

**JAPAN INTERNATIONAL
COOPERATION AGENCY**

**MINISTRY OF NATION BUILDING AND ESTATE
INFRASTRUCTURE DEVELOPMENT**

**MINISTRY OF URBAN DEVELOPMENT AND
SACRED AREA DEVELOPMENT**

**MINISTRY OF HOUSING AND COMMON
AMENITIES**

MINISTRY OF FINANCE AND PLANNING

**MINISTRY OF FISHRIES AND AQUATIC
RESOURCES**

**RECOVERY, REHABILITATION AND
DEVELOPEMENT PROJECT
FOR
TSUNAMI AFFECTED AREA
OF
NORTHERN AND EASTERN REGION
IN
THE DEMOCRATIC SOCIALIST REPUBLIC
OF
SRI LANKA**

FINAL REPORT

January 2008

KRI International Corp.
Nippon Koei Co., LTD.
System Science Consultants Inc.

Exchange Rate
(As of October 2007)
US\$ 1.00 = ¥115.55 = Rs.113.4

Preface

In response to the request from the Government of Sri Lanka, the Government of Japan decided to execute “The Recovery, Rehabilitation and Development Project for Tsunami Affected Area of Northern and Eastern Region in the Democratic Socialist Republic of Sri Lanka.”

JICA dispatched a project team to Sri Lanka over the period of March 2005 to January 2008. The Project Team consists of experts assigned by KRI International Corp., NIPPON KOEI Co., Ltd. and System Science Consultants Inc. and was headed by Mr. Toshikazu TAI as Team Leader.

The Project Team has held a series of discussions with relevant officials from the GoSL and local governments as well as stakeholders in the private sector, NGO, affected people, and community, and implemented the various activities in collaboration with them, with regard to the construction of Japan-Sri Lanka Friendship Village (JSFV) and formulation of the long-term redevelopment plans for Kalmunai Township and for Fishery Sector. After returning to Japan, the Project Team made further analysis and compiled the final results in this report.

I hope that the experiences reported here will contribute to the further redevelopment of the Northern and Eastern Regions of Sri Lanka and will enhance the friendly relationship between Sri Lanka and Japan.

I wish to express my sincere appreciation to the concerned officials and people of Sri Lanka for their close cooperation extended to the Project Team.

January 2008

Eiji HASHIMOTO

Vice President

Japan International Cooperation Agency

Mr. Eiji HASHIMOTO
Vice President
Japan International Cooperation Agency

January 2008

Letter of Transmittal

Dear Sir,

We are pleased to submit herewith the final report of “The Recovery, Rehabilitation and Development Project for Tsunami Affected Area of Northern and Eastern Region in the Democratic Socialist Republic of Sri Lanka.” This report presents the results of the project which has been undertaken from March 2005 to January 2008 by the Project Team organized jointly by KRI International Corp., NIPPON KOEI Co., Ltd. and System Science Consultants Inc. under the contract with JICA.

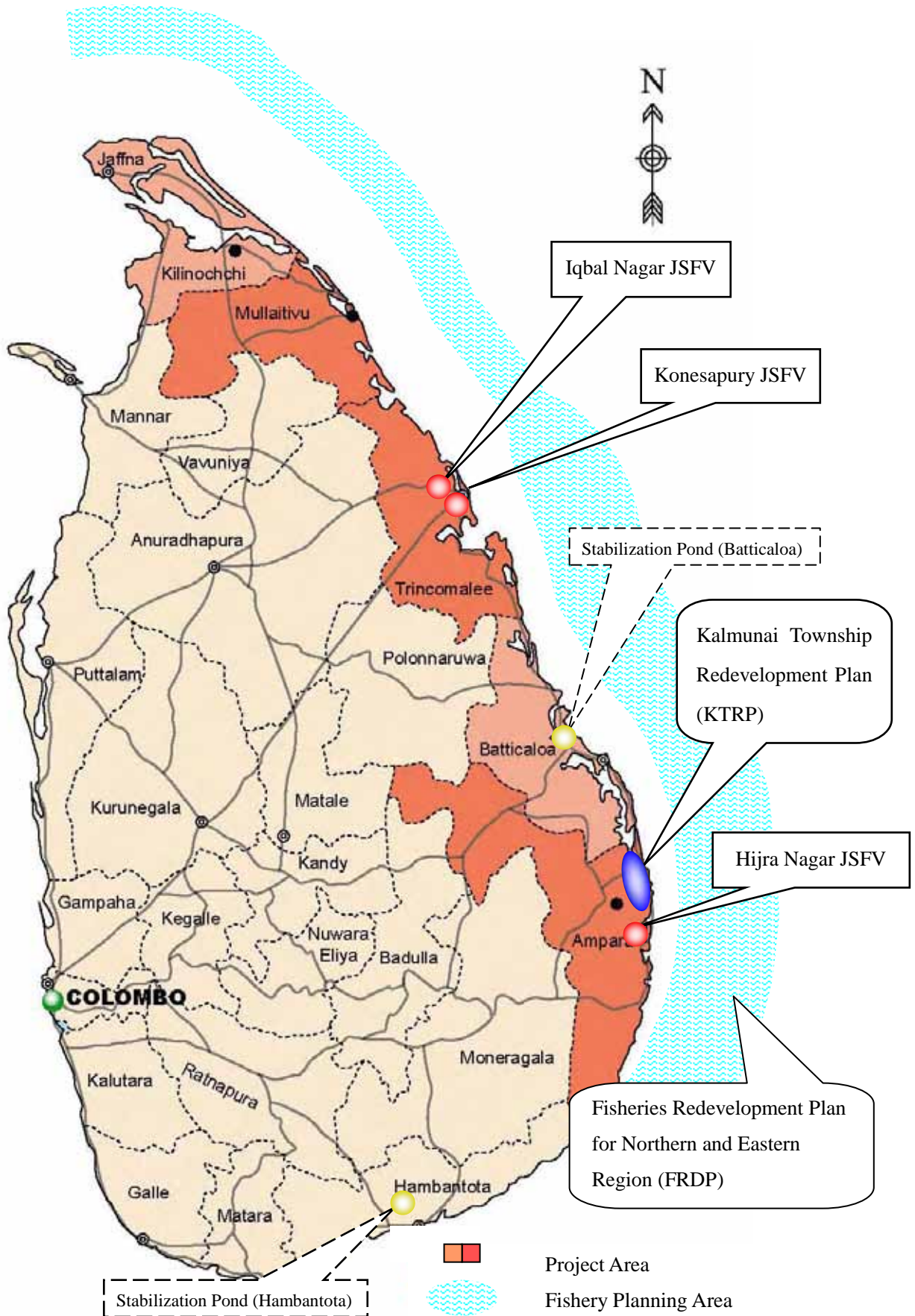
This project aims to solve urgent necessities of the affected people by the tsunami, and also to provide plans for future redevelopment in the Northern and Eastern Region. As the urgent works, construction of Japan Sri Lanka Friendship Village (JSFV) was taken up which was financed by the Japanese Non-project Grant Aid. For facilitating community participation, Community Based Organizations (CBO) were formulated in JSFV and strengthened. Preparation of the long term redevelopment plans, particularly for the Kalmunai Township Redevelopment Plan, has been made through the participation of the stakeholders.

Through the implementation of this project, various experience and lessons were gained that can be applicable to the planning of rehabilitation/reconstruction after the disaster. For further redevelopment on the Northern and Eastern Region, the priority projects selected from the long term development plans both for Kalmunai Township and Fisheries Sector are also to be implemented at the earliest stage.

