fishermen to acquire boats & equipment - Hard components (e.g. fish collection & marketing shed, ice store & fish store for FCS’s marketing activities, etc.) - Soft components (training in dry fish processing, managerial skills, accounting, etc.)	- Assistance (hard and soft components) to sustain the development in progress.
[Inland] (Giant’s Tank) - Periyakulam & Sirukkulam	- Provision of fishing boats (Vallam), nets, fish boxes for marketing. - Provision of training on dry fish.	- Conducting fishing and sales; however, fish catch depends on stocking that has been neglected during the conflicts.	- Improve quantity of fish landed through stocking of fingerlings. - Establish fry/fingerling rearing facilities.	- Construct ponds and other facilities for rearing of fry & fingerlings facilities (ponds, etc.) that will be stocked in Giant’s Tank.

Target Villages	Step 1		Step 2	Step 3
	Emergency and Humanitarian Assistance		Rehabilitation and Reconstruction	Medium to Long Term Development
	Time →			
		- Value addition to dried fish & income improvement.		- Provide training to responsible members of CBOs on technique of aquaculture, simple bookkeeping, etc.

4.5 Direction in the Implementation of the Pilot Projects

Based on the needs assessed and the information gathered by the surveys mentioned above in accordance with the strategies and approaches, the directions in the implementation of the Pilot Projects are set as follows:

The Pilot Projects will contribute to (1) restoring the livelihoods of the IDPs, (2) rehabilitating basic social and economic infrastructure, and (3) developing the capacity of the resettled communities/ organizations such as CBOs to plan and carry out socio-economic activities.

Criteria for the selection of the Pilot Projects are decided according to the above-mentioned directions.

4.6 Procedure and Criteria on Selection of the Pilot Projects

The Pilot Projects consist of (1) small-scale infrastructure rehabilitation and (2) community-based activities.

Under the Pilot Projects of Small-scale Infrastructure Rehabilitation, social and economic infrastructure will be rehabilitated, while the Pilot Projects of Community-based Activities aim to improve people's livelihoods and the standard of income.

The Pilot Projects are selected based on the strategies and approaches mentioned in Section 3.1 and from the needs identified in accordance with the following procedure and criteria.

Step 1: To narrow the needs down according to the following four criteria and make a long list (common to all the needs).

	Issue	Criteria
1	Other support for the identified needs	No commitment to support for the identified needs is made by other organizations to avoid overlap of activities.
2	Landmines	NTSC and LRC are issued in the area to secure the safety.
3	Public welfare	The needs are met for the public welfare.
4	Technical feasibility	The solution to meet the needs is technically feasible to implement.

Step 2: To select the needs for a shortlist from the long list mentioned above in accordance with the following criteria.

Pilot Project		Criteria
Small-scale Infrastructure Rehabilitation	Social infrastructure	(1) Resettlement of the returnees is expected to be promoted because of the Pilot Project. (2) The benefits to the beneficiaries are expected from the Pilot Project. No risks are anticipated in the community and among the villages due to implementation of the Pilot Projects. (3) Necessary resources such as human resources, land, materials are available. (4) System of operation and maintenance is expected to be reestablished and operated properly.
	Economic infrastructure	(1) The Pilot Project contributes to the revitalization of the regional economic activities. (2) The economic benefits to the beneficiaries are expected from the Pilot Project. No risks are anticipated in the community and among the villages due to implementation of the Pilot Projects. (3) Necessary resources such as human resources, land, materials are available. (4) System of operation and maintenance is expected to be reestablished and operated properly.
Community-based Activities		(1) CBO has the capacity to implement the Pilot Project. (2) The Pilot Project is expected to be sustainable. (3) The benefits to the beneficiaries are expected from the Pilot Project. No risks are anticipated in the community and among the villages due to implementation of the Pilot Projects. (4) Necessary resources such as human resources, land, materials, cost for operation & maintenance are available.

As a prerequisite condition of the selection of the needs for the Pilot Projects, there should be willingness to participate in the Project activities among the villagers. In addition, cooperation from the relevant government agencies has to be ensured.

From the shortlisted needs, further selection was carried out to finalize the Pilot Projects in

consideration of a balance of activities among the villages, period of implementation and social and environmental impacts, etc., and interviews and discussions with the government officers such as the GA, District Rehabilitation and Reconciliation Secretariat (DRRS), Director Planning of the GA office, respective DSs and AGAs, heads of the line Department and other donors.

4.7 Selected Pilot Projects

Based on the procedure and criteria of the selection of the Pilot Projects explained in the previous sections, the following activities were selected as the Pilot Projects.

Table 4.16 Selected Pilot Projects (Cluster-wise)

Cluster/ Major Livelihood	Objectives	Pilot Projects	
		Small-scale Infrastructure Rehabilitation (Approach 4, 5, 6, 7 and 8)	Community-based Activities (Approach 4, 5, 6, 7 and 8)
A (Northern part of Manthai West AGA Division)/ OFC cultivation	Restoration of livelihood	- Irrigation tank - Nursery farm - Poultry hatchery facilities (Chick rearing hut)	- Reactivation of OFC/ home gardening - Reactivation of paddy cultivation - Reactivation of poultry - Income generation activities (block making, mat weaving)
	Rehabilitation of social infrastructure	- Tube well - Village water supply system - Village internal road - Preschool	
	Rehabilitation of economic infrastructure	- MPCS facilities - Market facilities	
	Capacity development of CBOs and cooperatives	- Multi-purpose hall/ Community center	- Trainings & study tours for strengthening CBOs
B (Northern part of Manthai West AGA Division)/ Fisheries	Restoration of livelihood	- Provision of fishing crafts and equipment with revolving loan fund scheme	- Reactivation of OFC/ home gardening - Reactivation of poultry - Income generation activities (bakery, dry fish production)
	Rehabilitation of social infrastructure	- Village internal road	
	Capacity development of CBOs and cooperatives	- Community center - FCS building	- Trainings & study tours for strengthening CBOs
C (Rice Bowl area)/ Paddy cultivation	Restoration of livelihood	- Irrigation tank - Poultry hatchery facilities (Poultry breeding farm) - Fish pond for fry rearing	- Reactivation of paddy cultivation - Reactivation of OFC/ home gardening - Reactivation of poultry - Income generation activities (Fish fry/ fingerling rearing)
	Rehabilitation of social infrastructure	- Tube well - Village water supply system - Village internal road - Preschool	

Cluster/ Major Livelihood	Objectives	Pilot Projects	
		Small-scale Infrastructure Rehabilitation (Approach 4, 5, 6, 7 and 8)	Community-based Activities (Approach 4, 5, 6, 7 and 8)
		- Bridge and flood dike	
	Capacity development of CBOs and cooperatives	- Community center	- Trainings & study tours for strengthening CBOs
D (Madhu AGA Division)/ Paddy and OFC cultivation	Restoration of livelihood	- Irrigation tank - Nursery farm - Poultry hatchery facilities (Chick rearing hut)	- Reactivation of paddy cultivation - Reactivation of OFC/ home gardening - Reactivation of poultry - Income generation activities (block making)
	Rehabilitation of social infrastructure	- Tube well - Village water supply system - Village internal road - Preschool	
	Rehabilitation of economic infrastructure	- MPCS facilities	
	Capacity development of CBOs and cooperatives	- Community center	- Trainings & study tours for strengthening CBOs
Common to all clusters	Promotion of social unity		- Microfinance activities - Peace reconciliation workshop

A village-wise summary of the Pilot Projects are shown in **Annex 6** and **7**.

4.8 Stakeholders Involved in the Pilot Projects (Approach 6)

In handing over the project component and utilizing the lessons learned from the Pilot Projects and the Road Map, the following stakeholders have been identified.

DS/ AGA offices at the DS/ AGA Division level and Pradeshiya Sabha implement various programs/ activities in community development such as construction and maintenance of small-scale infrastructure, Food for Work program and livelihood assistance.

Under the DS/ AGA offices, GN conducts administrative work and the Rural Development Officer (RDO) works with CBOs. Assigned as a focal point of community development in DS Divisions, RDOs are expected to be in close collaboration with GNs, DS/ AGA Division and Pradeshiya Sabha in order to grasp the ground situation as well as to practically ensure sustainability of the program. While functioning in the field, RDOs in general have a tendency to lack human, physical, and financial resources, which remains a challenge to be overcome.

The government departments and institutions of respective sectors technically support activities at the community level.

Multi-lateral/ bi-lateral donors and NGOs still play active roles in rehabilitation/ reconstruction assistance. The focal point to coordinate those actors' assistance is the GA office.

Involvement of stakeholders in community development is crucial and could be a conditionality for the effective implementation of the Road Map.

4.9 Environmental and Social Considerations

4.9.1 Considerations for the Social and Natural Environment

The purpose of the environmental and social considerations in this Project is to evaluate adverse social and environmental impacts which are expected to be caused by the proposed Pilot Projects, examine countermeasures against the adverse impacts and monitor the construction and operation of facilities/activities from the viewpoints of the environmental and social considerations. The series of site reconnaissance were conducted by the Project Team during the field surveys after selection of the candidate Pilot Projects for the selected target villages and during implementation of Pilot Projects of Small-scale Infrastructure Rehabilitation and Community-based Activities.

Appendix 5 examines issues on the environmental and social considerations such as (i) the legal framework on environmental and social considerations, (ii) the necessary environmental procedures for the Pilot Projects under the Project, (iii) the expected environmental impacts for the Pilot Project of Small-scale Infrastructure Rehabilitation and Community-based Activities as of October 2010, (iv) land issues that appeared during the project implementation, (v) the Environmental Management Plans (EMP) and Environmental Monitoring Plans (EMoP) of the Pilot Projects of Small-scale Infrastructure Rehabilitation and Community-based Activities and (vi) monitoring results.

Details of the findings and considerations of the preliminary environmental assessment as of October 2010, based on the analysis of the information collected from the field reconnaissance by undertaking site inspections for all candidate Pilot Projects and secondary data, are presented in **Appendix 5**. In addition, the EMP and the EMoP were examined to monitor the negative impacts on the natural and social environment for both the Pilot Projects of Small-scale Infrastructure Rehabilitation and Community-based Activities during the planning, construction and operation phases. During implementation of the Pilot Projects, several land issues have arisen as mentioned below. Based on the results of the consultations, some items in findings and considerations of the preliminary environmental assessment are revised and modified as of January 2012.

The results of the preliminary environmental assessment of the proposed Pilot Projects were

considered and utilized in the detailed designs of the Pilot Projects to mitigate the negative impacts to the natural and social environment. In addition, all the activities are being monitored by the Project Team according to the proposed EMP.

Aside from the preliminary environmental assessment for the Project mentioned above, the Environmental Clearance Certificate (ECC) was obtained for construction of a fish pond for fry/fingerlings rearing for FCS Sirukkulam from the Central Environmental Authority (CEA) with assistance by the Project Team even though it has been reluctantly cancelled because of the land issue. Also the Environmental Protection License (EPL) is under procedure for approval by CEA for the bakery building in Illupaikadavai, while the Trade License and Business Registration, which are necessary for applying for EPL, have been obtained by FCS Illupaikadavai with assistance by the Project Team.

The details of the land issues that occurred during the project implementation are described in **Appendix 5** as well. At the time of preparing the Progress and Interim Report, the land issues for the project sites for construction, reconstruction and rehabilitation could not be confirmed. However, some land issues have arisen for some project sites after formulating construction plans by the Project Team and before/ after commencing the reconstruction/ rehabilitation of the specific facilities at the specific sites. As of January 2012, all the land issues which had appeared by December 2011 had been already resolved after consultation and coordination with several stakeholders, local authorities, land right asserters, villagers, the Project Team, and JICA, if necessary, resulting in postponing and recommencing construction, selecting alternative lands, and cancelling the construction, respectively.

4.9.2 Consideration for the Vulnerable

The conflict has resulted in large numbers of socially vulnerable people such as women-headed households and people with disabilities. Approximately 20% and 7% of the total number of households in the Project target GN Divisions are women-headed households and families with people with disabilities, respectively.

Particular emphasis should be given to the accessibility of the project activities to the vulnerable groups. However, there is a possibility that an overemphasis on targeting the socially vulnerable people would make other members of the community feel neglected by or excluded from the outside assistance. This could be followed by a social disharmony within a community and isolation of the socially vulnerable people.

Therefore, it is important to take into consideration relations between the vulnerable groups and the rest of the members in a community when the Project plans its activities. To mitigate

tensions and facilitate social inclusion of the vulnerable people, the Project should seek to design its activities to create opportunities for the targeted vulnerable population while also benefiting the whole community. In this respect, incorporation of the support for the socially vulnerable people into the community-based approach in combination with the activities targeting those people could be effective, especially in the post-conflict regions where the whole community has been affected by the conflict.

As activities targeting the socially vulnerable people, the Project introduced “home gardening” and “backyard poultry” as a means of livelihood in collaboration with the CBOs in the villages.

From the viewpoint of the community-based approach, the rehabilitation of small-scale infrastructure benefits not only the socially vulnerable people, but the whole community as well.

In addition, CBOs were encouraged to include the socially vulnerable people in their villages in the income generation activities such as mat weaving and dry fish production for which the beneficiaries were selected from the whole community.

Because women in the rural areas have little social safety net, microfinance activities have been introduced to the target villages.

4.10 Validation of the Effects of the Pilot Projects: Implementation of Baseline Survey

Evaluation of the effects of the Pilot Projects is conducted by examining the information of the Baseline Survey and the Endline Survey. The following points are evaluated based on the data and information gathered in the surveys: (1) output of each Pilot Project, (2) contribution of the Pilot Projects to reconstruction of lives and livelihoods of IDPs and (3) the effectiveness of the strategies and approaches presented in Section 3.1.

A series of surveys, such as the household survey, beneficiary survey, interview survey and focus group discussions were conducted as a part of the Baseline Survey from November 2010 to early 2011. The results of the surveys are attached as **Appendix 6**.

4.11 Record of Achievement

4.11.1 Pilot Projects of Small-scale Infrastructure Rehabilitation (SSIR)

(1) Implementing Method

Construction of small-scale infrastructure is to be conducted in two methods. One is Community Contract, under which the client is the Project Team and the works are carried out by the community in a special appointment contract adopting the Procurement Guideline of the National Procurement Agency of the GOSL. Community Contract was adopted only in the villages where the ex-JICA Project, MANRECAP, was implemented except for one item in Parasankulam as the people in the village are acquainted with Community Contract works. The following eight (8) contracts are carried out by Community Contract.

Table 4.17 List of Community Contract Works

No.	Facility to be Rehabilitated	GN Division	Village
1	Nursery farm	Vellankulam	Sewa Village
2		Parasankulam	Parasankulam
3	Multi-purpose hall	Vellankulam	Sewa Village
4			Ganeshapuram
5		Pali Aru	Pali Aru
6	Poultry hatchery facilities (Chick Rearing hut)	Vellankulam	Sewa Village
7	Village water supply system	Vellankulam	Sewa Village
8			Ganeshapuram

The other construction works and supply of facilities are implemented through open or shortlisted tenders, for which the JICA Sri Lanka office is the client. There are six (6) packages of contracts organized as follows:

- (1) Tube Well Construction and Rehabilitation
- (2) Buildings
- (3) Civil Works 1 consisting of village roads and irrigation tanks
- (4) Civil Works 2 consisting of village roads, irrigation tanks, fish pond and flood dike
- (5) Buildings and civil works mixed in Madhu AGA Division
- (6) Supply of fishing facilities

A Revolving Loan Fund scheme was introduced for the above-mentioned (6) supply of fishing facilities. The repayment status and utilization of the fund has been monitored not only by the Project but also by the Department of Fisheries and Aquatic Resources (DFAR) as it is their mandate to regulate the revolving loan fund operated by FCS.

The Pilot Projects of SSIR were scheduled to be completed by the end of March 2011. The contracts of “Tube Well Construction and Rehabilitation” and “Supply of Fishing Facilities” were completed on schedule, while other contract works were not completed by the end of January 2012 except for some of the buildings at Cheddiyarmagan Kaddaiadampan. Some of the contracts could not be completed by the end of March 2012 due to the following reasons:

- (1) Land issues arose when construction started
- (2) UXO issues arose while construction was in progress
- (3) Additional works required by the recipient Departments were ordered to the contractors
- (4) Management of the contractors was inadequate
- (5) Detailed design of the facilities and the construction process that followed was delayed due to the heavy and continuous rain in February and March 2011

The construction works that were not completed by the end of March 2012 will be completed in September 2012.

A summary of the progress of the above-mentioned Pilot Projects of SSIR with the names of institutions to hand over and to be responsible for the operation and maintenance of the facilities are attached in **Annex 8**.

4.11.2 Pilot Projects of Community-based Activities

Following is the summary of the achievement of each Pilot Project.

Table 4.18 Summary of Pilot Projects of Community-based Activities

Pilot Project (no. of target villages)	Activity	Achievement
Agriculture-related activities		
(1) Paddy reactivation program (15 villages)	<ul style="list-style-type: none"> • Conducting trainings • Distribution of quality seed paddy 	Number of beneficiaries of seed paddy distribution is 790. They utilized the seed paddy for the last Maha.
(2) OFC cultivation reactivation program	<ul style="list-style-type: none"> • Conducting trainings • Distribution of seeds, seedlings etc • Promotion of home gardening • Operation of nursery farms 	840 people got seeds, etc. and started OFC cultivation at home gardens or homesteads. Nursery farms are successfully producing seedlings, etc. and are expected to be operated by FOs after the end of the Project.
(3) Poultry reactivation program	<ul style="list-style-type: none"> • Conducting trainings • Operation of 1 breeding farm and 2 chick rearing facilities • Distribution of 1-month old chicks 	1 breeding farm and 2 chick rearing facilities are successfully hatching and rearing chicks and those chicks have been distributed to the beneficiaries.

Pilot Project (no. of target villages)	Activity	Achievement
Income generation activities		
(1) Cement block making (2 villages)	<ul style="list-style-type: none"> • Conducting trainings • Support for marketing 	Groups of cement block making have started production and have earned a considerable amount of profit out of this activity.
(2) Mat weaving (1 village)	<ul style="list-style-type: none"> • Construction of a mat weaving center • Conducting trainings • Support for marketing 	20 female participants have started production.
(3) Bakery (1 village)	<ul style="list-style-type: none"> • Conducting trainings • Support for operation of bakery 	FCS will undertake the O & M of bakery and 15 female participants will produce bread once business license is obtained.
(4) Dry fish production (5 villages)	<ul style="list-style-type: none"> • Conducting trainings • Support for production 	Large numbers of the 129 participants have started production and some have earned a considerable amount of profit out of this activity.
Strengthening CBOs		
(1) Study tour on community-managed Operation & Management (O&M) of community infrastructure (all villages)	Conducting lectures and field trips on community-managed O&M of community infrastructure	115 CBO leaders and Grama Niladhari participated and gained knowledge on how to formulate O & M systems of infrastructure.
(2) Training in financial management (all villages)	Conducting trainings	150 CBO leaders participated and gained knowledge on financial management of CBOs.
(3) Construction skill training (all villages)	Conducting trainings	47 villagers participated and gained a basic knowledge of construction.
Microfinance Activities		
Microfinance activities (12 villages)	Introduction of Women's Saving Group (WSG) activities	39 WSGs with 451 members save their money and give loans to the members. This functions as a safety net for the members.

In addition to the above-mentioned activities, Peace Reconciliation Workshops were conducted in eight (8) villages to facilitate social unity among the villagers, taking into consideration the situation that some are less cooperative with other members of the village due to the stress of the harsh reality during and after the conflict. The Workshop introduced ideas and measures on how to manage conflicts in a village by the villagers themselves, such as non-violent communications and control of emotion. In total, 245 people participated in the Workshops.

More detailed evaluation and analysis of the above-mentioned activities will be presented in the following chapter, which deals with the Endline Survey and overall evaluation of the Pilot Projects.

CHAPTER 5 LESSONS LEARNED FROM THE IMPLEMENTATION OF THE PILOT PROJECTS

5.1 Introduction of the Endline Survey

5.1.1 Objectives

The Endline Survey was conducted to identify lessons learned from the implementation of the Pilot Projects. The specific objectives of the survey were as follows:

- (1) Study the outcomes of the Pilot Projects
- (2) Study the contributions of the Pilot Projects to reconstruction of lives and livelihoods of the target villages
- (3) Evaluate the strategies and approaches to facilitate the resettlement process of IDPs
- (4) Identify lessons learned to be utilized in implementation of the Road Map

5.1.2 Survey Methodologies

The Endline Survey was conducted from 30 November 2011 to 8 January 2012. The methodologies adopted in the survey were as follows:

- (1) Study the outcomes of the Pilot Projects

To study the outcomes of the Pilot Projects, the Project Team visited the sites of the Pilot Projects and conducted focus group discussions with the beneficiaries. A structured individual interview survey was conducted as well to study the outcome of the paddy and OFC cultivation reactivation program. Monitoring reports produced by the Project Team were also reviewed.

The following table shows the indicators used to measure the output of each Pilot Project. The necessary data for the indicators were collected by the Baseline and Endline Surveys. As mentioned earlier, the Endline Survey was conducted at the time that most of the Pilot Projects of Small-scale Infrastructure Rehabilitation had not been completed due to the short timeframe of the Project. Therefore, the following indicators were applied to verify the outputs of the Pilot Projects that had been completed and were utilized by the community at the time of the Endline Survey.

Table 5.1 Indicators for the Pilot Projects

Pilot Projects	Indicator for Verification	Verification Method
1. Small-scale Infrastructure Rehabilitation		
(1) Restoration of Livelihoods		
Irrigation tank	<ul style="list-style-type: none"> • Under construction at the time of the Endline Survey • Only issues and future expectations were confirmed 	<ul style="list-style-type: none"> • Interview the stakeholders such as government officers
Nursery farm	<ul style="list-style-type: none"> • Function and contribution of the nursery farm 	
Poultry Hatchery facilities	<ul style="list-style-type: none"> • Function and contribution of the chick hatching and rearing facilities 	
Supply of fishing craft and equipment	<ul style="list-style-type: none"> • Average weekly profit per person • Average no. of days engaged in fishing activities • % of collection of rental fees 	
(2) Social Infrastructure		
Tube well and village water supply system	<ul style="list-style-type: none"> • Current issues and problems • Average time and distance to the drinking water sources • % of collection of O&M fees • Availability of water for OFC cultivation 	<ul style="list-style-type: none"> • Focus group discussion • Case study • Interview the stakeholders such as government officers
Village internal road	Not verified because they were under construction at the time of the Endline Survey	
Preschool	<ul style="list-style-type: none"> • No. of children registered before the displacement and after the resettlement • Average attendance per day • Average attendance rate • Current issues and problems 	
Bridge and flood dike	Not verified because they were under construction at the time of the Endline Survey	
(3) Economic Infrastructure		
MPCS facilities	Not verified because they were under construction at the time of the Endline Survey	/
Market facilities		
(4) Capacity Development of CBOs		
Multi-purpose hall/ community center	<ul style="list-style-type: none"> • Activities and events conducted in the hall before the displacement and after the resettlement • Current issues and problems 	<ul style="list-style-type: none"> • Focus group discussion
FCS building	Not verified because they were under construction at the time of the Endline Survey	
2. Community-based Activities		
Paddy reactivation program	<ul style="list-style-type: none"> • No. of beneficiaries commenced and continue paddy cultivation • No. of beneficiaries producing seed paddy • Level of contribution of paddy cultivation to livelihood 	<ul style="list-style-type: none"> • Focus group discussion • Structured individual survey • Case study • Review of monitoring documents
OFC cultivation reactivation program	<ul style="list-style-type: none"> • No. of beneficiaries commenced and continue OFC cultivation • No. of beneficiaries selling OFC cultivation • Level of contribution of OFC cultivation to livelihood 	
Poultry reactivation program	Not verified because chicks had not been distributed yet at the time of the Endline Survey	

Pilot Projects	Indicator for Verification	Verification Method
Income generation activities	<ul style="list-style-type: none"> No. of beneficiaries commenced and continuing income generation activities Level of contribution of the income generation activities to the livelihood 	<ul style="list-style-type: none"> Focus group discussion Structured individual survey Case study Review of monitoring documents
Microfinance activities	<ul style="list-style-type: none"> No. of beneficiaries commenced and continuing saving program Level of contribution of the saving program to the livelihood 	
Strengthening of CBOs	<ul style="list-style-type: none"> No. of CBO leaders participated in the trainings Level of contribution of the knowledge and skills imparted from the trainings 	

(2) Study contributions of the Pilot Projects to reconstruction of lives and livelihoods of the target villages

To study contributions of the Pilot Projects to the reconstruction of lives and livelihoods of the target villages, the Project Team conducted a structured household survey. In the survey, the households that were interviewed at the time of the Baseline Survey were interviewed again in the Endline Survey. The total number of sample households for the Endline Survey was 191. The Project Team also conducted case studies of the selected households, which were visited at the time of the Baseline Survey.

The following table shows the indicators used to measure the overall effects of the Pilot Projects toward the reconstruction of lives and livelihoods of IDPs at the termination of the Project.

Table 5.2 Indicators for Reconstruction of Life and Livelihood

Item of verification	Pilot Projects	Indicator for Verification	Verification Method
Contribution of the Pilot Projects to reconstruction of lives and livelihoods in the target villages	All the Pilot Projects	<ul style="list-style-type: none"> Increase in number of farm and fishing families who commenced production Increase in number of vulnerable families who obtained livelihoods Decrease in the number of families who have difficulty obtaining three meals a day Number of rehabilitated infrastructure that is operated and maintained satisfactorily Increase in household income and expenditure Decrease in percentage of food expenses out of total household expenses Increase in productivity of paddy and OFC cultivation Increase in weekly profit of fishing activity 	<ul style="list-style-type: none"> Structured household survey Case study

(3) Evaluate the strategies and approaches to facilitate resettlement process of IDPs

To evaluate the strategies and approaches to facilitate the resettlement process, the Project Team conducted interviews and discussions with the stakeholders of the Project, i.e. government officers, CBO leaders and focus groups in the target villages and the project staff. The minutes of the meetings of the District Steering Committee and other project documents, such as monitoring reports and meeting minutes of the project staff, were also reviewed in this regard.

The effectiveness of the strategies and approaches was evaluated mainly at the ex-post evaluation. The indicators and method for verification are presented in Table 5.11.

(4) Identify lessons learned to be utilized in implementation of the Road Map

Lessons learned from the Pilot Projects were identified by examining the results of the above-mentioned studies and evaluation comprehensively.

5.1.3 Limitation of the Survey

(1) Only the initial outcomes of some of the Pilot Projects were verified by the Endline Survey because the Survey was conducted at the time the Project Team had not completed most of the Pilot Projects of Small-scale Infrastructure Rehabilitation and had just completed training of all the income generation activities. The real effects of the Pilot Projects should be measured after the completion of all the Pilot Projects in the ex-post evaluation.

(2) By comparison of the Baseline and Endline Surveys, it was not possible to distinguish the macro impact and the impact of the Pilot Projects, because it was a simple comparison of a before-and-after situation. Causes for changes in the socio-economic situation of the beneficiaries include not only the intervention of the Project but also self-help of the beneficiaries as well as other assistance rendered by the Government of Sri Lanka, other donor agencies, NGOs and others.

5.2 Main Findings of the Survey

5.2.1 Outcomes of the Pilot Projects of Small-scale Infrastructure Rehabilitation

There are completed Pilot Projects that are well utilized by the communities and contribute to improving their income levels and living conditions. The fishing crafts, nets and engines, which were provided to the two fishing villages, Thevanpidy and Anthonyarpuram, are appreciated and utilized well by the beneficiaries. The provision of the equipment

definitely reduced the cost and improved the efficiency of fishing, although the fishermen will only enjoy the real benefit during the fishing season from December 2011.

The nursery farms in Parasankulam and Sewa Village have been producing seeds and seedlings as planned. The poultry hatchery facilities (breeding farm) at Cheddiyarmagan Kaddaiadampan have completed and chick hatching and rearing had commenced in October 2011. Chick rearing facilities in Sewa Village and Vilathikulam started operation at the end of December 2011.

All the construction work of tube wells in four villages was completed in October 2011. Among the tube wells, those which installed hand pumps were utilized by the villagers with appreciation as soon as the installation was completed. The village water supply system in Sewa Village has been completed and commenced services on 1 January 2012. The completion of village water supply system in Ganeshapuram was expected by the middle of January 2012. Tube wells in the villages of Cheddiyarmagan Kaddaiadampan, Sirukkulam, Vilathikulam and Sinna Valayankaddu will be utilized soon after the village water supply system consisting of elevated tanks and distribution network, is completed.

It is appreciated that the infrastructure rehabilitated by community contract, which was conducted in the then-target villages of the ex-JICA Project, MANRECAP, was successfully completed. The community contract proved to be efficient not only because the civil work had been completed earlier than those undertaken by private contractors but also because it provided the CBOs with opportunities to develop leadership, regain confidence and earn some money, which is kept and utilized by the CBOs. The Project Team found during the Endline Survey that multi-purpose halls constructed through community contract were utilized well by the villagers as planned. The villagers conducted preschool activities under a tree at the time of the Baseline Survey. They are now happy to conduct the activities in the re-constructed multi-purpose halls.

Other infrastructure, such as irrigation tanks, village internal roads, community halls (except those completed by community contract), preschools, MPCS facilities, FCS building, village water supply systems (except in Sewa Village), market facilities and bridge and flood dike were under construction at the time of the Endline Survey. Once they are completed, they will be handed over to the respective government institutions and CBOs, of which arrangement has already been discussed and agreed to among the stakeholders. See **Appendix 7** for the details of the Endline Survey on the Pilot Projects of Small-scale Infrastructure Rehabilitation.

A period of the some construction works was extended and the construction still continues

due to various reasons such as an exceptionally heavy rain, UXOs found at work sites and a wide range of the Pilot Projects of Small-scale Infrastructure Rehabilitation in terms of the number and kind of target facilities, so that the outcomes of the Pilot Projects to be created through utilization of the completed facilities were not fully evaluated. Assistance for operation and maintenance of the facilities is continued by the Project.

5.2.2 Outcomes of the Pilot Projects of Community-based Activities

(See **Appendix 8** for the details of the Endline Survey on the Pilot Projects of Community-based Activities.)

(1) Paddy Reactivation Program

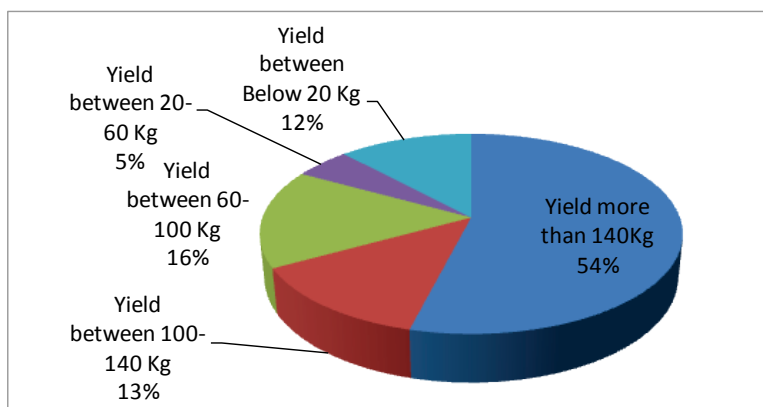
As the following table shows, almost all of the paddy farmers in the three clusters targeted in the Program had started paddy cultivation from the last Maha season in 2010-2011.