The Project Team wishes to take this opportunity to express heartfelt gratitude to all the Sri Lankan government officers and participants as well as Japanese government officers who have cooperated for the implementation of the Project. We sincerely hope that the results of this project will contribute to facilitating redevelopment in the region, and further socio-economic development of the whole country.

Very truly yours,

Toshikazu TAI
Project Team Leader



Location Map

Damages by the Tsunami on 26th December, 2004



Damaged houses in Sainthamaruthu, Ampara (October 2005)



Debris left by the tsunami (200 m from the shore) Kalmunai, Ampara

Transit Shelters for the Tsunami Affected People



Transit shelters near Iqbal Nagar (September 2005)



Temporary houses in Kalmunai

Discussions with the Counterpart Agencies



Discussion at Ministry of Housing and Construction (October 2005)



Kalmunai Township Redevelopment (KTR) meeting (September 2005)

Construction of Japan-Sri Lanka Friendship Villages 1(JSFV)



Site of JSFV in Iqbal Nagar (August 2005)



Construction of Iqbal Nagar JSFV (February 2006)



Selection of house design, Hijra Nagar (September 2005)



Construction of Hijra Nagar JSFV (February 2006)



Konesapury site (September 2005)



Konesapury site (GVC Housing) (February 2006)

Construction of Japan-Sri Lanka Friendship Villages 2(JSFV)



Construction of Iqbal Nagar JSFV (October 2007)



Construction of Iqbal Nagar JSFV (Pre-School, October 2007)



Construction of Hijra Nagar JSFV (Shopping Complex, October 2007)



Construction of Hijra Nagar JSFV (August 2007)



Construction of Konesapury Site (Red Cross House, October 2007)



Construction of Konesapury JSFV (Bus Stop and Shop Building, October 2007)

Pilot Project Implementation



Formation of Community Based Organization (CBO) in Pottuvil, Ampara (July 2005)



Skill training - Food processing, Iqbal Nagar, Trincomalee (October 2005)



Agriculture support- an onion farmer who received a water pump (Veloor Ambal FO)



Agriculture support- a paddy farmer who received 300kg of paddy seeds (Thamaraikulam FO)



Fisheries Pilot Project- Lockers in Pottuvil, Ampara (February 2006)



Water O & M Training in Pottuvil, Ampara (September 2007)

EXECUTIVE SUMMARY

1. INTRODUCTION

1.1 Overall objectives of the Project stipulated in the Scope of Work on Recovery, Rehabilitation and Development Project for Tsunami Affected Area of Northern and Eastern Region in the Democratic Socialist Republic of Sri Lanka are:

- (1) To formulate a plan of recovery, rehabilitation and development for the tsunami affected area in the Northern and Eastern Region;
- (2) To assist and monitor the implementation of recovery and rehabilitation projects to be funded by the Japanese Non-project Grant Aid; and
- (3) To share the Japanese experience in disaster management through the implementation of the Project.

1.2 In order to achieve the above objectives, the following project components were planned and implemented through which relevancy of the proposed approach will be verified. A model of rehabilitation and reconstruction of victims' lives and a model of urban reconstruction and fishery sector were also planned to be established for the future development of the whole Northern and Eastern Region.

- (1) Reconstruction of urgent facilities for tsunami victims
 - a) Japan Sri Lanka Friendship Villages (JSFV) in Trincomalee and Ampara
 - b) Night soil treatment facilities in Batticaloa and Hambantota
- (2) Preparation of long term redevelopment plans
 - a) Kalmunai Township redevelopment plan
 - b) Fishery redevelopment plan in the Northern and Eastern Region

1.3 Prior to the planning stage, a field investigation of the tsunami damage was conducted. Results of the investigation were analyzed in order to decide priority both on urgent and long term schemes. Identified needs for urgent scheme are construction of housing and urgent infrastructure (night soil treatment facilities) as well as livelihood improvement of the affected people, while those for long term are long term redevelopment plans for Kalmunai Township

and fishery sector in the Northern and Eastern Region. For the plan formulation and implementation of the project, lessons from similar experiences in Japan and special characteristics of the region are planned to be fully incorporated.

2. CONSTRUCTION OF URGENT FACILITIES

2.1 From the needs analysis conducted through the investigation, priority of the construction of permanent houses (called Japan Sri Lanka Friendship Village: JSFV) and night soil treatment facilities (NSTF) were confirmed. Construction of the priority facilities is, therefore, planned to be implemented using the Japanese Non-Project Grant Aid Program under this project.

2.2 For the successful implementation of these facilities, particularly for JSFV, it is assumed that formation of a beneficiary group or Community Based Organization (CBO) and positive participation of the CBO during the stages of planning, design, construction up to operation and maintenance are indispensable. It is also assumed that not only houses for the victims, but also construction of community facilities such as a community center, kindergarten, playground, etc. are necessary to provide a sustainable living environment for the people to be resettled.

2.3 For the selection of the site of JSFVs, field investigations were conducted on the land proposed by GOSL to have been followed by the engineering analysis. Through a series of laborious discussions and coordination with the related government agencies, two sites for JSFVs were finally determined at Iqbal Nagar, Trincomalee District and Hijra Nagar, Ampara District. In addition to these sites, assistance for one more site at Konesapury in Trincomalee was requested by GOSL, and was taken up and included in this Project later. Since several NGOs have already committed to housing construction, only land preparation and installation of an infrastructure are required to be implemented at the Konesapury site.

The locations of the three selected sites are presented in Figure ES.1

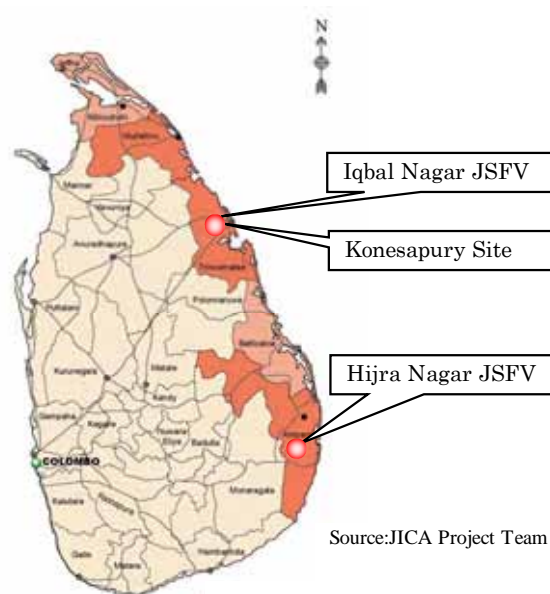


Figure ES.1 Japan Sri Lanka Friendship Village Sites

2.4 The number of beneficiaries was determined by the GOSL on the basis of the regulation defined by TAFREN. The DS, administrating organization for the JSFV sites worked out for the selection of the beneficiaries. The number of beneficiaries planned is summarized below.

Table ES.1 Development Framework of JSFVs

Site	Num. of beneficiaries		Site Area (acre)	Infrastructure and Facilities Included
Iqbal Nagar	Muslim	110 families	33	Housing, Infrastructure and common facilities will be constructed by Japanese grant aid
	Tamil	136 families		
	Total	246 families		
Hijra Nagar	Muslim	180 families	23	Housing, Infrastructure and common facilities will be constructed by Japanese grant aid
	Tamil	20 families		
	Total	200 families		
Konesapury	Tamil	343 families	58	Infrastructure and some common facilities will be constructed by Japanese grant aid. NGOs are responsible for houses construction.
Total	Muslim	290 families	114	-
	Tamil	499 families		
	Total	789 families		

Note: The number of families was finally reduced to 789 from 875 due to the modification of the buffer zone policy by Sri Lankan Government and disappearance of beneficiaries during the construction period.