Table 5.3 Percentage of Paddy Farmers Engaged in Paddy Cultivation

Cluster	Maha 2009/2010	Yala 2010	Maha 2010/2011	Yala 2011
A	0	0	100%	19%
C	74%	57%	100%	74%
D	0	0	88%	24%

Source: Endline Survey, the Project

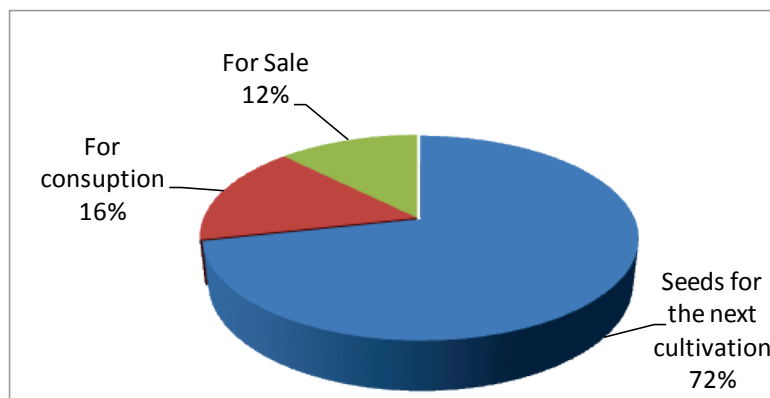
The following figure shows the yield of 2 kilograms of registered seed paddy, which was provided by the Project. It is worth mentioning that around 54% of the beneficiaries had produced more than 140 kilograms of harvest successfully although the weather conditions of the last Maha season were unfavorable.



Source: 3rd Monitoring Report of Paddy Cultivation Reactivation Program, the Project

Figure 5.1 Yield from 2kg of Seed Paddy

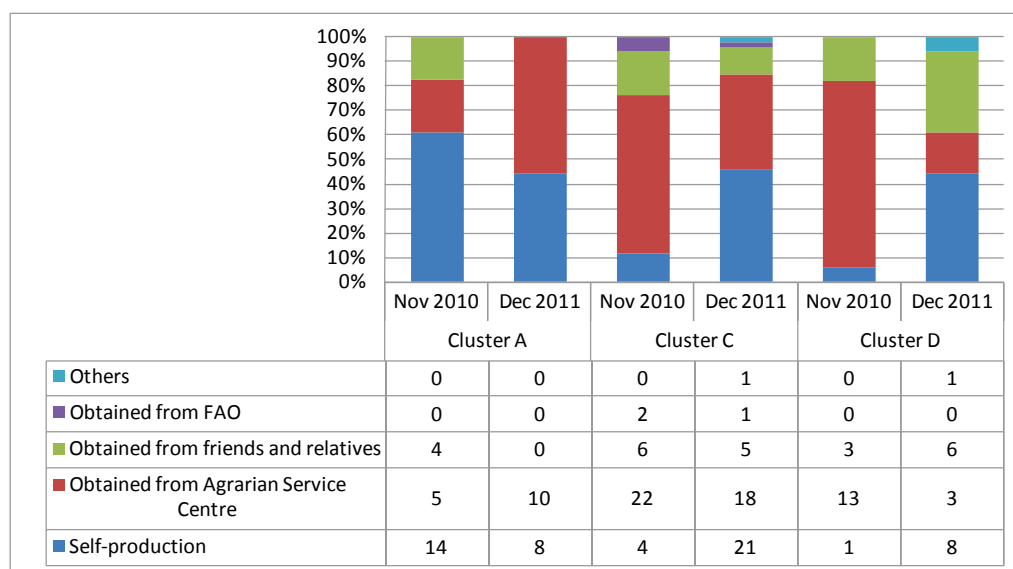
The following figure shows that around 72% of farmers who had obtained harvest from the seed paddy were planning to use them mainly for the next cultivation. This is above the expectation of the Project Team.



Source: 3rd Monitoring Report of Paddy Cultivation Reactivation Program, the Project

Figure 5.2 Plan of Utilization of the Harvest from the Seed Paddy

The following figure shows the sources of seed paddy the sample farmers used for the coming Maha season. It shows that the seed paddy of the Agrarian Service Centre (ASC) became available in Cluster A, as the ASC in Illupaikadavai recently began functioning. It also shows that self-production of seed paddy was promoted remarkably in Cluster C and D, although most of them obtained seed paddy from the ASC before as the villagers stated in the Baseline Survey. There is a strong possibility that the intervention of the Project made seed paddy reproduction more popular among the farmers in the clusters.



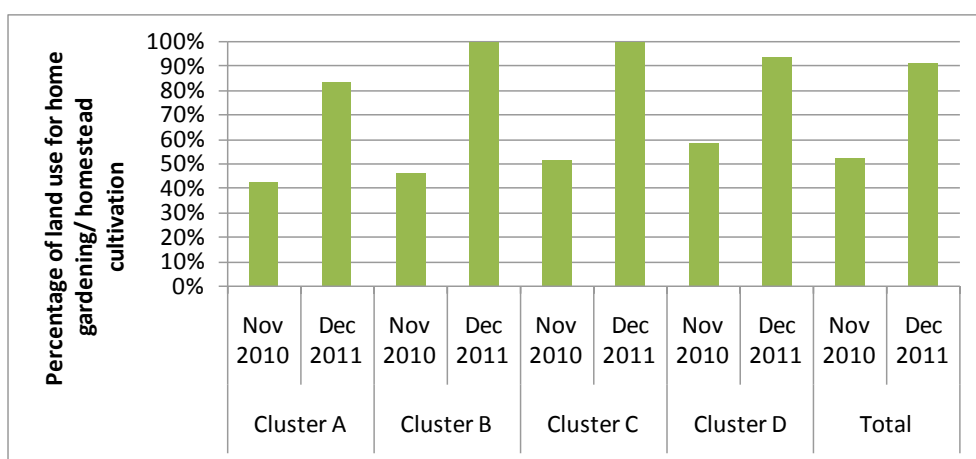
Source: Endline Survey, the Project

Figure 5.3 Sources of Seed Paddy

As the following figures show, the participants of the training courses on paddy cultivation had applied knowledge and skills gained in the training to their cultivation; however, they could not yet create remarkable results mainly due to adverse weather conditions during the last Maha season. They also felt that they could have had better results if an irrigation facility for their paddy fields had been reconstructed at the time of the cultivation.

(2) OFC Cultivation Reactivation Program

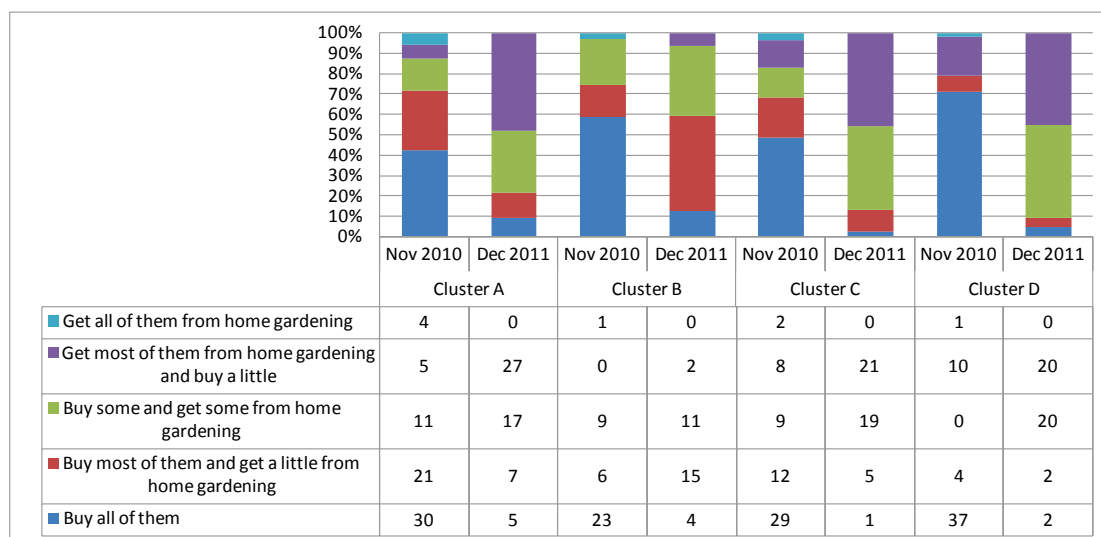
The Project Team found that home gardening introduced under the OFC cultivation reactivation program became very popular among the beneficiaries. As the following figure shows, around 90% of the land for home gardening was utilized for cultivation at the time of the Endline Survey, while it was only around 50% at the time of the Baseline Survey.



Source: Endline Survey, the Project

Figure 5.4 Utilization of Land for Home Gardening

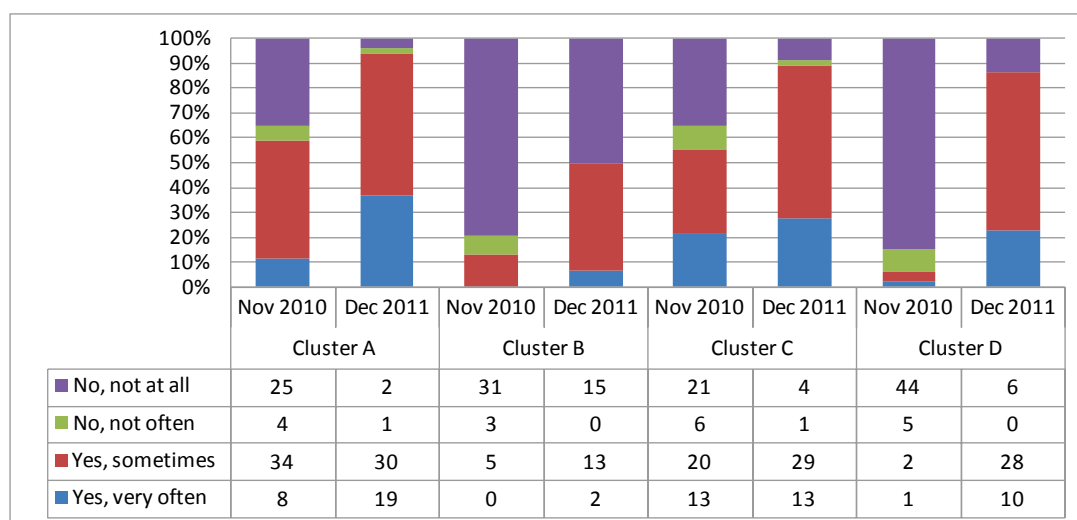
The program was implemented mainly to increase food security by promoting self-consumption of vegetables. As shown in the following figure, there was remarkable progress in the levels of self-consumption of vegetables among the beneficiaries. The figure also shows that the majority of the villagers who had not commenced home gardening at the time of the Baseline Survey had begun the activity at the time of the Endline Survey. It is highly likely that the Pilot Project of the OFC cultivation reactivation program including home gardening had contributed to the above-mentioned re-start of home gardening and increase in self-consumption of vegetables, although it is difficult to quantify the degree of contribution. The case studies shown in **Appendix 8** indicate that the target groups of the program, i.e., women-headed families and families with persons with disability, benefitted from the program.



Source: Endline Survey, the Project

Figure 5.5 Sources of Vegetables for Consumption

The following figure shows that the beneficiaries of the Program not only increased the amount of self-consumption but also gained more opportunities to sell their products.



Source: Endline Survey, the Project

Figure 5.6 Are you Selling Vegetables you Produced in Your Home Garden?

As the following table shows there were wide varieties in sales amounts of vegetables under the Program, mainly because of the differences in water conditions of the fields and levels of experience of the beneficiaries in cultivation. For example, the average sales amount of Cluster A and D was Rs. 8,486. Most of the villagers in these clusters had experience in vegetable cultivation and marketing before the displacement and some of them have a source of water, water pumps and a relatively large cultivation area. Some beneficiaries, such as those in Theththavaady, implemented the program to levels exceeding expectations

in spite of the adverse weather conditions mentioned later. It is appreciated that even the villagers in Cluster B, which is the coastal fishery area with sandy soil and fewer water sources, had sold some of their products.

Table 5.4 Annual Sales Amount of Vegetables Cultivated under the Program

Cluster	Average (Rs.)	Maximum (Rs.)	Name of the village	Minimum (Rs.)	Name of the village
A & D	8,486	48,333	Theththavaady	475	Vellankulam
B	2,317	4,167	Moonrampiddy	150	Anthonyarpuram
C	4,730	13,667	Chalampan/Velakulam	300	Neduvarambu

Source: 4th Monitoring Report of OFC Cultivation/ Home Gardening Reactivation Program, the Project

(3) Poultry Reactivation Program

A breeding farm was constructed in Cheddiyarmagan Kaddaiadampan as a Pilot Project of Small-scale Infrastructure Rehabilitation and commenced its operation in October 2011. The first batch of 120 one-month chicks, which were hatched and reared in the farm, was distributed to the target villages as planned in the fourth week of December 2011.

Currently, the farm is operated by a committee consisting of representatives from the village and from the Nanaddan-Musali Livestock Breeders' Cooperative Society. The farm is planned to have a capacity to produce around 4,000 chicks per month to meet the demand for chicks in the entire Mannar District. It is a positive sign to ensure the commercial sustainability of the farm that the farm would receive an order from Department of Animal Production and Health (DAPH) Mannar, to supply chicks for the year 2012.

(4) Income Generation Activities

Income generation activities were introduced mainly to the members of woman-headed families and families with persons with disability. All the planned training programs for income generation activities were completed and there were positive signs of success for the activities of dry fish production, mat weaving, cement block making and bakery at the time of the Endline Survey.

It was found that most of the participants of the training in dry fish production from the villages of Cluster B had commenced production of dry fish with the new method³⁷. They mentioned that producing dry fish with the new method is more profitable, as they can obtain higher prices for the products. The villagers were expecting to engage in production on a larger scale once the rainy season ended around the end of January 2012.

³⁷ For example, 24 participants of the training in dry fish production in Theththavaady, out of 34 participants in total, were producing dry fish in a new method at the time of the Project monitoring conducted in October 2011.

Twelve villagers of Sinna Valayankaddu commenced production of cement blocks by receiving orders from the contractor for the Project and also from ZOA, an international NGO, for construction of temporary sheds and toilets in the village. The villagers are working on the production by taking turns. The villagers mentioned that it is very important for them to have a secured workplace in the village, where they can work every day; otherwise, they have to depend on day labor work, which is not always available. It is a positive sign for the future sustainability that the Rural Development Officer (RDO) of Madhu AGA Division is helping by giving them advice to improve bookkeeping and accounting of the activity.

The villagers engaged in cement block making in Ganeshapuram, mat weaving in Pali Aru and bakery in Illupaikadavai were about to start commercial operation at the time of the Endline Survey and therefore the Project Team could not identify any outputs and effects on income generation. Unfortunately, the fresh water fish fry and fingerling rearing program planned in Sirukkulam was cancelled because of an unauthorized occupant in the construction site and a long delay in settling the land issue for construction.

The operation of the income generation activities introduced by the Project, except for dry fish production, which is conducted individually, were undertaken by CBOs in the villages to ensure sustainability.

(5) Strengthening CBOs

Study tours on community-managed O&M of community infrastructure, financial training and construction skill training were conducted to strengthen the capacity of the CBOs in the target villages. 306 villagers in total participated in the program.

Through interviews conducted in the Endline Survey, the Project Team found that the visit to the FO of Nachchaduwa, Anuradhapura, which was one of the target groups of the Pro-Poor Economic Advancement and Community Enhancement Project (PEACE), was most impressive for the participants of the study tour. During the interviews, the participants mentioned that they were very much impressed to see that the FO had completed the community contract of the irrigation facility successfully and thereafter maintained it in a participatory manner. They were also motivated that they, too, may do the same if they had the opportunity to undertake a community contract.

Financial training was also appreciated by the participants and the knowledge and skills obtained during the training were utilized in bookkeeping and accounting of CBOs. Training on construction skills were conducted as planned and contributed in facilitating the villagers to conduct community contract works successfully.

(6) Microfinance Activities

43 groups were conducting microfinance activities in the target villages at the time of the Endline Survey. 451 women in total joined the activities. The number of groups that commenced and continued the activities in fact exceeded the Project Team's expectation. It was found that the Study Tour to the women's saving groups in Santhipuram³⁸, organized by the Project as an introduction to the activities, greatly impressed the group members and gave them a strong motivation to commence and continue the activities.

At the time of the interviews with members of the groups, all of them stated that they felt a sense of security and self-reliance because they do not have to depend on money lenders and were able to provide with the emergency loan scheme to the group members at the time they incurred sudden expenses. It was found that a sense of unity and friendship was also created among the group members through conducting meetings and discussing their day-to-day problems every week. The Project Team found that the group members were helping each other at various occasions, such as funerals, weddings, childbirth and sometimes when family members of the groups had a traffic accident or became sick.

The Project Team had a concern that the women in Cluster D, who had just been resettled at the time of introduction of the activities, would be able to continue the saving activity because most of them had not started cultivation and were dependent on dry rations at that time. It was a pleasant surprise for the Project Team that 11 groups in total were engaging in the activities and new groups were under formation in Cluster D at the time of the Endline Survey. The microfinance activity could be better appreciated by such villagers, where banks are very far away and therefore accessibility to financial services is very limited.

(7) Peace Reconciliation Workshop

The Project Team identified a need to enhance harmony and psychological stability among the villagers in order to make the community-based activities more effective. For example, during the dry fish processing training, the Project Team found that some participants did not have the patience to listen to the lecture and some could not concentrate on training because they were too concerned about family issues, such as financial problems, disputes among family members, alcoholism of husband, and other problems. The Project Team conducted a series of Peace Reconciliation Workshops in eight villages where the villagers expressed interest, even though the workshops were not in the list of Pilot Projects. The number of participants was 245 in total.

After the workshop, a participant stated: "We became aware that we used to use violent words and violent behavior in daily life without knowing it". Another said, "I noticed that

³⁸ Shanthipuram is one of the former target villages of MANRECAP in Mannar Town DS Division.

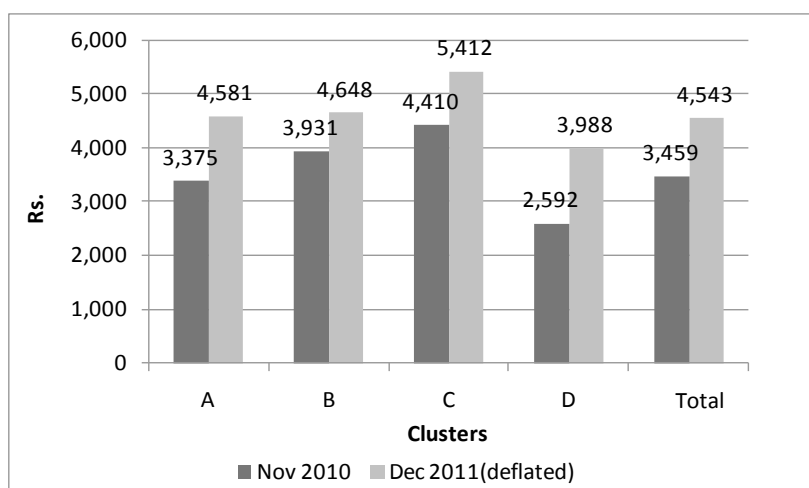
I should change first”. At the time of the Endline Survey, some participants mentioned that they had solved some of their family problems after the workshops. From the experience of conducting the workshops, the Project Team learned the importance of providing assistance not only to restore the livelihoods of the villagers but also to ensure psychological stability and reconciliation among them.

5.3 Contribution of the Pilot Projects to Reconstruction of Lives and Livelihoods in the Target Villages - Findings of Household Survey and Case Studies

5.3.1 Status of Life and Livelihood of the Target Villages - Summary

As shown in 2.2.3, resettlement of the IDP returnees in the target villages of the Project has been in progress for the last two years and continues today³⁹.

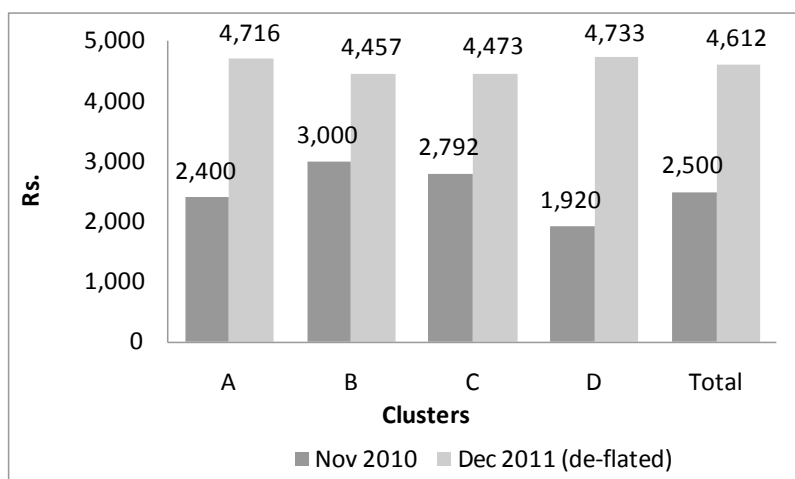
As shown in the following figures, it was found from the Endline Survey (see **Appendix 9, Findings of the Household Survey**, for details) that income and expenditure of the target villages increased remarkably. This was mainly because of villagers who had not commenced cultivation and fishing, or who had engaged in such activities on a very small scale at the time of the Baseline Survey, beginning the activities by the time of the Endline Survey. An increase in employment opportunities at construction sites, farms and other places also contributed to the increases in income and expenditure.



Source: Endline Survey, the Project

Figure 5.7 Median Per Capita Consumption Expenditure per Month

³⁹ Population in Kannaddy GN Division increased rapidly at the end of 2010 as Muslim IDPs had returned in groups from Puttalam District.



Source: Endline Survey, the Project

Figure 5.8 Median Per Capita Cash Income per Month

However, as shown in the following table, expenditure and income of the target villages were still much lower than the average of the rural sector of the country. The median of per capita expenditure per month of the target villages was Rs. 4,543⁴⁰ in the Endline Survey while that of the rural sector in the country was Rs. 5,771⁴¹, both at the real value of November 2010. The median of per capita cash income per month of the target villages was Rs. 4,612⁴² in the Endline Survey and including the value of self-consumed food was Rs. 5,362⁴³. They are still much lower than the median of per capita income per month of the rural sector in the country of Rs. 8,636⁴⁴ (including self-consumed food). It should also be noted that the average food ratio of the target villages in the Endline Survey was 56.1%, much higher than that of the rural sector of the country in 2006/07 at 43.7%⁴⁵.

⁴⁰ Median of the per capita expenditure per month of the target villages was Rs. 4756 in the Endline Survey in November 2011. It was deflated by 4.7% (Source: Colombo Consumers' Price Index (CCPI), Central Bank of Sri Lanka) to be the real value of November 2010.

⁴¹ Median of the per capita expenditure per month in the rural sector of Sri Lanka was Rs. 4,005 in 2006/07 (Source: Page viii, Final Report, Household Income and Expenditure Survey, 2006/2007, Department of Senses and Statistics, Sri Lanka). It was inflated by the index number of 1.441 (Source: CCPI, Central Bank of Sri Lanka) to be the real value of November 2010.

⁴² Median of the per capita income per month of the target villages was Rs. 4,829 in the Endline Survey in November 2011. It was deflated by 4.7% (Source: CCPI, Central Bank of Sri Lanka) to be the real value of November 2010.

⁴³ Value of self-consumed food was calculated as Rs. 3246 (average value of self-consumed food per household) / 4.13 (average size of a household) / 1.047 (deflated to Nov. 2010 value)

⁴⁴ Median of the per capita income per month of the rural sector of Sri Lanka was Rs. 5,993 in 2006/07 (Source: Page viii, Final Report, Household Income and Expenditure Survey, 2006/2007, Department of Senses and Statistics, Sri Lanka). It was inflated by the index number of 1.441 (Source: CCPI, Central Bank of Sri Lanka) to be the real value of November 2010. This figure included not only cash income and the value of self-consumed food but also the value of owner occupied housing units.

⁴⁵ Source: Page viii, Final Report, Household Income and Expenditure Survey, 2006/2007, Department of Senses and Statistics, Sri Lanka

Table 5.5 Comparison of Income and Expenditure
(median of target villages and median of rural sector in Sri Lanka)
(adjusted to the value of November 2010 by CCPI)

Items	Per capita expenditure per month	Per capita cash income per month	Per capita income per month including value of self-consumed food	Food ratio
Median of Target Village	Rs. 4,543	Rs. 4,612	Rs. 5,362	56.1%
Median of Rural Sector in Sri Lanka	Rs. 5,771	n/a	Rs. 8,636	43.7%
% of target village vs. rural sector of Sri Lanka	79%	-	62%	-

Source: Endline Survey, the Project and Final Report, Household Income and Expenditure Survey

The following table shows the number of households in the sample of the Endline Survey that are below the national level official poverty line of November 2011, i.e. Rs. 3,269⁴⁶. The table also shows percentages of households below the poverty line. The percentages were very high in Cluster A, B and D compared with the poverty head count ratio⁴⁷ of the rural sector of the country in 2009/10, i.e. 9.4%⁴⁸.

Table 5.6 Number of Households Below Poverty Line

	Cluster A	Cluster B	Cluster C	Cluster D
No. of sample households in total	50	44	49	48
No. of households below poverty line	11	09	02	12
% of households below poverty line	22%	20%	4%	25%

Sources: Endline Survey and “District official poverty line”, Department of Census and Statistics, Sri Lanka, December, 2011

As shown in the following figure, the consumption expenditure for food increased slightly except for Cluster C⁴⁹; however those of all the other items have increased for the last year. It is, however, important to note that most of the sample households were receiving dry rations of Rs. 320 per month per head or similar value of cash under the “cash for work” program from WFP at the time of the Baseline Survey in 2010; however they did not receive them at the time of the Endline Survey in 2011. The amounts of dry rations are not included in the following figure as the Project Team found that the frequencies of receipt of dry rations and the cash for work program were irregular at the time of the Baseline Survey.

⁴⁶ District official poverty line, Department of Census and Statistics, Sri Lanka, 7 December 2011, http://www.statistics.gov.lk/poverty/monthly_poverty/index.htm accessed on 3 January 2011.

⁴⁷ Poverty head count index is the total number of people living under the poverty line as a percentage of the total population.

⁴⁸ Poverty Indicators, Department of Census and Statistics, Sri Lanka, May 2011.

⁴⁹ Consumption expenditures for food decreased in Cluster C for unknown reasons.

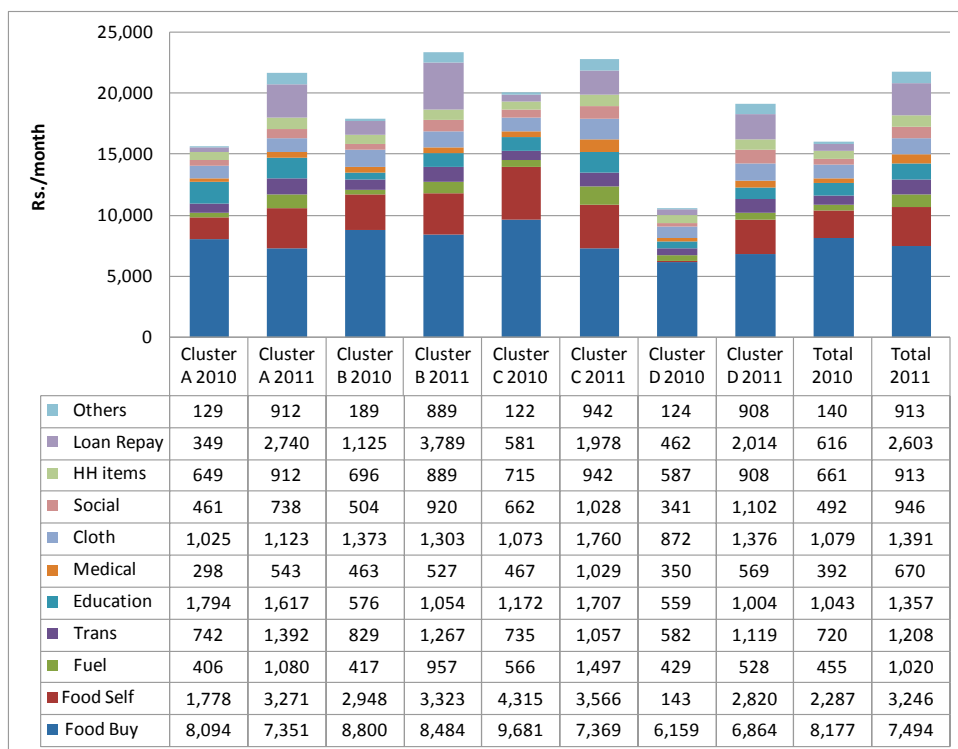
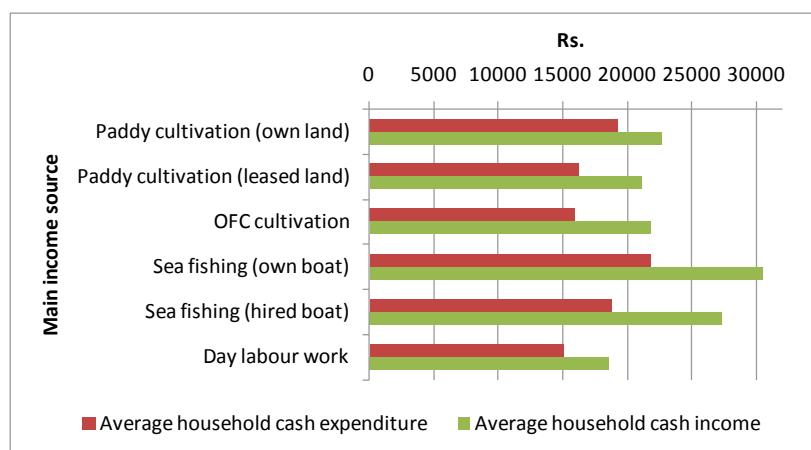


Figure 5.9 Average Monthly Household Consumption Expenditure by Type (Rs.)

The following figure shows the average household cash expenditure and cash income per month classified by main income sources at the time of the Endline Survey. It shows that fishing families had better incomes and expenditures while families living on day labor work had smaller incomes and expenditures on average.



Source: Endline Survey, the Project

Figure 5.10 Average Household Cash Expenditure and Cash Income per Month Classified by Main Income Sources (December 2011)

It was found from the case studies (see **Appendix 10**) that there were several families who were still unable to get out from the consequences of the conflict and displacement, such as

mental instability caused by a loss of their children in the welfare camp, absence of bread-winners, fluctuation of family relationships as a result of long-time separation and others. These are the examples to show that the effects of conflicts and displacement are not transitory symptoms but are issues that require long-term care and assistance. Therefore, it is important to reestablish interpersonal communication among the affected people and reconstruct a community, through implementing community-based activities such as women's saving groups and group-based income generation activities, so that a sense of mutual understanding and care are enhanced.