Source: JICA Project Team

2.5 Layout plans prepared by the JICA Project Team were also presented to the CBOs for discussion and getting their comments particularly on the demarcation between Tamil and Muslim. Through this time-consuming procedure, the layout plans were finally determined and later modified. Regarding the type of houses for the JSFV, three models were formulated by JICA Project Team under consultation with NHDA. Selection of appropriate housing type was made through hearing sessions with CBOs formulated in each JSFV site.

2.6 Construction work was influenced by several intermittent suspensions due to security problems in the region. The completion target date was revised several times from the original target of October 2006 to finally August 2007. After the construction work was completed at the end of July and August 2007, the beneficiaries moved in JSFV from temporary houses.

(Resettlement in Iqbal Nagar JSFV)

Handing over of the documents and keys August 1, 2007 and by the beginning of October 2007, all the beneficiaries settled into JSFV except those who were displaced to India and other districts of Sri Lanka.

The beneficiaries were delighted to move into the new houses after surviving for two and a half years in temporary shelters. As soon as the beneficiaries moved in, some started cottage businesses by opening grocery shops in the houses, others bought potted plants for gardening, and children started playing cricket and volleyball happily in the playground.



(Resettlement in Hijra Nagar JSFV)

Handing over of the documents and keys began September 4, 2007 and within a week, all the beneficiaries except 33 households whose eligibility was questioned, received the documents and keys.

On October 5, 2007, the Government Agent of Ampara made a visit to Pottuvil and announced the results of the investigation had conducted, i.e. 28 of those 33 households are fully eligible and the remaining 5 households are conditionally eligible. A few days after this announcement, the remaining keys and documents were handed over to those 33 households. By the beginning of October, street lights in the JSFV were operating and 167 households had moved into JSFV.



2.7 From the needs analysis conducted through the investigation, priority of the construction of night soil treatment facilities (NSTF) was confirmed. The objectives for establishing the night soil treatment facilities are to establish a model for the treatment facilities, and to promote implementation of the similar facilities in other affected areas through preparation of a manual. Through the field investigation and evaluation on several districts in

the target area carried out by municipalities under the direction of NWSDB, two sites for NSTF were finally selected at Batticaloa and Hambantota.

2.8 In Batticaloa, construction work commenced in February 2006. Construction work was suspended for several times due to security reasons and to the limited capacity of the local contractor. Approximately 90% of the construction was completed as of January 2008 with the remaining work to be soon completed.

2.9 In Hambantota, although the construction commenced in April 2006, the work has been suspended since October 2006 due to environmental problems. To that end, the needs of the facility were reconfirmed among NWSDB, local community representatives and GA. However, the new site has not yet been determined among related stakeholders.

3. CBO FORMATION AND PILOT PROJECT

3.1 As mentioned earlier, livelihood improvement of the affected people is indispensable for their recovery and redevelopment in addition to the rehabilitation of the physical facilities such as infrastructure and housing. To improve the livelihood, community empowerment through the formation of CBO and its strengthening are critically important. It is assumed that co-assistance through positive participation of the community supplemented by government assistance will accelerate the rehabilitation process.

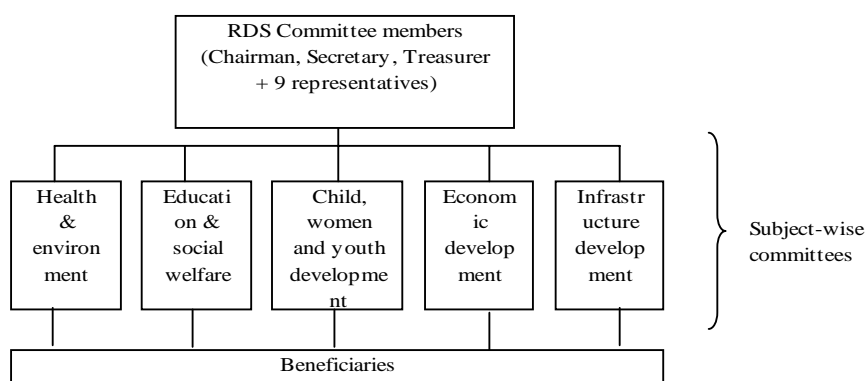
3.2 The pilot project is proposed to verify the relevancy of the proposed approach and effect of improving the livelihood of the affected people, and includes the following components:

- 1) Skills training for income generation for the affected people
- 2) Agriculture support for recovery of agriculture production
- 3) Fishery support through strengthening of fishery cooperatives

3.3 To identify the characteristics of the target communities, a survey in the form of a questionnaire of individual households of the beneficiaries was conducted to compile basic information about their living and housing conditions before the tsunami. Then, Rural Development Societies (RDSs) were formed as CBO to represent beneficiaries of the JSFVs. In Iqbal Nagar, two RDSs, one for Muslim beneficiaries and the other for Tamil beneficiaries were formed and a common forum was formed to share information and to discuss about resettlement and development of JSFV. In Hijra Nagar, a RDS was formed to represent both Muslim and Tamil beneficiaries.

3.4 In Hijra Nagar, the RDS committee, consists of 12 members, including chairman, secretary and treasurer and representatives from the different G.N. Divisions, was formed as a central coordination body of the beneficiaries. In addition, subject-wise committees were

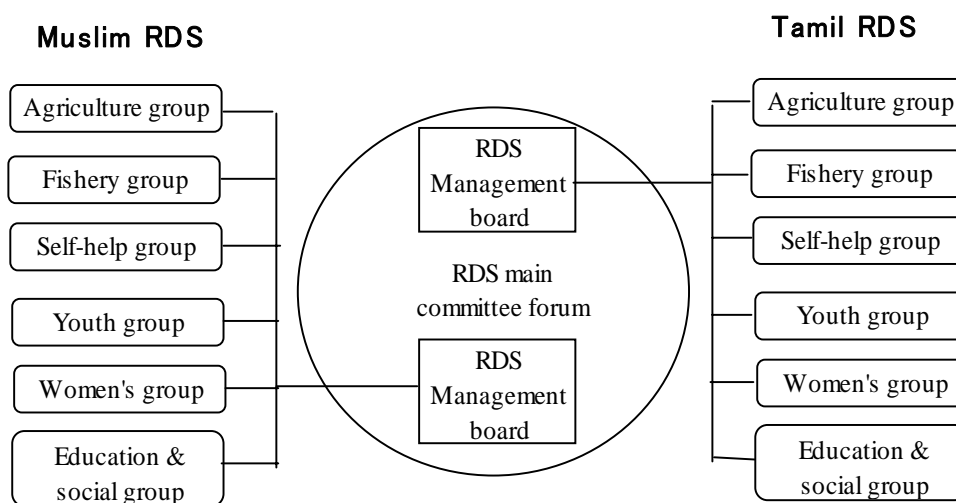
formed in 2006 as a structure to undertake O&M and development of the JSFV. The organizational structures of the RDS and the subject-wise committees are shown below.



Source: JICA Project Team

Figure ES.2 Structure of RDS (Hijra Nagar)

3.5 In Iqbal Nagar, the organization structure was planned as presented below to undertake O&M and development of JSFV. However, due to the deterioration of the security situation, displacement of the Tamil beneficiaries and delay of the construction of the JSFV, the subject-wise groups were not formed. RDS management boards were established and utilized.