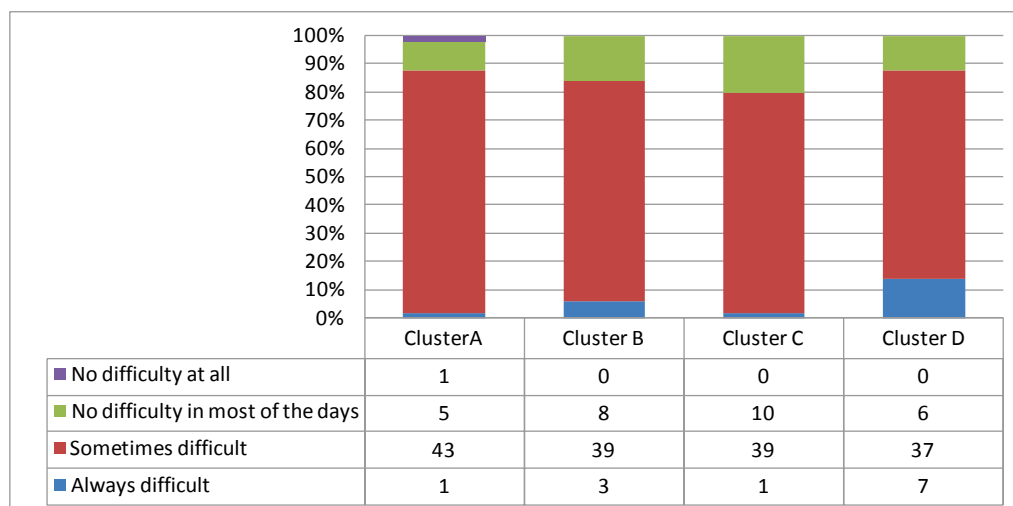
The following table depicts the number of households that have outstanding debt and the average amount of outstanding debt. The information regarding debt in Cluster C could not be collected. The table shows that a significant number of households have outstanding debt and the amounts of debt are relatively large.

Table 5.7 Debt-Holding Households

Cluster	No. of Sample Households in Total	Number of Households who have Debt	Average Outstanding Debt Amount at Present (Rs.)
Cluster A	50	39	97,085
Cluster B	44	36	102,034
Cluster D	48	28	62,438
Total	157	103	78,575

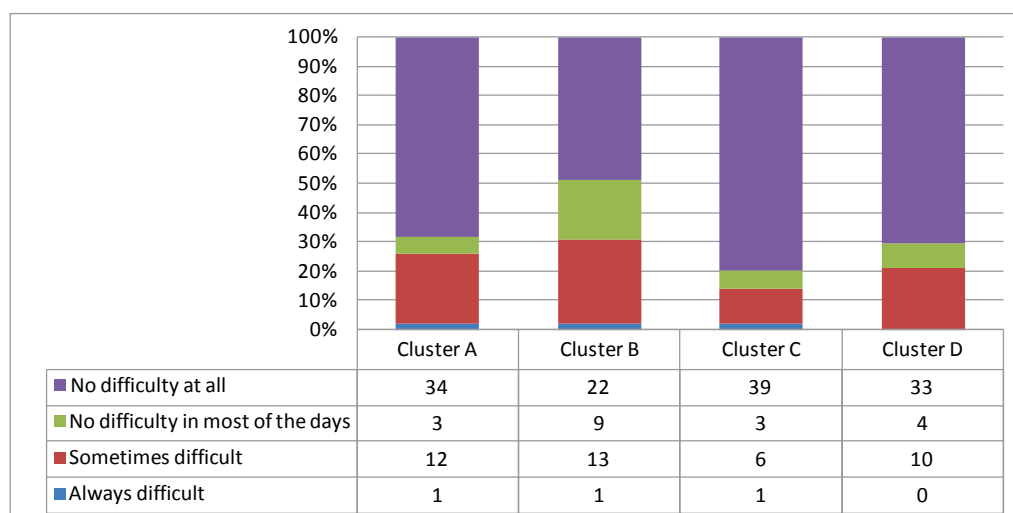
Source: Endline Survey, the Project

The following two figures show that there was a significant improvement in food security over the past year. However, it should be noted that there are still around 14% to 31% of households that stated it is sometimes/ always difficult to have three meals a day. It was an unexpected result that Cluster B, which was the highest among the clusters in expenditure and income, had the worst figure for food security. It could be because opportunities for self-consumption of rice and vegetables are rarer in the cluster.



Source: Baseline Survey, the Project

Figure 5.11 Difficulty of Having Three Meals a Day (November 2010)



Source: Endline Survey, the Project

Figure 5.12 Difficulty of Having Three Meals a Day (December 2011)

5.3.2 Contribution of the Pilot Projects - Summary

When the Endline Survey was conducted, the Project Team had not completed the Pilot Projects of Small-scale Infrastructure Rehabilitation. Irrigation facilities such as irrigation tanks and village internal roads, which benefit the entire village and were at the top of the villagers’ priority list, were not done. Also, income generation activities had just begun at the time of the Endline Survey. Therefore, on the whole, the Project Team could not identify significant effects of the Pilot Projects on the lives and livelihoods of the villagers from the results of the household survey conducted in the Endline Survey.

However, it is quite likely that the Pilot Projects contributed to increased production of self-consumed vegetables in every cluster through the promotion of home gardening.

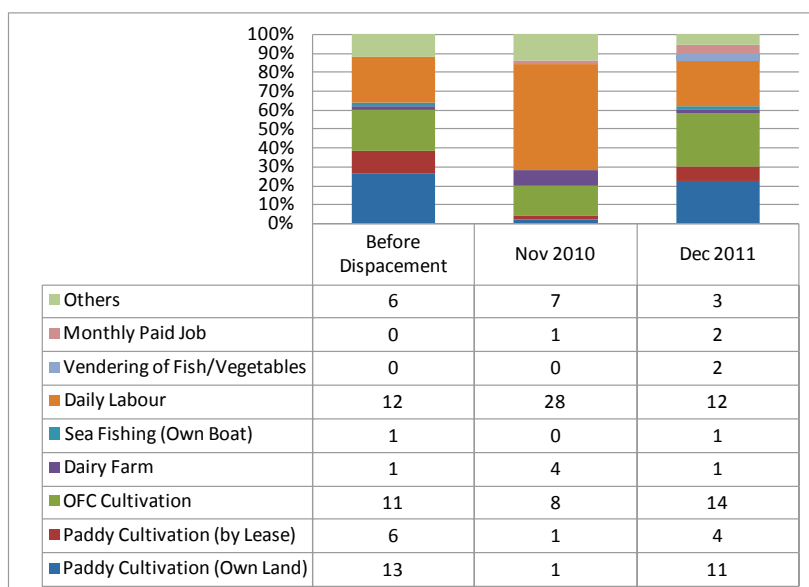
There are several positive signs for improvements in lives and livelihoods in the future. For example, the villagers succeeded in the reproduction of seed paddy, the fishing equipment provided by the Project are utilized well and the villagers are actively involved in income generation activities and group saving activities introduced by the Project.

The following sections explain the present situation of life and livelihood and the contributions of the Project in each cluster in detail.

5.3.3 Cluster A

As a result of the Endline Survey, it was found that traditional livelihoods have been revived to a large extent and the economic situation has improved remarkably over the past year in Cluster A. It is likely that the OFC cultivation reactivation program under the Pilot Projects of Community-based Activities played an important role in promoting home gardening and OFC cultivation in the cluster. Following are the detailed results of the Endline Survey on lives and livelihoods of the people in Cluster A.

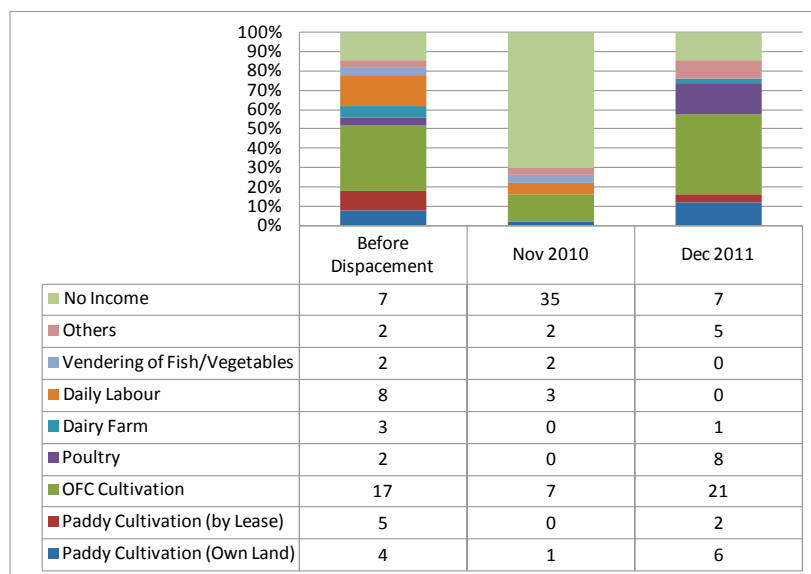
As shown in the following figure, daily labor was the main income source at the time of the Baseline Survey in Cluster A; however, at the time of the Endline Survey, farming (paddy and OFC cultivation) constituted the main source of income, and the distribution pattern of income source has become similar to that in the pre-displacement period. These results show that the people in the cluster have restored their traditional livelihoods in general.



Source: Endline Survey, the Project

Figure 5.13 Main Income Source: Cluster A

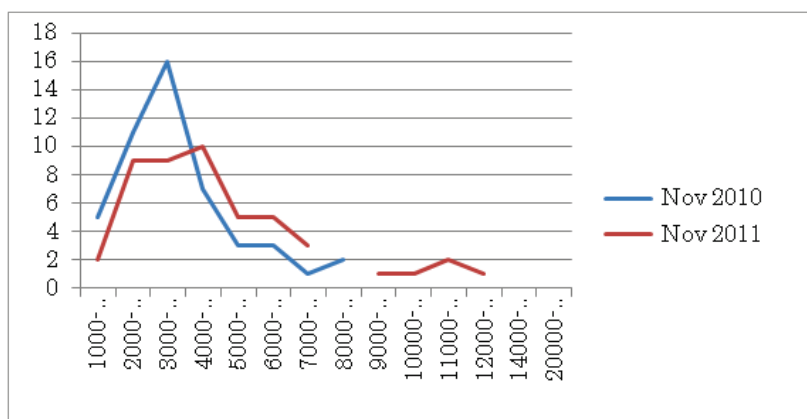
As the following figure shows, only around 30% of households had additional income sources at the time of the Baseline Survey, which increased to around 85% at the time of the Endline Survey. This also shows that the livelihoods of the people in the cluster have been activated.



Source: Endline Survey, the Project

Figure 5.14 Additional Income Source: Cluster A

The following figure also shows that consumption expenditure of the cluster has increased over the past year.



Source: Endline Survey, the Project

Figure 5.15 Distribution of Per Capita Consumption Expenditure (Rs.): Cluster A

At the time of the Baseline Survey, most of the families had not started home gardening and mentioned that they did not have fences, male hands, seeds and seedlings and others. However, as explained earlier, around 50% of the villagers stated that they obtain most of their vegetables from home gardening and only buy a little at the time of the Endline Survey. Others also obtain some vegetables from home gardening, and only around 9% buy all from shops. The Project Team found from case studies and interviews that the villagers were

happy to share that they had consumed vegetables they produced for around three to four months without buying much from shops. However, they stopped vegetable cultivation, except for a few varieties, around May to June 2011 when the dry season started. The villagers in Sewa Village and Ganeshapuram expect to engage in home gardening for a longer time next season as village water supply systems of the Project have been completed.

Incomes and expenditures of the villagers in this Cluster increased remarkably by the time of the Endline Survey, as in the other clusters as discussed earlier. The median per capita consumption expenditure per month was Rs. 3,375 at the time of the Baseline Survey. However, it increased by 36% to Rs. 4,581 at the time of the Endline Survey (deflated). The median per capita cash income per month was Rs. 2,826 at the time of the Baseline Survey when villagers depended on dry rations. However, it increased by almost 2.4 times to Rs. 6,809 at the time of the Endline Survey (deflated). This indicates that the consumption and income pattern are becoming “normal”, although the numbers are still lower than the average for rural areas in the country as mentioned earlier. In addition to reactivation of home gardening and OFC cultivation, increased opportunities for day labor work in farms and construction sites have contributed to the increases.

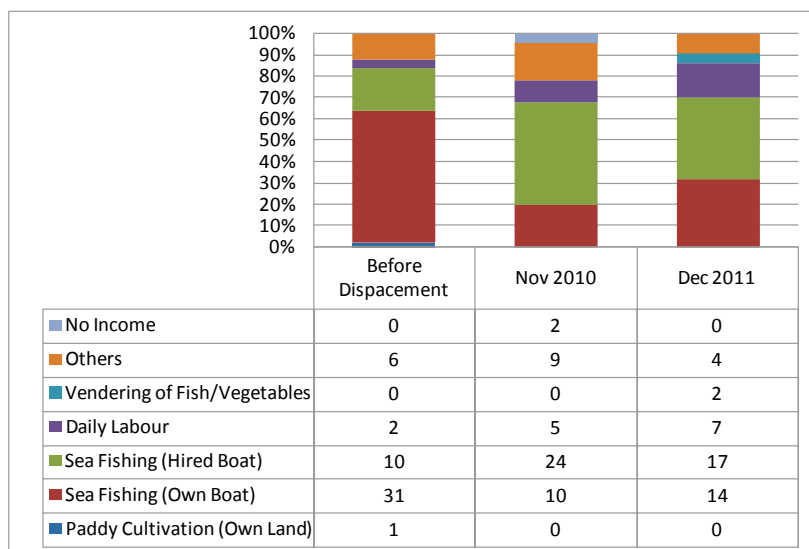
The Project Team was surprised to find that considerable numbers of families of the cluster obtained loans from banks for purposes such as cultivation, purchasing of tractors and motorbikes and construction of wells, although they did not have any access to bank loans before the displacement. It shows a high demand for finance among the villagers. It also indicates that the villagers, as well as banks, are now confident enough to invest in their livelihoods because they believe they won't be displaced again.

5.3.4 Cluster B

As a result of the Endline Survey, it was found that traditional livelihoods have been revived to some extent and the economic situation has improved over the past year in Cluster B. There was no particular impact of the Pilot Projects to the lives and livelihoods of the people in the cluster yet, except for the increase in self-consumption of vegetables. However, there is a possibility that ongoing Pilot Projects will contribute to improvements in their livelihoods in the future. Following are the detailed results of the Endline Survey on lives and livelihoods of the people in Cluster B.

As the following figures show, the main livelihood of Cluster B, marine fisheries, had been revived at the time of the Endline Survey; however, not to the level before the displacement. This result suggests that unlike farming, the speed of revival of fishing was slow, mainly because revival of fishing requires comparatively large capital investment for boats, nets and

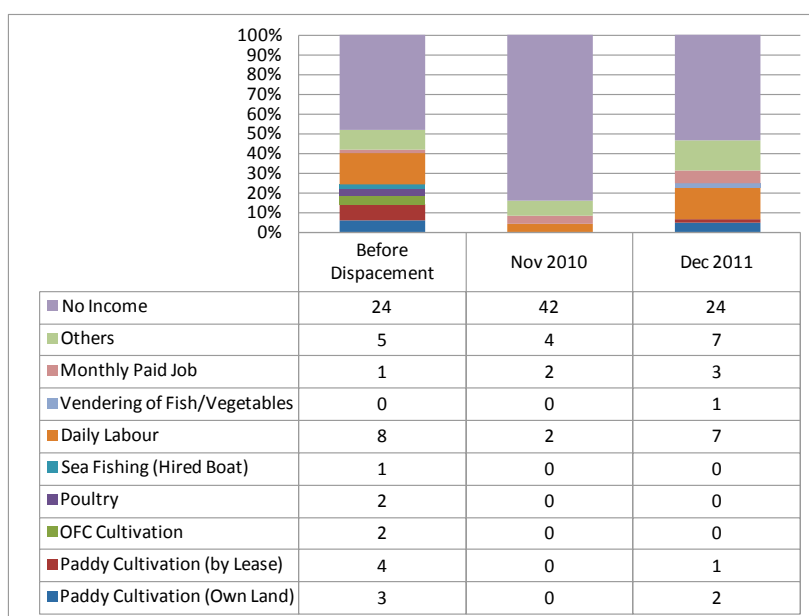
engines. Day labor work was found to be the main income source for around 15% of the households in the cluster. The Project Team also observed in the case study and interviews that the villagers have many opportunities in day labor work these days as a lot of construction work for roads and buildings is ongoing in the area.