Source: JICA Project Team

Figure ES.3 Planned Structure of RDS (Iqbal Nagar)

3.6 The objective of skill training is to improve livelihood of the target households by providing technical and managerial training, providing equipment, and establishing business plans. This pilot project also plans that CBO would participate to the construction of JSFVs for gaining income. The needs assessment was first conducted from July to August 2005 to identify individual training needs and preferences. Based on the needs assessment, the project developed the training activities, which consist of training in selected fields of animal husbandry, construction-related skills and small business including food processing,

management training and follow-up activities. The total number of the participants who completed the training was 340.

3.7 The objective of the agricultural support pilot project was to restart the agriculture activities of the tsunami affected farmers through the strengthening of the established Farmers' Groups. Two Farmers' Organizations (FOs) were registered in September 2005 under the guidance of ADO (Agriculture Development Officer). After two FOs were formally registered, the agriculture inputs were handed over to both FOs in September 2005. Beneficiary farmers who received paddy seeds, onion seeds and water pumps restarted the cultivation and reaped the harvest in late 2005 to early 2006. However, although some beneficiaries have recovered the income of pre-tsunami period through this support, others, especially a part of Tamil beneficiaries have fled to India or other areas of Sri Lanka, due to the aggravated security situation in the area from late 2006. Tamil FO is planned to be re-established after the settlement to JSFV is completed.

3.8 The objectives of the Fishery Support Pilot Project are:

- a) To assist the fishermen of JSFV in restarting fishing activities to improve their livelihood.
- b) To learn lessons for livelihood empowerment

3.9 Construction of landing facilities was completed in March 2006. 14 lockers and a fish handling shed are constructed for Hidayafuram FCS, Ampara and an access road is constructed for Veloor FCS, Trincomalee. Materials for fishing gears were handed over to Hidayafuram FCS in December and to Veloor FCS in November 2005. Materials for a beach seine and 20 cast nets were provided to Hidayafuram FCS, whereas 31 gill nets were provided to Veloor FCS. Three training sessions on FCS management capacity building were completed in February 2006 for both Hidayafuram and Veloor FCS. As a result, Hidayafuram FCS is now collecting fees for lockers and cast nets, and Veloor FCS is collecting fees for gill nets.

3.10 The community is undertaking responsibilities of the O&M of the common facilities of the JSFVs, and the demarcation of roles and responsibility was discussed and agreed upon among stakeholders, i.e. DS, PS, NHDA and RDS in both IN-JSFV and HN-JSFV.

4. EVALUATION AND LESSONS LERNED

4.1 Evaluation was made for the urgent works such as JSFVs and the night soil treatment facilities (NSTF) and the pilot projects on the basis of the five evaluation criteria. The results of the evaluation are summarized in the following.

(JSFV Development)

Achievement: JSFVs including houses, infrastructure and community facilities are implemented successfully. Compared to the decline of NGO basis resettlement housing projects due to the lack of funds for infrastructure development and environmental concerns such as solid waste management issues, human encroachment into animal habitats, etc., JSFVs, planned with integrated infrastructure and facility development and designed under appropriate environmental consideration, are implemented advantageously. Participation of beneficiaries from the planning stage to O&M has enhanced ownership and will facilitate the sustainability of the project.

(NSTF Development)

Achievement: Implementation of NSTF in Batticaloa is almost complete and is expected to serve as a model facility in Sri Lanka. Plans of NSTFs both in Batticaloa and Hambantota were prepared and construction is underway in Batticaloa (90% progress as of January 2008 and expected to be completed by March 2008). This model can be replicated in the tsunami affected areas throughout the country.

Challenge: Third site of the Hambantota is now under investigation to correspond the environmental related problems. Engineering works and the succeeding construction of Hambantota is to be accelerated.

(CBO Formation and Capacity Building for JSFV)

Achievement: Functional RDSs were established in both Hijra Nagar JSFV and Iqbal Nagar JSFV by assistance of local governments and JPT. RDSs played important roles to make the resettlement program participatory such as 1) representing the needs of the beneficiaries, 2) participatory decision making, 3) information sharing among the beneficiaries and 4) monitoring of the construction of the JSFV. RDS contributed to the smooth development of JSFV and formulation of O&M organization.

Challenge: Re-formation of the Tamil RDS in Iqbal Nagar, which was weakened by the displacement of the leaders due to security reasons, should be made.

(Livelihood Improvement of JSFV Beneficiaries)

Achievement: Beneficiaries of JSFV and adjoining community members successfully re-started their livelihood activities through participating pilot projects as of the end of 2006, except for the Tamil fishermen and farmers in Iqbal Nagar JSFV, who are suffering from frequent fishing bans and difficulty of traveling.

Challenge: The Tamil fishermen in Iqbal Nagar also re-started fishing activities in early 2006. However, they could not improve their livelihood due to the frequent fishing bans imposed by the navy and malfunctioning of FCS due to the evacuation of beneficiaries caused by security

problems. Tamil farmers have had similar problems. Monitoring and follow-up of the livelihood restoration of the Tamil fishermen and farmers should be carried out in order to ensure the impact of the project.

(Beneficiaries' Evaluation on JSFV)

Beneficiaries resettled in JSFV evaluated affirmatively as summarized below. (Refer to 4.4.5 of main text for details)

- 1) 86% beneficiaries in Iqbal Nagar and 98% in Hijra Nagar are satisfied with JSFV.
- 2) Beneficiaries are generally satisfied with quality of house and common facilities in both JSFVs. Further, unchanged neighbors configuration in the Iqbal Nagar JSFV is highly evaluated.
- 3) Beneficiaries of both JSFVs were satisfied with participatory planning through that their ideas were taken into consideration in JSFV and construction of JSFV.
- 4) Beneficiaries appreciated the support program to livelihood restoration such as the micro credit scheme of women's bank.

4.2 Lessons Learned from the implementation of JSFV are summarized below.

(Land Acquisition)

- Although GOSL is fully responsible for the land preparation required for the permanent housing development, close cooperation between donors/NGOs and GOSL is necessary to settle sensitive land ownership issues.
- Through consultation with local government and community, alternative land is also to be considered in order to secure an appropriate site.
- Land ownership problems if any will be unveiled when construction work commence. It is recommended that preliminary construction work such as bush clearance should be done in earlier development stages to detect any land ownership problems.
- It is noted that a capable local mediator is the key to settling land ownership disputes successfully. An influential MP (Member of Parliament) in the community contributed to the settlement of the land ownership dispute at the Iqbal Nagar site.
- Collaboration with local government authorities, who are well acquainted with the community situation, will contribute to solving the land disputes.

(Ethnic Dispute)

- We have to understand that ethnic dispute could easily be aggravated because refugees are forced to live under unstable living conditions and tend to be suspicious about sensitive

ethnic issues after experiencing such a large scale of disaster. Much attention should be paid in order to prevent the escalation of ethnic disputes.

(Participation in Planning and Design (JSFV))

- Beneficiaries' participation in the planning and design of the resettlement houses should be increased to make the project implementation smooth. Operation and maintenance works will be efficiently and smoothly carried out because of the ownership created.

(Frequent Modification of Plan/Design (JSFV))

- Explanation and discussion about the plan and design with beneficiaries should be made fully and any modifications and amendments should be agreed by them.
- Engineering surveys should be carried out in parallel with the construction works, and design amendments will be necessary based on the results of the engineering surveys.
- Communication and collaboration with donors and NGOs active in the neighboring area is necessary for successful engineering works such as confirmation of water source.