Source: Endline Survey, the Project

Figure 5.16 Main Income Source: Cluster B

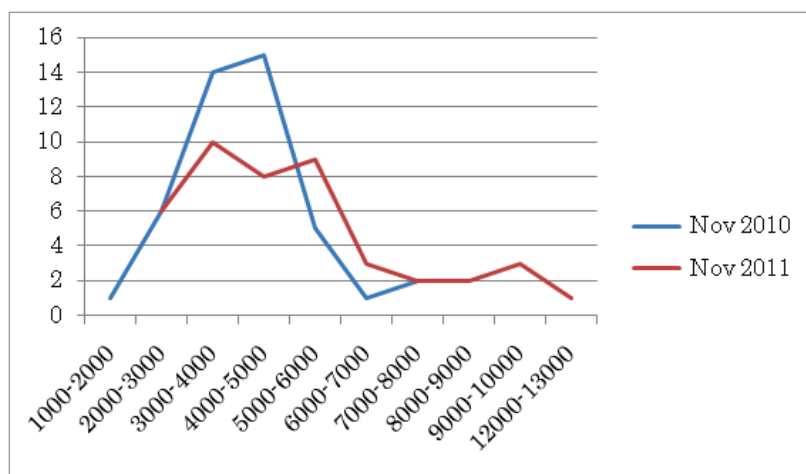
As the following figure shows, only around 16% of households had additional income sources at the time of the Baseline Survey; however, it increased to around 47% at the time of the Endline Survey and the distribution pattern of income sources has become similar to that in the pre-displacement period. This shows that livelihoods of the people in the cluster have been activated.



Source: Endline Survey, the Project

Figure 5.17 Additional Income Source: Cluster B

The following figure also shows that consumption expenditure of the cluster has increased over the past year.



Source: Endline Survey, the Project

Figure 5.18 Distribution of Per Capita Consumption Expenditure (Rs.): Cluster B

The following tables depict the average weekly incomes for various fishing activities of fisher families during the fishing seasons and off-fishing seasons. They show that income levels have increased significantly over the past year for most of the activities.

Table 5.8 Average Fishing-Related Weekly Income of Fisher Households during Fishing Season (Baseline Survey)

Name of the village	Income from: (Rs.)					
	Fishing	Fish Marketing	Dry Fish	Net Cleaning	Net Mending	Others
Thevanpidy and Puthukadu	4,346	182	0	0	0	1,182
Moonrampiddy	4,300	0	0	83	0	244
Illupaikadavai and Parankikaman	3,714	143	0	0	0	0
Anthonyarpuram	4,100	0	0	0	0	0
Total	4,163	94	0	23	0	475

Source: Baseline Survey, the Project

Table 5.9 Average Fishing-Related Weekly Income of Fisher Households during Fishing Season (Endline Survey)

Name of the village	Income from: (Rs.)					
	Fishing	Fish Marketing	Dry Fish	Net Cleaning	Net Mending	Others
Thevanpidy and Puthukadu	6,455	0	155	0	0	0
Moonrampiddy	7,908	0	0	67	0	0
Illupaikadavai and Parankikaman	7,579	571	0	0	0	0
Anthonyarpuram	7,340	0	500	300	0	0
Total	7,248	125	131	66	0	0

Source: Endline Survey, the Project

Table 5.10 Average Fishing-Related Weekly Income of Fisher Households during Off-fishing Season (Endline Survey)

Name of the village	Income from: (Rs.)					
	Fishing	Fish Marketing	Dry Fish	Net Cleaning	Net Mending	Others
Thevanpidy and Puthukadu	1,503	107	0	0	103	500
Moonrampiddy	1,600	0	36	0	0	0
Illupaikadavai and Parankikaman	1,736	91	0	0	0	0
Anthonyarpuram	1,300	0	0	0	0	0
Total	1,541	52	10	0	31	150

Source: Endline Survey, the Project

Incomes and expenditures of the villagers in this cluster increased at the time of the Endline Survey as in the other clusters as stated earlier. The median per capita consumption expenditure per month was Rs. 3,931 at the time of the Baseline Survey. However, it increased by 18% to Rs. 4,648 at the time of the Endline Survey (deflated). The median per capita cash income per month was Rs. 3,000 at the time of the Baseline Survey when the villagers depended on dry rations. However, it increased by almost 1.5 times to Rs. 4,457 at the time of the Endline Survey (deflated). Revival of marine fisheries and increased opportunities for day labor work should be the contributing factors in this regard.

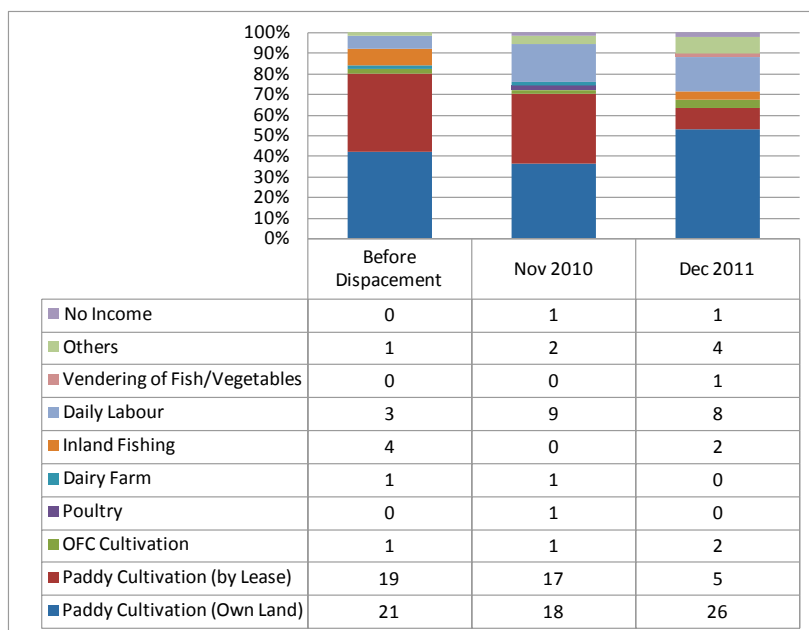
It is worth mentioning that self-consumption of vegetables as a result of promotion of home gardening increased even in this cluster as stated earlier. Around 60% of the people in the cluster bought all their vegetables from shops at the time of the Baseline Survey; however, it reduced to around 12% at the time of the Endline Survey. There is a great possibility that home gardening introduced by the Project contributed to these changes.

There were no other direct impacts of the Pilot Projects found as a result of the Endline Survey in the cluster. However, there are some positive signs that ongoing Pilot Projects would contribute to the improvement of lives and livelihoods of the people in the cluster in the future. Some examples include the active utilization of the fishing equipment provided by the Project, commencement of the production of value-added dry fish, and the opening of a bakery by FCS with a women's group in the cluster.

5.3.5 Cluster C

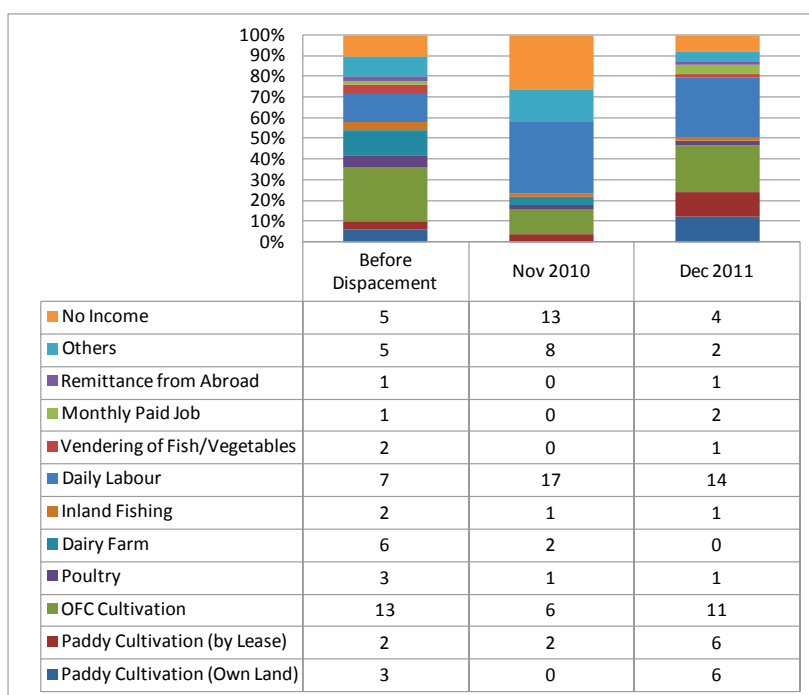
As a result of the Endline Survey, it was found that in Cluster C, paddy cultivation became less profitable than other income sources, especially because the crops were seriously damaged in the last Maha season due to adverse weather conditions. The Project Team believes that the Pilot Projects that were given the highest priority and urgency in the activity list, such as reconstruction of irrigation tanks, village internal roads and village water supply systems, will create a great impact to lives and livelihoods of the people in this cluster by the middle of 2012. Following are the detailed results of the Endline Survey on lives and livelihoods of the people in Cluster C.

The traditional livelihood of Cluster C has been paddy cultivation, as its name "Rice Bowl area" implies. However, as a result of the Endline Survey, it was found that households that are engaged in paddy cultivation as the first income source had been reduced from 70% to 63% over the past year (see Figure 5.19). Yet, this does not mean that fewer people in the cluster were engaged in paddy cultivation this year because, as Figure 5.20 shows, the percentage of people who were engaged in paddy cultivation as a secondary income source has increased. These factors suggest that, for some people, paddy cultivation might become less profitable than other income sources although they are still engaged in it. It is uncertain whether this is a temporary situation caused by the serious damage of crops in the last Maha season.



Source: Endline Survey, the Project

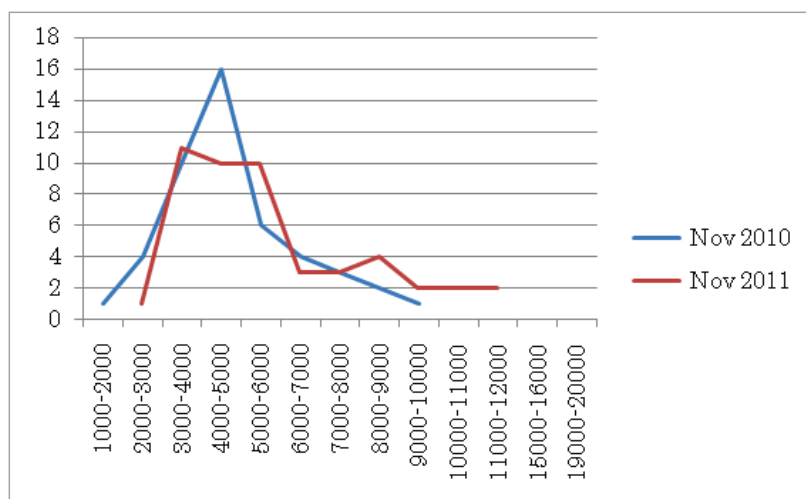
Figure 5.19 Main Income Source: Cluster C



Source: Endline Survey, the Project

Figure 5.20 Additional Income Source: Cluster C

The following figure also shows that the consumption expenditure of the cluster has increased over the past year.



Source: Endline Survey, the Project

Figure 5.21 Distribution of Per Capita Consumption Expenditure (Rs.): Cluster C

Incomes and expenditures of the villagers in this cluster increased at the time of the Endline Survey as in the other clusters as stated earlier. The median per capita consumption expenditure per month was Rs. 5,028 at the time of the Baseline Survey. However, it increased by 22% to Rs. 6,095 at the time of the Endline Survey (deflated). The median of per capita cash income per month was Rs. 2,792 at the time of the Baseline Survey when villagers depended on dry rations. However, it increased more than 1.5 times to Rs. 4,473 at the time of the Endline Survey (deflated). The revival of various kinds of additional income sources, such as inland fisheries and OFC cultivation, and increased opportunities for day labor work should be the contributing factors in this regard.

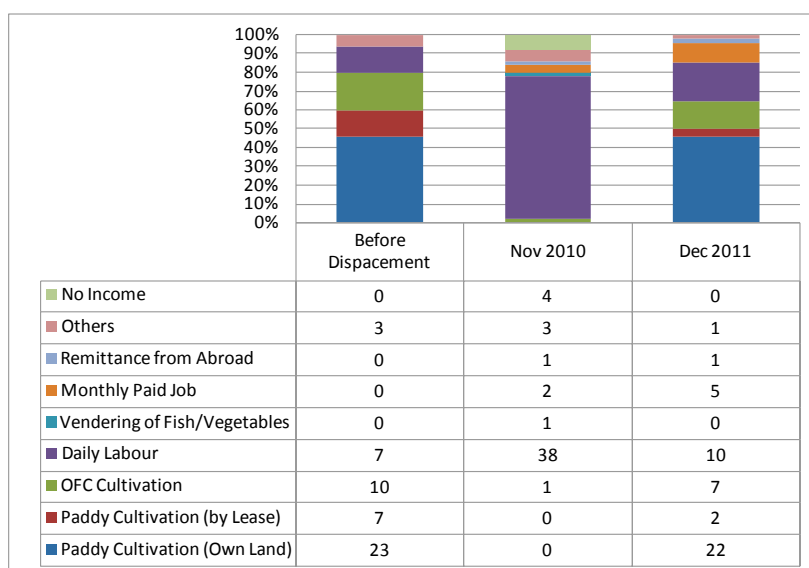
There are some positive signs that ongoing Pilot Projects will contribute to improvements in lives and livelihoods of the people in the cluster in the future. Some examples include the successful results of seed paddy production and the promotion of home gardening, and the active participation of the women’s saving groups to the microfinance activities.

5.3.6 Cluster D

As a result of the Endline Survey, it was found that traditional livelihoods have been revived to a large extent and the economic situation has improved remarkably over the past year in Cluster D. It suggests that the lives of the people in this cluster have become “normal” through the past year. Revival of traditional livelihoods and increased opportunities for day labor work should be the background of the above-mentioned improvement. There is a possibility that the OFC cultivation reactivation program under the Pilot Projects of Community-based Activities played an important role in promoting vegetables and OFC cultivation in the cluster. Other than that, there has been no direct impact of the Pilot

Projects to the improvement of lives and livelihoods of the people in this cluster. The Project Team believes that the Pilot Projects such as reconstruction of the irrigation tanks and village water supply systems will create a great impact to the livelihoods of the people in the cluster by around the middle of 2012. Following are the detailed results of the Endline Survey on lives and livelihoods of the people in Cluster D.

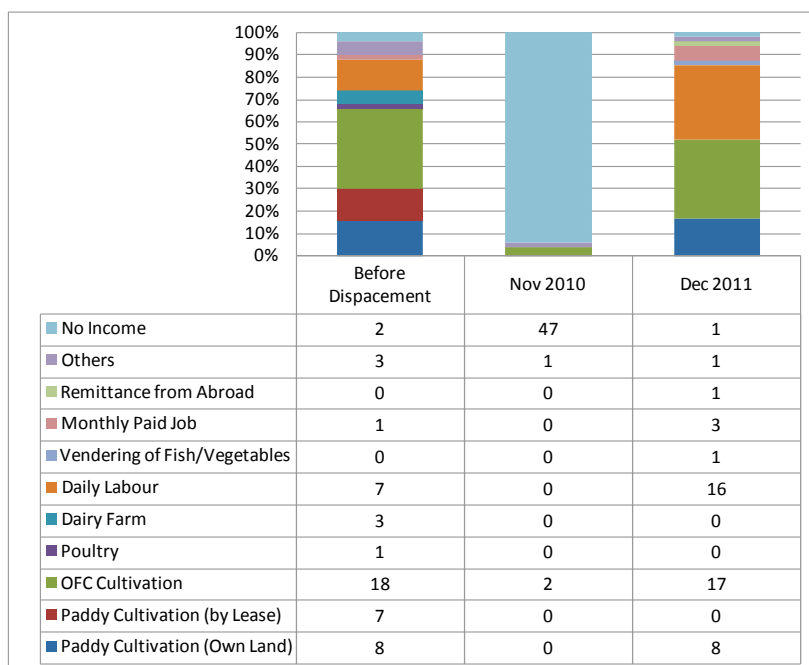
As shown in the following figure, daily labor was the main income source at the time of the Baseline Survey in Cluster D; however, at the time of the Endline Survey, farming (paddy and OFC cultivation) constituted the main source of income, and the distribution pattern of income sources becomes similar to that in the pre-displacement period. These results show that the people in the cluster are in the process of restoration of their traditional livelihoods in general.



Source: Endline Survey, the Project

Figure 5.22 Main Income Source: Cluster D

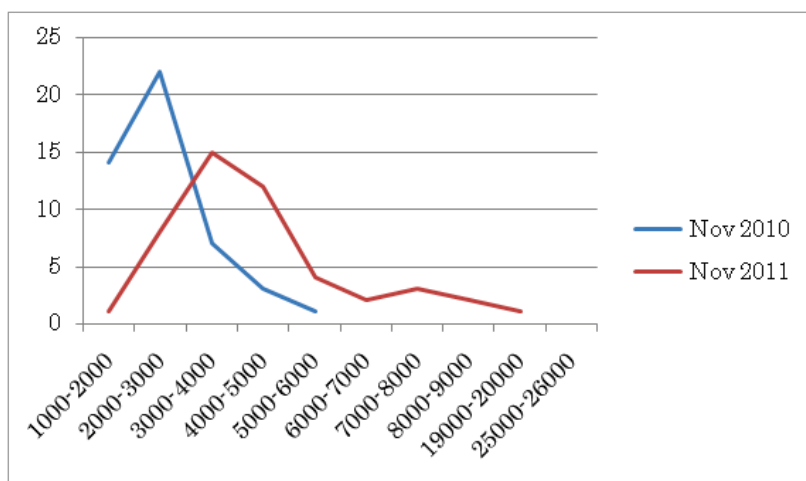
As the following figure shows, only around 5% of households had additional income sources at the time of the Baseline Survey; however, it increased to around 98% at the time of the Endline Survey. This also shows that livelihoods of the people in the cluster have been activated significantly.



Source: Endline Survey, the Project

Figure 5.23 Additional Income Source: Cluster D

The following figure also shows that the consumption expenditure of the cluster has increased over the past year.



Source: Endline Survey, the Project

Figure 5.24 Distribution of Per Capita Consumption Expenditure (Rs.): Cluster D

Incomes and expenditures of the villagers in this cluster increased at the time of the Endline Survey as in the other clusters discussed earlier. The median per capita consumption expenditure per month was Rs. 2,592 at the time of the Baseline Survey. However, it increased by 54% to Rs. 3,988 at the time of the Endline Survey (deflated). These figures for consumption expenditure are still the lowest among the clusters; however, the increment rate was the highest among all. The median per capita cash income per month was Rs. 1,920 at the time of the Baseline Survey when villagers depended on dry rations. However, it

increased around 2.5 times to Rs. 4,773 at the time of the Endline Survey (deflated). The revival of farming, including paddy and OFC, and increased opportunities for day labor work should be the contributing factors in the increases in expenditure and income.

There are some positive signs that the ongoing Pilot Projects will contribute to improvements in lives and livelihoods of the people in the cluster in the future. Examples include the successful results of seed paddy production and promotion of home gardening, active participation of women's saving groups to the microfinance activities and high demand for cement block production by the women's group.

5.4 Evaluation of the Strategies and Approaches to Promote the Resettlement Process of IDPs

5.4.1 Contributing Factors and Positive Experiences in Implementation of the Pilot Projects

- (1) The needs-based approach for the Pilot Projects contributed to an effective implementation of the Pilot Projects. For example, needs and priorities of the villagers were carefully identified through CAP workshops and therefore villagers actively participated and were keenly interested in all of the Pilot Projects of Community-based Activities throughout the implementation period. The needs-based approach was adopted not only at the time of selection of the Pilot Projects, but also throughout the project implementation. For example, a decision was made through a series of meetings with the villagers at the time to select the kinds of vegetables and fruits for distribution, so that the needs and requests of the villagers were properly taken into consideration. (Approach 1 of Strategy 1)
- (2) To capture the needs of the target areas appropriately and to propose the Road Map based on the needs, the Project classified the target villages into four clusters according to the characteristics of the areas. This approach enabled the Project to concentrate on assistance most needed in each cluster and later analyze the results of the interventions according to the classification. (Approach 2 of Strategy 1)
- (3) The Project identified development potentials and disincentives of the four clusters for the Pilot Projects, with consideration of the characteristics of the clusters such as main income sources before the last displacement, natural environment, capacity and experience of the CBOs of the villages and others. The identifications were helpful for the Project Team to identify the Pilot Projects most effective to the clusters and to verify the effects of the Pilot Projects by examining the changes created to the villagers' lives and livelihoods. (Approach 3 of Strategy 1)

- (4) Continuous monitoring and advisory visits by the Project Team were another key factor for effective implementation of the Pilot Projects. The villagers faced a number of unexpected problems once they started the Pilot Projects. Sometimes, they were discouraged to continue the Pilot Projects due to economic and social problems they were facing. Timely advice and assistance rendered by the Project Team during the monitoring visits were important for the villagers to maintain motivation.
- (5) Microfinance activities and construction work through community contract aimed at promoting a self-help and mutual-help attitude towards sustainable development were implemented. Among these activities, microfinance activity by women's saving groups proved to be successful to levels exceeding expectations. At the time of the Endline Survey, it was found that the saving group members gained a sense of security and self-reliance because they do not have to depend on money lenders and were able to provide with the emergency loan to the group members at the time they incurred sudden expenses. A sense of unity and friendship was also created among the group members through conducting weekly meetings and sharing their problems. The Project Team found that the saving group members were helping each other at various occasions. The Project Team had a concern that the activity might not be popular among the women, who had resettled in the villages very recently and were experiencing severe difficulties financially as well as mentally. However, it was later found that they were keen on savings and encouraged to continue the activity. (Approach 4 of Strategy 2)
- (6) Community contract was successfully conducted by the CBOs in the former MANRECAP villages. Through the work, the CBOs further strengthened their technical capacity of construction work, developed leadership, enhanced the spirit of mutual-help and gained financial profit. The construction work was conducted almost as scheduled and found to be much faster than the work entrusted to the private contractors. (Approach 4 and 5 of Strategy 2)
- (7) Study tours on community-managed O&M of community infrastructure, training in financial management and construction skill training were conducted to strengthen capacity of the CBOs in the target villages. 306 villagers in total participated in the program. These study tours and trainings are implemented not only to provide skills to the participants but also increase their motivation. The Project Team found that the visit to the FO of Nachchaduwa, Anuradhapura, was most impressive for the participants of the study tour. The participants mentioned that they were very much impressed to see that the FO had completed the community contract of the irrigation facility successfully and thereafter maintained it in a participatory manner. They were also motivated that they, too, could do the same if they obtained an opportunity to undertake a community contract. Training in financial management was also appreciated by the participants and the knowledge and skills obtained during the training were utilized in bookkeeping and accounting of CBOs. Training on

construction skills were conducted to the villagers who undertook a community contract as planned and contributed to them conducting community contract works successfully. (Approach 5 of Strategy 2)

- (8) Involvement of the government officers in the Pilot Projects proved to be effective to make the projects technically appropriate and also essential to ensure “connectedness to the government / local systems” in the future as stated in Section 1.3.3. For example, a series of trainings in agriculture-related reactivation programs was conducted by the officers of the Department of Agriculture (DOA), Development of Animal Production and Health (DAPH) and others. The officers were involved in progress monitoring of the projects and are also keen on follow-up activities after the completion of the projects period. (Approach 6 of Strategy 3)
- (9) Promotion of home gardening proved to be effective to improve the status of self-consumption and also to generate some income even for women-headed families, families with persons with disability and families in coastal marine fisheries areas.
- (10) The Project’s experience with income generation activities on dry fish production indicates the importance of introducing new technology to make the activity more value-added even at the time of reconstruction during the post-conflict period.
- (11) It proved to be important to use the locally familiar methods, which have been accepted by the Government and local people, as much as possible. In the Pilot Projects, some methods, such as needs identification of the community by the CAP workshops and community contract have been utilized and proved to be effective and efficient. The revolving loan fund scheme, which was adopted by FCS in the area, was introduced for the repayment of the fishing equipment provided by the Project. The repayment status and utilization of the fund has been monitored not only by the Project but also by the Department of Fisheries and Aquatic Resources (DFAR) in Mannar as it is their mandate to regulate the revolving fund of FCS. (Approach 6 and 7 of Strategy 3)
- (12) The Project Team made every effort to ensure that the Pilot Projects are in line with the development plans of the Government of Sri Lanka. In order to do so, the Team kept in close communication with government officers in the relevant departments, such as Agriculture, Livestock, Fishery and Cooperative. For example, the poultry breeding farm was originally planned to be constructed on a smaller scale to provide chicks to the target villages of the Project. However, the Project changed the plan to meet the need for chicks through the entire Mannar District, after a series of discussions not only with the DAPH at the District but also with the Provincial Headquarters, by understanding the needs and priorities in the development strategy of the Department. DAPH has provided full support for construction of the facilities for the breeding farm and the CBO-managed hatching and chick rearing. (Approach 8 of Strategy 3)
- (13) The achievements and experience of JICA in Mannar District in the past positively facilitated the implementation of the Pilot Projects. For example, it was very helpful to

the Project Team that the government officers of the District rendered active cooperation to the Project from the beginning because JICA had already established its reputation in the District by MANRECAP and construction of the New Mannar Bridge. The Sri Lankan staff of the Project, who had earlier worked for MANRECAP, contributed much, this time too, to smooth communication between the Project Team and village people as well as to effective implementation of the Pilot Projects.

- (14) The Project Team learned the importance of providing assistance not only to restore livelihoods of the villagers but also to improve psychological stability and reconciliation among them from the experience of conducting the Peace Reconciliation Workshops.

5.4.2 Disturbing Factors and Negative Experiences in Implementation of the Pilot Projects

- (1) A period of construction works under the Pilot Projects of Small-scale Infrastructure Rehabilitation (SSIR) was extended due to various reasons such as an exceptionally heavy rain experienced in February and March 2011 and UXOs found at work sites. A wide range of the Pilot Projects in terms of the number and kind of facilities to be rehabilitated/ reconstructed also caused the delay in implementation of the construction works, so that some of the urgent needs of the villagers were not met by the Project Team at the early stage.
- (2) Commencement of the Pilot Projects of Community-based Activities was also delayed for around two months due to the procedure of obtaining approval from JICA Headquarters, MOD and PTF. Commencement of several activities were further delayed for more than six months, because the construction of the facilities necessary to commence the activities such as building for the bakery, poultry breeding farm and fish pond were delayed as mentioned above.
- (3) Due to the above-mentioned delays, there is a concern that the Project Team might not have adequate time to make sure that the Pilot Projects such as the nursery farms, poultry hatchery facilities, bakery and cement block making are commercially successful, though initial operations show positive results.
- (4) Due to the above-mentioned delays, the Project Team could not yet quantify the increase in incomes of the beneficiaries of the income generation activities, as the activities were just started at the time of the Endline Survey.
- (5) Due to the short timeframe of the Project, there is a concern that the Project Team might not have adequate time to monitor and follow-up with local public organizations and CBOs, which will operate and maintain the small-scale infrastructure rehabilitated under the Pilot Projects such as village water supply systems, irrigation tanks, village internal roads and others.

- (6) Synergetic effects by the combination of rehabilitation of small-scale infrastructure (hard component) and community-based activities (soft component) were expected; however, they were not yet fully realized due to the above-mentioned delays. For example, the OFC cultivation reactivation program could have been more effective if village water supply systems were completed in time in the villages such as Ganeshapuram and Sewa Village. The bakery, one of the income generation activities, could have established commercial operation by this time if the building had been completed much earlier as scheduled.
- (7) Land issues and illegal occupation disturbed the implementation of some small-scale infrastructure rehabilitation such as construction of the breeding farm at Cheddiyarmagan Kaddaiadampan and a fish pond for rearing of fish fingerlings in Sirukkulam.
- (8) Heavy and continuous rain during the harvesting time in the Maha 2010/11 season destroyed crops and undermined the effects of the agriculture-related reactivation program and also caused a delay of preparatory works of small-scale infrastructure rehabilitation resulting in a delay of construction.

5.5 Lessons Learned to the Road Map

Taking the above-mentioned results of the Endline Survey, the following lessons learned are drawn to incorporate in the Road Map at the present time before the full impact of the Pilot Projects is evaluated.

5.5.1 Summary of the Verification Process of the Pilot Projects and Reflection to the Road Map

The following table presents the summary of the verification process of (1) the individual Pilot Projects, (2) the overall effect of the Pilot Projects to the reconstruction of lives and livelihoods of IDPs, and (3) the effectiveness of the strategies and approaches to promote resettlement of IDPs, and reflection of the outcomes as lessons learned to the Road Map.

Table 5.11 Summary of the Results of Verification and its Reflection to the Road Map

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
1. Individual Pilot Projects (1) Small-scale Infrastructure Rehabilitation (SSIR)	Rehabilitation of infrastructure such as irrigation tanks, nursery farms and poultry hatchery facilities and provision of fishing equipment (fishing crafts, engines and nets) to restore the livelihoods	See Table 5.1.		<ul style="list-style-type: none"> Rehabilitation of such infrastructure and provision of fishing equipment has contributed or is expected to contribute to restoration of the livelihoods of IDPs. 	<ul style="list-style-type: none"> Rehabilitation/development of infrastructure such as irrigation tanks, nursery farms and poultry hatchery facilities is proposed both in the Village-wise and Sector-wise Development Plan. Provision of fishing equipment is proposed in the Village-wise Development Plan.
	Rehabilitation of Social infrastructure such as village water supply systems and village internal roads			<ul style="list-style-type: none"> Rehabilitation of village water supply systems has saved time to fetch water and money to purchase it. 	<ul style="list-style-type: none"> Rehabilitation and development of village water supply systems is proposed in the Village-wise Development Plan.
	Rehabilitation of Economic infrastructure such as market facilities			<ul style="list-style-type: none"> Those facilities were under construction at the time of the Endline Survey, however, they are expected to activate economic activities of neighboring villages. 	<ul style="list-style-type: none"> Rehabilitation/development of economic infrastructure is proposed both in the Village-wise and Sector-wise Development Plan.