(Inflating Cost and Supervision (JSFV))

- Cost estimation should be done taking the unexpected price escalation into account and based on the latest information and data.
- Construction plans should be flexible to correspond with any modifications and changes, particularly in the security sensitive area.
- It is understood that even the local contractor cannot handle the security problems caused by ethnic conflict.
- Coordination with government agencies responsible for water and electric supply should be carefully conducted prior to carrying out connection work. Water and electricity supply are part of the minimum condition for living in the resettled houses.

4.3 Lessons learned from CBO formation and pilot project are as follows.

(CBO Formation)

- CBO formulation is fundamental for the successful development of a new community. CBO is especially crucial to making the resettlement program participatory. With assistance from the RDO (Rural Development Officers), community empowerment and community harmony will be enforced effectively.
- Even after the CBO is formulated, it is not easy and takes time to establish a functioning CBO. Continuous facilitation is essential to nurse the leaders of the CBO with experience and confidence, especially when the leaders are inexperienced in community work and are

less united.

(Skills Training)

- As part of emergency assistance, more detailed demand analysis, sufficient duration and level of the training, careful selection of the trainees, examination of the feasibility and dialogue with the relevant authorities, is crucial to make skill development training successful.
- Skill development training should commence after the RDS, which is the central coordination body of the program, develop its capacity on coordination and management.

(Agriculture Support)

- Close communication and coordination among donors, NGOs and GOSL are essential to avoid duplication of the agricultural input supply and maximize the effects of the assistance.
- Continuous monitoring is crucial to encourage the performance of the beneficiaries in loan repayment.

(Fishery Support)

- Flexible planning is necessary for facility improvement corresponding to the change of disaster management policy.
- Insufficient collaboration with other assistance schemes could be a risk factor making the impacts of the project uncertain. Integrated assistance should be a way to avoid the risk.

(Security in Project Implementation)

- Plans and schedules for field investigation should be flexible with sufficient allowance for contingency if the site is located in or adjacent to areas with security issues.
- In selecting the site for pilot projects, careful consideration to the security situation is to be made as well as in depth analysis on possible adverse effects on the community and its people (such as impacts on ethnic problems).

5. Kalmunai Township Redevelopment Plan (KTRP)

5.1 The Kalmunai Township Redevelopment Plan was used as a model for rehabilitation and development of the disaster affected township to be formulated through community participation. The effectiveness of community participation and its applicability to other regions are also to be evaluated at a later stage. The reasons of selecting Kalmunai for the formulation of redevelopment plan are as follows.

(1) Kalmunai municipality was the hardest tsunami-hit area in Sri Lanka, and is considered an important to model in assisting its rehabilitation and redevelopment as a model.

By doing so, the formulated redevelopment plan would be able to serve as the direct leverage for Kalmunai's rehabilitation/redevelopment activities.

(2) Kalmunai has some of the typical features of Sri Lanka's Northern and Eastern region, with its development status relatively backward due to the limited development support from central government and near absence of national/international donors and ethnic composition composed of Muslim and Tamil living in close proximity with chronic tension existing among them.

It is considered that although challenging, by selecting Kalmunai, the formulated redevelopment plan would be able to exert the high applicability as an operational model to all socially and economically similar areas of the region.

5.2 Under the framework of the rehabilitation and redevelopment of the Kalmunai Township, objectives of formulating the redevelopment plan are set as follows.

- (1) To provide perspectives for the future development of Kalmunai Township toward the year of 2030
- (2) To identify priority projects to be implemented up to year 2010 and to prepare the implementation plan
- (3) To prepare the plan as a model for reconstruction and redevelopment of the urban area after disaster through the participation of stakeholders and community (participatory approach)

Participatory approach has been taken up from the stage of identification of local needs and planning priority projects through to the implementation stage of the pilot projects. For this, three tiers of the working committees were formulated where several workshops and meetings were held inviting the stakeholders and community representatives.

5.3 The population of Kalmunai Township is estimated at 147,000 including 102,000 in Kalmunai Municipality and 45,000 in Ninthavur PS in 2005. The future population of the Township is estimated to be 164,000 in 2010 and 252,000 in 2030 according to the estimation of UDA's Eastern Province Physical Plan. This means that 17,000 will be added by 2010, and by 2030 the population is expected to increase to around 105,000 compared to 2005.

5.4 The land use plan of Kalmunai Township in the target year of 2030 with 250,000 in population was prepared on the basis of following assumptions.

- (1) In the existing urban area developed between Route A4 and sea coast, improvement of the internal road network, development of an evacuation aid center and plantation of buffer zone along shoreline will be made for the

strengthening of the disaster resistance capacity of the township.

- (2) For the purpose of developing the new amusement core in the township, rehabilitation of Thonas and development of a memorial park will be made.
- (3) The new township with residential areas, new business zones, parks, green space, etc. will be developed in the west of Route A4.
- (4) The lagoons will be expanded for the enhancement of the flood retention capacity as well as the procurement of soil materials for land reclamation for the new township. The expanded lagoons will contribute to the fresh water fishing and new development of waterfront park facility.
- (5) New industrial zone for small/medium processing industry will be developed at the expanded lagoon shore.
- (6) By-pass road of Route A4 will be necessary in case the traffic exceeds the road capacity after 2020.

5.5 As mentioned earlier, the KTRP is planned to be formulated basically under the concept of participatory approach. Through District Committee and Community Focus Group of the KTRP, various discussions were made and needs for the rehabilitation and redevelopment in the Kalmunai Township were identified. Based on the proposed schemes, implementing priority of the proposed improvement plans was also discussed among the stakeholders and community representatives, and schematically classified as presented in the following figure.

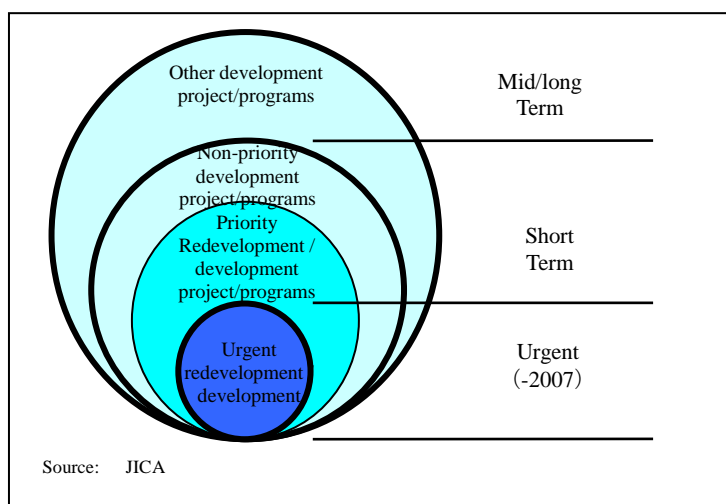


Figure ES.4 Schematic Image of Project/Program Configuration

5.6 The project/program are categorized by (1)urgent project/program necessary for urgent redevelopment/development, (2)priority redevelopment/development project/program to be implemented within a short-term period (approximately 5 years), (3)non-priority development project/program expected to be implemented in short term, 4)other development project/program expected to be implemented in mid/long term period.