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
	Rehabilitation of infrastructure for capacity development of CBOs such as multi-purpose halls/ community centers and an FCS building			<ul style="list-style-type: none"> Rehabilitation of multi-purpose halls has activated community-based activities such as CBO meetings, preschools, library and vocational trainings. 	<ul style="list-style-type: none"> It is proposed as “Other Basic Infrastructure” in the Village-wise Development Plan with Community Contract method.
(2) Community-based Activities (CBA)	Agriculture-related activities (paddy, OFC, poultry)	See Table 5.1.		<ul style="list-style-type: none"> Seed paddy reproduction became more popular among famers. Home gardening has enhanced food security by increasing self-consumption of vegetables. Promotion of OFC cultivation has given farmers opportunities to sell their products. Poultry hatchery facilities have commenced their operation and successfully produced chicks. 	<ul style="list-style-type: none"> Lessons learned from the activities/ verified outcomes have been reflected to both the Village-wise and Sector-wise Development Plan.
	Income generation activities			<ul style="list-style-type: none"> The activities have just started to generate profits. Socially vulnerable people such as women-headed households and families 	<ul style="list-style-type: none"> Income generation activities are proposed in the Village-wise Development Plan. Fresh water fish fry and

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
				<p>with persons with disability are able to gain supplementary income for the activities.</p>	<p>fingering rearing is proposed in the Village-wise Development Plan, although it was cancelled as a Pilot Project due to a land issue.</p>
	Microfinance activities			<ul style="list-style-type: none"> The saving group members gained a sense of security and self-reliance because they do not have to depend on money lenders and are able to provide with the emergency loan to the group members at the time they incurred sudden expenses. A sense of unity and friendship was also created among the group members through conducting weekly meetings and sharing their problems. 	<ul style="list-style-type: none"> Microfinance activities are proposed for “Promotion of Social Inclusion/ Social Unity” in the Village-wise Development Plan.
	Activities for strengthening CBOs			<ul style="list-style-type: none"> CBO leaders obtained knowledge and skills to manage their organizations. 	<ul style="list-style-type: none"> Activities for strengthening CBOs are proposed for “Promotion of Social Inclusion/ Social Unity” in the Village-wise Development Plan.

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
<p>2. Contribution to Reconstruction of lives and livelihoods of IDPs in the target villages</p>	<p>All the Pilot Projects</p>	<p>See Table 5.2.</p>		<p>For a year from the Baseline Survey to the Endline Survey, villagers in the target villages have restored their livelihoods such as agriculture and fisheries. Accordingly, income in the target villages increased remarkably. Still, the income level is much lower than that of the rural sector of the country. In addition, a significant number of households have outstanding debt.</p> <ul style="list-style-type: none"> • There are some positive signs that the Pilot Projects, such as village water supply systems, successful results of seed paddy production, promotion of home gardening, active participation of women's saving groups to the microfinance activities and high demand for cement block production by the women's group, will contribute to improvements in lives and livelihoods of the people in the target 	<p>The results of the survey are utilized as the background information for the Road Map.</p>

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
				<p>villages in the future.</p> <ul style="list-style-type: none"> In particular, it is highly likely that home gardening has contributed to increase in self-consumption of vegetables. It has also generated some income for women-headed families. Members of the women's saving groups expressed positive words in the interview under the Endline Survey, e.g. "saving is important even at a time of rehabilitation" and "small amount of money becomes much savings when we continue saving money." It shows that the activities have facilitated self- and mutual help among villagers. 	
3. Effectiveness of the Strategies and Approaches to Promote Resettlement Process of IDPs					
Strategy (1): Assistance based on the needs	Approach (1): Assessment of the needs and priorities according to the progress of resettlement and	Whether to grasp the areas/ GN Divisions in need of assistance and needs of IDPs rapidly and effectively	Interviews and discussions to the stakeholders such as government officers, CBO	<ul style="list-style-type: none"> Most needy areas and urgent needs are selected. Needs-based approach brought active participation and keen interest of the villagers as well as the government officers in the 	<ul style="list-style-type: none"> This approach is not directly reflected in the Road Map, however, it is expected that it is utilized by the government of Sri Lanka when they implement any
	Selection of the target GN Divisions based on the criteria such as degree to meet BHN			<ul style="list-style-type: none"> Members of the women's saving groups expressed positive words in the interview under the Endline Survey, e.g. "saving is important even at a time of rehabilitation" and "small amount of money becomes much savings when we continue saving money." It shows that the activities have facilitated self- and mutual help among villagers. 	
	Implementation of the Social Survey of the target GN Divisions				

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
reconstruction activities	<ul style="list-style-type: none"> Needs Assessment through CAP method Sector-wise Needs Assessment 	Whether to plan the effective activities for the villages in the same cluster	leaders and focus groups in the target villages <ul style="list-style-type: none"> Review of the minutes of the DSC meetings Review of the Project documents 	Pilot Projects.	community-based development activities in Mannar District.
Approach (2): Classification of the Target Areas According to the Characteristics	<ul style="list-style-type: none"> Classification of the target villages according to the livelihoods 	Whether to plan the effective activities for the villages in the same cluster		<ul style="list-style-type: none"> There are some GN Divisions where there are farming villages and fishing villages together. Therefore, GN Division-wise planning is not always effective especially for activities on livelihoods. Classification according to the socio-economic characteristics helped to plan development activities on livelihoods for the villages in the same cluster. 	<ul style="list-style-type: none"> Mannar District is classified into three (3) categories in the Road Map.
Approach (3): Identification of Development Potentials and Disincentives	<ul style="list-style-type: none"> Cluster-wise analysis Sector-wise analysis 	Whether to identify the mid- to longer-term needs of the area		<ul style="list-style-type: none"> Identification of cluster-wise and sector-wise development potentials and disincentives helped to grasp the ground situation of the area and plan the longer-term development potentials. 	<ul style="list-style-type: none"> In the Road Map, Development Potentials and Disincentives in each cluster are analyzed to plan the activities.
Strategy (2): Rehabilitation	<ul style="list-style-type: none"> Formulation of Community Action Plan 	<ul style="list-style-type: none"> What kind of Pilot Projects have 		<ul style="list-style-type: none"> CAP workshops have provided villagers with 	<ul style="list-style-type: none"> Microfinance activities are proposed for "Promotion

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
Process with the Scope for Sustainable Development	self- and mutual-help activities by villagers through CAP method • Implementation of the Pilot Projects of CBA (trainings in agriculture and poultry, small-scale income generation activities, micro finance activities) • Implementation of the Pilot Projects of SSIR (fishing facilities provided by the Project and introduction of revolving loan fund scheme for the fishing facilities)	promoted self- and mutual-help activities in a community • Whether the socially vulnerable people participate in the activities		opportunities to identify what can be done by themselves and what needs outside assistance, and enhance the sense of self- and mutual-help. • The capacity of community and CBOs was fostered through the process of self- and mutual-help activities such as trainings for livelihoods and income generation activities, introduction of revolving loan fund scheme for fishing facilities, group saving activities of microfinance activities, and adoption of community contract method. • Even those who had resettled recently and experienced financial as well as mental difficulties participated in group saving activities and other trainings.	of Social Inclusion/ Social Unity” in the Village-wise Development Plan. • This approach is also reflected to formulate proposed priority projects.
Approach (5): Strengthening of CBOs	• Implementation of the Pilot Projects of CBA (study tour on	Whether to activate development activities and		Through various trainings and opportunities to gain knowledge and skills to	• Activities for strengthening CBOs are proposed for “Promotion

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
Strategy (3) Connectedness to the Government/ Local System	<p>community-managed O&M of community infrastructure, training in financial management, construction skill training)</p> <ul style="list-style-type: none"> Implementation of the Pilot Projects of SSIR (utilization of Community Contract method) 	<p>operation and maintenance of community infrastructure in a community by strengthening CBO's capacity to plan and implement their own activities</p>		<p>manage the organization, CBOs were strengthened, which will ensure sustainability of the activities introduced by the Project.</p>	<p>of Social Inclusion/ Social Unity" in the Village-wise Development Plan.</p>
<p>Approach (6): Involvement of Various Stakeholders</p>	<ul style="list-style-type: none"> Cooperation with the relevant stakeholders for implementation of the Pilot Projects Conclusion of the Minutes of Understanding over the facilities rehabilitated/ constructed under the Pilot Projects of SSIR 	<ul style="list-style-type: none"> Whether to deepen the understanding of community-based activities of the staff of the relevant institutions Whether to receive continuous support from the relevant institutions to the communities 		<ul style="list-style-type: none"> Throughout the implementation period, sincere cooperation from the relevant institutions was rendered to the Project. It indicates that the counterparts of the Project, especially those who work in the District, understand the importance of community-based activities. 	<ul style="list-style-type: none"> Not relevant to the Road Map Recommendation to other donors
Approach (7):	<ul style="list-style-type: none"> CAP method 	<ul style="list-style-type: none"> Whether 		<ul style="list-style-type: none"> Throughout the 	<ul style="list-style-type: none"> Adoption of Community

Item of Verification	Pilot Project for Verification	Indicator for Verification	Verification Method	Verified Outcome	Reflection to the Road Map
Utilization of Local Methods	<ul style="list-style-type: none"> • Pilot Projects of SSIR (Community Contract method, revolving loan fund scheme for fishing facilities provided by the Project) • Locally practiced bidding procedure • Pilot Projects of CBA (training method) 	adaptation of local methods makes it easy to obtain support from the relevant institutions or to increase opportunities for the administration to utilize the same methods		sincere cooperation from the relevant institutions was rendered to the Project.	Contract method is proposed as “Other Basic Infrastructure” in the Village-wise Development Plan.
Approach (8): Assistance in Line with Development Plan of the Government of Sri Lanka	<ul style="list-style-type: none"> • Consistency with the National, District and other plans • Pilot Projects of SSIR (Implementation of poultry hatchery facilities in accordance with the policy of DAPH of the Northern Province, etc.) 	<ul style="list-style-type: none"> • Whether to enhance sustainability of the activities 		<ul style="list-style-type: none"> • The approach will ensure future involvement of the relevant institutions such as DAPH on poultry hatchery, DFAR on revolving loan fund scheme, DOA on nursery farms, etc., and sustainability of the activities. 	<ul style="list-style-type: none"> • The Road Map is formulated in accordance with the Government’s plans such as <i>Joint Plan for Assistance for the Northern Province (JPA)</i> and <i>Development Priorities of Sri Lanka</i>.

5.5.2 Project Administration

- (1) The size of any activities jointly implemented by the local authorities, communities and a donor(s) needs to be decided in consideration of the implementing capacity of not only the donors but also the recipients including contractors, communities and local authorities.
- (2) The Project could not yet satisfy most of the urgent needs of the resettled communities, partly because the procedure of project administration took a longer time than expected. With due consideration of the urgency of the needs of the resettled communities, it is necessary to simplify and expedite the administrative procedures such as the process of project approval and procurement of contractors, and create expected outputs in a short time.
- (3) From the lessons learned of the implementation of the Pilot Projects of Small-scale Infrastructure Rehabilitation, when any project is planned in the conflict-affected regions, the Project Team recommends dividing the activities into two categories: one is to be carried out immediately after the launch of the project in consultation with GA and other donor organizations such as UNHCR, which includes water supply, provision of fishing boats and agriculture inputs, and the other shall be rehabilitation and construction of infrastructure to be decided through participation of beneficiaries for their future necessity. The division will contribute towards fulfilling the urgent needs of IDPs swiftly, which will make them realize the peace dividends soon after the termination of a conflict. This division shall be adopted not only for the construction of infrastructure, but also for community-based activities.
- (4) Taking into account the short timeframe of a project under this assistance scheme of JICA, it is not quite possible to incorporate the results and lessons learned from the Pilot Projects into the future development plan such as the Road Map of the Project. Therefore, while the results and lessons from the process of implementation of the Pilot Projects are learned and incorporated into a development plan as much as possible, monitoring and follow-up activities for the Pilot Projects need to be continued for the future sustainability and elaboration of the lessons even after termination of the Project.

5.5.3 Lessons Learned from the Implementation of Small-scale Infrastructure Rehabilitation

- (1) Construction of the infrastructure as the Pilot Projects has been delayed partly due to the issues in relation to contractors. The causes of the delays are combined effects of (a) shortage of the management staff of contractors acquainted with the local conditions and skilled laborers since so many construction works have been implemented in 2011 and 2012 in the North, (b) national and local contractors are still weak to carry out the

works in Mannar District after nearly 30 years' interruption of the construction business and (c) others. As the lessons learned, elimination of such causes of delays shall be taken into consideration.

- (2) As already learned in other JICA projects, community contract proved to be efficient and effective, especially when local contractors have a limited capacity. However, community contract had created successful results in the Project because the CBOs, which had undertaken the community contract, had a similar experience under the ex-JICA project, MANRECAP, and the Project provided the CBOs with technical support and close supervision. Therefore, at the time of introducing the community contract in a project, it is important to carefully consider the factors, such as experience of CBOs, capacity of the project team to provide close supervision and technical support, and availability of time for construction with due consideration of seasonal factors, such as farming, fishing and rainy seasons.

5.5.4 Issues to Strengthen the Capacity of Field Level Officers

The Project activities shall be monitored and guided by the officers after the Project is completed. In this connection, it is necessary to enhance the level of knowledge and skills of the field officers on community development in order for them to grasp the communities' needs and render appropriate assistance to the communities, in addition to the improvement in their working environment such as ensuring transportation.

5.5.5 Lessons Learned from the Environmental and Social Considerations

- (1) The case studies and interviews with CBO leaders revealed that there were some families who were still unable to get away from the consequences of the conflict and displacement, such as mental instability, absence of bread-winners, fluctuation of family relationships and others. The Project Team also learned the importance of providing assistance to improve psychological stability and reconciliation among the villagers from the experience of the Peace Reconciliation Workshops. These are the examples to show that effects of conflicts and displacements are not transitory symptoms but are the issues that require long-term care and assistance. It is important to re-establish interpersonal communication among the affected people and reconstruct a community, through implementing community-based activities such as women's saving groups and group-based income generation activities, so that a sense of mutual understanding and care are enhanced.
- (2) In the selection of the Pilot Projects of Small-scale Infrastructure Rehabilitation, rehabilitation/ reconstruction works were purposefully selected with the expectation that no land issues would be raised from the works, unlike construction of new

infrastructure at new sites. Contrary to the expectation, there occurred several land issues and one of the Pilot Projects, namely construction of a fish pond for fish fry/fingerlings rearing, was finally cancelled due to the issue (see **Appendix 5** for details). The land issue occurred due to complications of land ownership during the prolonged conflict and repeated displacements, taking advantage of post-conflict confusion and so on. On implementation of a construction project, necessary measures to avoid land issues such as information gathering from all the stakeholders need to be taken in addition to the basic procedures such as confirmation of land ownership and publicity of the project work to the surrounding villages and the administration.

- (3) The Pilot Projects were implemented in the areas where the Low Risk Certificate had been issued and the safety had been confirmed. However, several UXOs were found at work sites in the focal villages. In addition, with the passage of time after the resettlement, the villagers' range of action was expanded and landmines and UXOs were encountered. Implementation of any activities even in the Low Risk Areas requires actions such as cross-check of information gathered, close communication with relevant organizations and implementation of Mine Risk Education to the stakeholders.
- (4) Various community-based activities were carried out under the Project to rehabilitate lives and livelihoods of IDPs. Many agriculture-related activities have been contributing to quick rehabilitation of the livelihoods. Promotion of home gardening proved to be effective to ensure food security and to increase cash income of the resettled families. Promotion of home gardening was also found to be appropriate as assistance to women-headed families and families with persons with disability. Other community-based activities such as trainings to strengthen capacity of CBOs and microfinance activities of women's saving groups also enhanced motivation of IDPs to reconstruct a community.

Those lessons learned are incorporated into the Road Map or utilized as recommendations to similar projects. At the same time, it is expected that the Government of Sri Lanka will take them on the implementation of reconstruction/ development activities proposed in the Road Map.