- 5.7 Priority programs were selected through the following process:
- (1) Proposed priority projects for KTRP were further reviewed and selection of the priority projects to be included in this study was made in due consideration of commitments of other donors, NGOs, and government agencies concerned (the committed projects were excluded).
 - (2) The selected high priority projects were integrated into the three priority programs as explained below.
- 5.8 The Restoration Program for Urban Environment includes the following components:
- (1) Internal Road Network comprising improvement of National Road A4, National Road A31 connecting Ampara, internal road and coastal road of in Kalmunai municipality
 - (2) Debris clearance and solid waste management for Kalmunai
 - (3) Urban amenity improvement along Thonas
 - (4) Tsunami memorial park
 - (5) Sewage and night soil treatment and disposal
- 5.9 The Program for Disaster Mitigation and Management includes the following components:
- (1) Flood control and drainage improvement
 - (2) Disaster management
 - (3) Emergency operation plan for emergency response
- 5.10 The Livelihood Restoration Program includes the following components:
- (1) Activation plan for local cottage industry
 - (2) Fishery activation plan
- 5.11 Viability of activating local industry was verified through the success of the pilot project conducted by JPT. Three working groups, formulated in three targeted communities of Kalmunai Tamil DS, Kalmunai Muslim DS and Sainthamaruthu DS, identified respective local products utilizing the palm fibre, water-Hyacinth, by-product of fish for activating local industry. Three groups successfully implemented the production of the local products and sales promotion in exhibitions.

Even after JPT support finished, the groups presented their products in the exhibition held by National Craft Council (NCC) in Colombo in August 2007, and plan to join another exhibition to be held in November by Ceylon Industrial Board. Moreover, NCC started its support for the improvement of water-hyacinth handicrafts and held 4-days of training in Kalmunai. Sri Lanka Handicrafts Board (LAKSALA) is also ready for collaborating with groups, as they are to be registered with LAKSALA and waiting for the good samples from groups for issuing the purchase order.

6. FISHERIES REDEVELOPMENT PLAN (FRDP)

6.1 Necessity for preparation of the fisheries redevelopment plan for northern and eastern region is as summarized below.

- (1) The fisheries industry was the sector hardest hit by the tsunami, particularly in Northern and Eastern Region. Approximately 75% of the fishing fleet (24,114 fleets) were damaged or destroyed by the tsunami, 70% of which were located in Northern and Eastern Region. A total of 4,870 fishers died in a whole country, 75% of which are fishers in Northern and Eastern Region.
- (2) The income level of fishermen engaged in coastal fisheries (using traditional canoe) is quite low. In addition, about 75,000 people out of 150,000 who lost their main source of income were in the fisheries sector. Redevelopment of fisheries is directly linked to the improvement of the livelihood in the whole country.
- (3) About 60,000 mt of fish equivalent to about 25% of total fish production (253,190 mt) distributed to Colombo and other consuming areas from Northern and Eastern Region in 2004. Recovery of the fisheries sector in Northern and Eastern Region is important for securing the food security in Sri Lanka.

In due consideration of the above situation, particularly, the serious damage on the fishery sector affected by the tsunami and lower level of living standard, formulation of the long term plan for fisheries redevelopment is required in parallel to the execution of urgent rehabilitation works.

6.2 The Fisheries Re-development Plan (FRDP) aims at restoring the fisheries from damages of tsunami, and to offer necessary and urgent improvements to create conditions for sustainable development of fisheries sectors and to uplift the livelihood of fishermen in the Northern and Eastern Region. Under the framework of limited fisheries resource, the FRDP proposes activities not to increase the fish production but to promote sustainable development of the fisheries sector through the introduction of resource management measures, and to increase added value with present production volume.

6.3 Regarding the resource management, the FRDP proposes to establish a resource management model in a closed water body (lagoon area) where it is relatively easy to introduce resource management measures due to limitation of resource users. The FRDP also proposes to increase additional value of catch and decrease post harvest loss through the improvement of quality control. The basic concept of FRDP is as presented below.

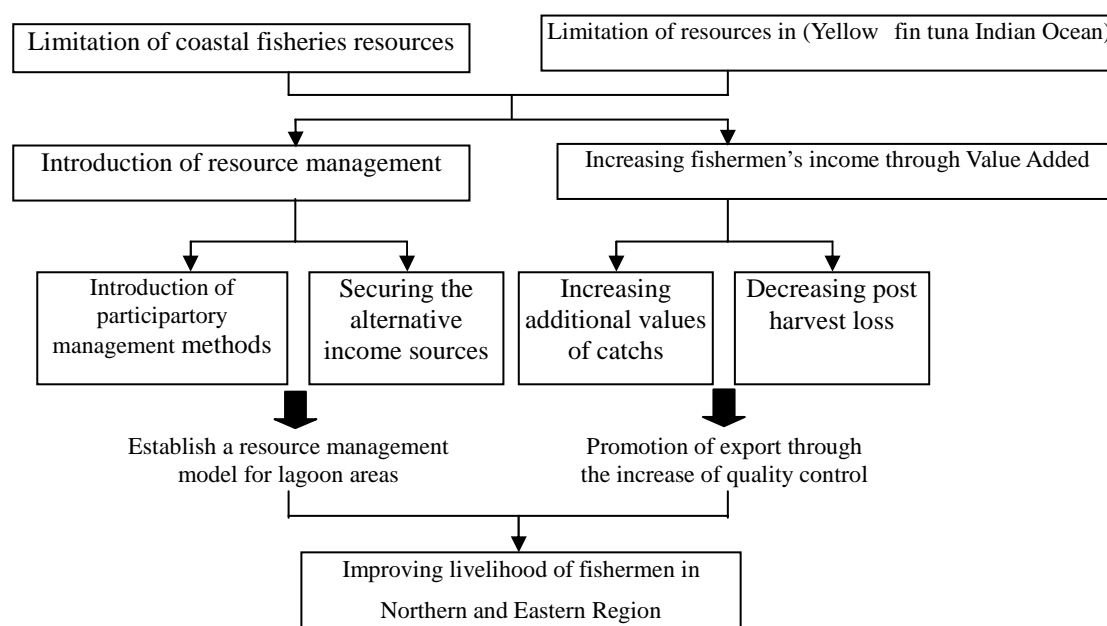


Figure ES.5 Concept of the Fisheries Redevelopment Plan

6.4 In line with the strategies formulated, priority projects for redeveloping fisheries sector in Northern and Eastern Region are formulated to utilize limited financial and human resources effectively, as mentioned below.

Table ES.2 Priority Projects and Strategies

Priority Projects	Strategies	Project Area
1. Redevelopment of Tsunami affected fisheries facilities	Support technical capacity building Support monitoring and evaluation of tsunami assistance	Batticaloa Ampara
2. Strengthening of fish market		
2-1 Improvement of quality control for Off-shore and Deep Sea Fisheries	Expand export opportunities	Trincomalee
2-2 Improvement of Fish Marketing System	Expand domestic market	Jaffna Kilinochchi
3. Promoting Sustainable Fisheries Community Development through Resources Management	Promote export-oriented aquaculture Sustainable use of fishers resources Enhance alternative economic opportunities and quality of life for small scale fishers Strengthen financing opportunities Establish models for natural resource management	Batticaloa
4. Improve Institutional Support Services	Support monitoring and evaluation of tsunami assistance Ensure fishers have equal opportunity to share in the Tsunami-aid Improve capacity for technology extension Promote accurate data / information collection and compilation	Jaffna Kilinochchi Mulativu Trincomalee Batticaloa Ampara

Source: JICA Project Team

6.5 Priority projects are designed to be applied to the areas where high impacts are expected in due consideration of the development strategy and area strategy. Although “Improvement of quality control for Off-shore and Deep Sea Fisheries Project” and “Improvement of Marketing System Project” are designed based on the same strategies, they have different components due to the varying potential in the target areas.

7. OVERALL EVALUATION AND RECOMMENDATIONS

7.1 As an overall evaluation, urgent works of the rehabilitation have been successfully implemented in spite of the delay of the completion, and long term development plans were well prepared through the participation of stakeholders and community people. Through implementation of this Project, it is shown that understanding of the stage of reconstruction (urgent relief, rehabilitation, reconstruction), and timely response to the changing demands are the most important aspect for successful rehabilitation/reconstruction.

7.2 Verification on effectiveness of the hypothesis is made as summarized below.

- (1) Community empowerment was facilitated through CBOs participation in the implementation of JSFV from the stage of planning and design to construction. Implementation of a livelihood program through the pilot projects also empowered the community as well as preparation of KTRP applying the community participatory approach. It is verified that co-assistance has been enhanced through this community empowerment and worked effectively for early realization of rehabilitation and reconstruction.
- (2) Experience of JSFV proved that necessity of infrastructure and community facilities in addition to permanent housing is quite high and effective for early realization of community life, and eventually for materialization of rehabilitation. Community activity will be more activated using these facilities which would also facilitate the recovery to the normal life.
- (3) Though reactivation of local industry is implemented in small scale using the pilot project, multiple approaches have been applied in this project. It is verified that multiple approaches including rehabilitation of permanent housing, infrastructure and local industrial activity produce synergy effects among them and is effective for early rehabilitation and reconstruction.

7.3 As presented in the preceding chapters, it is concluded that this Project comprising implementation of urgent works supported by CBO formation and its capacity building, and formation of long term redevelopment plans has been carried out successfully for the rehabilitation and redevelopment of the affected Northern and Eastern Region. Importance of co-assistance through community empowerment for the rehabilitation/reconstruction is proved in this Project. The formulated two redevelopment plans, KTRP and FRDP indicate future direction of the development and proposed priority projects for early realization of the reconstruction. From the above, it is concluded that the results of this Project are to be used as a model for rehabilitation and reconstruction after gigantic disasters like the tsunami.

7.4 For successful implementation of rehabilitation and reconstruction in the poverty area

like Northern and Eastern Region, the following recommendations are made on the basis of the experience of JSFV development and KTRP.

- (1) Necessity of supporting livelihood of the victims in parallel with rehabilitation of housing

High demand for recovery and improvement of livelihood was identified in the initial profile survey, for that various pilot projects for livelihood improvement were implemented. As proved during implementation of the Project, support of the livelihood of the victims is the most important for the recovery and rehabilitation from the disaster damage, particularly in areas of poverty.

- (2) Necessity to take “harmony” within victims and with adjacent areas fully into account

Various activities have been carried out in order to maintain harmony among different ethnic groups in this Project, such as cooperation of Tamil and Muslim in JSFV and collaboration for planning of KTRP. To keep harmony with adjacent poverty areas is also important and has been proved to be quite effective particularly in solving land problems for JSFV. Development benefit on the livelihood improvement is also to be extended to the adjacent areas as well as installation of infrastructure. Keeping this kind of harmony is considered one of the most important factors for the successful implementation of the rehabilitation and reconstruction works.

- (3) Necessity to support and strengthen institution and organizations

Local government system and CBO are relatively well established in Sri Lanka. However, the local budget is small and the capacity is quite limited in the poverty area. As implemented in the Project, strengthening of CBO is much needed; CBO for resettlement is to be formulated and then, registered, necessary training on CBO to be implemented including preparation of O&M after resettlement. Capacity development of local government is also necessary for positive participation to planning and implementation of rehabilitation, coordination with the central government agencies, and support for CBO.

7.5 Construction of JSFVs was completed by August 2007 and all beneficiaries except for the Tamil families evacuated to India and other parts of Sri Lanka resettled in JSFVs. Preparation of the resettlement of the beneficiaries including training of OM for infrastructure and common facilities was carried out.

- (1) To strengthen CBO for resettlement

For the preparation of the resettlement, further training of the CBOs including training of OM for infrastructures (particularly for water supply) and community facilities was

implemented by the appropriate authorities assisted by NGOs. It is recommended that JICA will follow up its technical support to make the project sustainable and to improve the livelihood of the beneficiaries.

(2) To coordinate with T-CUP and TRINCAP

In parallel with this Project, other JICA technical assistance projects called T-CUP and TRINCAP started in 2006. T-CUP is designed to support the livelihood of poor villages around JSFVs as well as monitor and follow up the operation and management of JSFVs after settlement, while TRINCAP supports farmers around Iqbal Nagar. It is recommended that the coordination with these JICA technical assistance projects, especially with T-CUP is to be strengthened for the sustainable operation of the JSFV. Since the target population of T-CUP includes the beneficiaries of the two JSFVs, close follow-up supports of the operation and management of JSFVs and effective monitoring using the PNA results are highly expected.

7.6 For the early realization of the proposed priority project, particularly for the Kalmunai Township Redevelopment Plan, it is recommended that the government give them higher priority and make requests to international fund sources including JBIC or Japanese grant. Early materialization of the priority projects could facilitate community participation for the redevelopment of the township.

7.7 The pilot project to activate the local cottage industry through utilization of local resources conducted in Kalmunai verified the viability and effectiveness of such scheme. Lessons of the pilot project can be replicated to activate the cottage industry in the Tsunami damaged area and undeveloped poor area throughout the island. JICA technical program is one of the aid resources for this replication.

**RECOVERY, REHABILITATION AND DEVELOPEMENT
PROJECT FOR TSUNAMI AFFECTED AREA OF
NORTHERN AND EASTERN REGION
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA**

Final Report

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Acronyms and Abbreviations

ACCD	Assistant Commissioner Cooperative Development
ADB	Asian Development Bank
CBO	Community Based Organization
CCD	Department of Coast Conservation
Cey-Nor Foundation	Ceylon-Norway Foundation Limited
CDO	Cooperative Development Officer
CEA	Central Environmental Authority
CEB	Ceylon Electricity Board
CECB	Central Engineering Consultancy Bureau
CFC	Ceylon Fisheries Corporation
CFHC	Ceylon Fishery Harbors Corporation
CNO	Centre for National Operations
CZMP	Coastal Zone Management Plan
DANIDA	Danish International Development Agency
DAD	Development Assistance Database
DCKTR	District Committee for Kalmunai Township Development
DFAR	Department of Fisheries & Squatic Resources
DFEO	District Fishery Extension Office
DMC	Disaster Management Centre
DPDHS	Deputy Provincial Director of Health Services
DS	District Secretary
ECTAD	Eastern Coastal Towns of Ampara District
DEEC	District Environmental Enforcement Committee
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
FCR	Fisheries Cooperative Society
FCR	French Red Cross
FO	Farmer Organization
FCS	Fisheries Cooperative Society
FI	Fisheries Inspector
FINIDA	Finish International Development Agency
FRDP	Fisheries Redevelopment Plan
FRP	Fiber Reinforced Plastic
F/S	Feasibility Study
GA	Government Agent
GDP	Gross Domestic Project
GN	<i>Grama Niladhari</i> (Village Officer)
GOJ	Government of Japan
GOSL	Government of Sri Lanka
IBE	In Board Engine
ICRC	International Committee of the Red Cross
IDP	Internally Displaced People
INFID	Integrated Fisheries Development Project
INGO	International Non-Governmental Organizations
IOTC	Indian Ocean Tuna Committee
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JICS	Japan International Cooperation System
JPT	JICA Project Team
JSFV	Japan Sri Lanka Friendship Village
KMC	Kalmunai Municipality Council
KTRP	Kalmunai Township Redevelopment Plan
INFID	Integrated Fisheries Development Project
INGO	International Non-Governmental Organizations
LTTE	Liberation Tigers of Tamil Eelam

MFAR	Ministry of Fisheries and Aquatic Resources
MOE	Ministry of Education
MOHC	Ministry of Housing and Construction
MOU	Minutes of Understanding
MP	Member of Parliament
MPPA	Marine Pollution Prevention Authority
MSY	Maximum Sustainable Yield
M3R	Ministry of Relief, Rehabilitation and Reconciliation
NAQDA	National Aquaculture Development Authority
NARA	National Aquatic Resources Research and Development Agency
NCKTR	National Committee for Kalmunai Township Redevelopment
NECCDEP	North East Coastal Community Development Project (ADB)
NEP	Northern and Eastern Province
NER	Northern and Eastern Region
NFPO	National Forum of People's Organization
NGO	Non-governmental Organization
NHDA	National Housing Development Authority
NIFNE	National Institute of Fisheries and Nautical Engineering
NSTF	Nigh Soil Treatment Facility
NWSDB	National Water Supply and Drainage Board
OBE	Out Board Engine
OBM	Out Board Motor Boats
OJT	On-the-Job Training
O/M, O&M	Operation and Maintenance
PMU	Project Management Units
PNA	Peacebuilding Needs and Impact Assessment
PS	<i>Pradeshya Sabha</i> (Local Public Services Office)
PQ	Prequalification
PQLI	Physical Quality Life Index
QC	Quality Control
RADA	Reconstruction and Development Agency
RDS	Rural Development Society
R/V	Research Vessel
RFTC	Regional Fishery Training Centre
SAS	Senior Assistant Secretary
STAART	Sri Lanka Tsunami Affected Area Recovery and Takeoff Project (JBIC)
T-CUP	Tsunami and Conflict Affected Communities Upliftment Project
TAC	Total Allowable Catch
TAFLOL	Task Force for Logistics, Law and Order
TAFREN	Task Force for Rebuilding the Nation
TAFRER	Task Force for Rescue and Relief
THRU	Tsunami Housing Reconstruction Unit
TMG	Tokyo Metropolitan Government
TRINCAP	Technical Cooperation Project for Agriculture and Rural Development for Rehabilitation and Reconstruction through Community Approach
UNDP	United Nations Development Programme
UDA	Urban Development Authority
WB	World Bank

PART I

PROJECT BACKGROUND AND IMPLEMENTATION OF URGENT WORKS

PART I PROJECT BACKGROUND AND IMPLEMENTATION OF URGENT WORKS

CHAPTER 1 INTRODUCTION

1.1 Project Background

The tsunami tidal waves caused by the gigantic earthquake near Sumatra on December 26, 2004 devastated the coastal areas of Sri Lanka. The northern and eastern coastal belts of the island were severely affected with more than 14,000 lives lost, 600,000 people affected and more than 52,000 houses totally destroyed.

The Government of Japan provided immediate emergency medical relief aid to the affected areas as well as a cash grant aid to the Government of Sri Lanka (GOSL) at the very outset of the relief phase. Further, for the rehabilitation and reconstruction work, the Government of Japan dispatched an initial assessment mission in January 2005 to assess the situation in the affected areas and to identify the needs for relief and rehabilitation. The second mission (the Aid Preparatory Mission) headed by Mr. Masami Fuwa arrived on the island in March 2005 to discuss technical cooperation in detail with the GOSL and formulate the Recovery, Rehabilitation and Development Project for the Tsunami Affected Areas of Northern and Eastern Region (hereafter referred to as “the Project” in this report).

The Mission had a series of discussions with the Ministry of Relief, Rehabilitation and Reconciliation (M3R) and other agencies and organizations related to the Project. Based on these discussions, the GOSL and the Mission agreed on the scope of work for the Project as summarized in the “Scope of Work” and “Minutes of Meeting”.

Following the formulation of the project by the Aid Preparatory Mission, a consulting team (referred to as “the JICA Project Team” in this report) consisting of experts from KRI International Corp., Nippon Koei Co. Ltd and System Science Consultants Inc. arrived on March 13, 2005 to plan and implement the project. As agreed in the Scope of Work, a field investigation was initiated to assess the current situation in the tsunami

affected area.

Activities conducted during the period of March-September 2005 were compiled into Progress Report (1), while those implemented up to December 2005 were summarized into Progress Report (2). In succession, the Interim Report was prepared incorporating the results of the previous survey/analysis and progress of the project implementation up to early March 2006 together with the preliminary evaluation. Results of the project implemented through February 2007 including technical assistance for the construction works were compiled in the Draft Final Report 1. The Draft Final Report 2 compiled all the results of the project implementation. Ultimately, this Final Report was prepared incorporating all the comments from the related stakeholders.

1.2 Objectives and Scope of Work

Overall objectives of the Project stipulated in the Scope of Work on Recovery, Rehabilitation and Development Project for Tsunami Affected Area of Northern and Eastern Region in the Democratic Socialist Republic of Sri Lanka are:

1. To formulate a plan of recovery, rehabilitation and development for the tsunami affected area in the Northern and Eastern Region;
2. To assist and monitor the implementation of recovery and rehabilitation projects to be funded by the Japanese Non-project Grant Aid; and
3. To share the Japanese experience in disaster management through the implementation of the Project.

The study area in the project includes the tsunami affected districts in the Northern and Eastern Regions, namely Ampara, Batticaloa, Trincomalee, Mullaitivu, Kilinochchi, and Jaffna. The project implementation areas are in three districts, Ampara, Batticaloa and Trincomalee districts.

In order to attain the above objectives, the following project components were planned and implemented to determine the relevancy of the proposed approach. A model of rehabilitation and reconstruction of victims' lives and a model of urban reconstruction and fishery sector were also planned to be established for the future development of the whole Northern and Eastern Region.

- 1) Reconstruction of urgent facilities for tsunami victims
 - 1)-1 Japan Sri Lanka Friendship Villages (JSFV) in Trincomalee and Ampara

- 1)-2 Night soil treatment facilities in Batticaloa and Hambantota
- 2) Preparation of long term redevelopment plans
 - 2)-1 Kalmunai Township redevelopment plan
 - 2)-2 Fishery redevelopment plan in the Northern and Eastern Region

Since the fisheries industry was the sector hardest hit by the tsunami and most of the people affected by the tsunami engaged in fisheries or fisheries related businesses, redevelopment of the fisheries sector is also a key issue for rehabilitation and development of the Northern and Eastern Region.

Prior to the planning and implementation of the Project, experiences of the disasters in Japan have been reviewed and the following lessons have been gained.

1. In addition to the physical rehabilitation such as infrastructure and housing, restoration of the livelihood of the victims is to be emphasized in the rehabilitation planning.
2. Participation of beneficiaries from the planning stage to the implementation is indispensable through community empowerment activities.

For the verification of the working hypothesis set based on the Japanese experience, community empowerment through implementation of the pilot projects has been introduced. Lessons learned through evaluation of these pilot projects were planned to be incorporated into models of rehabilitation and redevelopment, which may eventually contribute to the reconstruction and development of Northern and Eastern Region.

1.3 Project Organization and Schedule

1.3.1 Project Organization

The Project Team is composed of experts in 29 fields of expertise from KRI International Cooperation, Nippon Koei Co. Ltd and System Science Consultants Inc. The Sri Lankan counterpart of the Project consists of four related ministries represented by the Ministry of Relief, Rehabilitation and Reconstruction (reorganized as the Ministry of Nation Building and Development) as provided in Figure 1.3.1. The Project Team worked closely in partnership with these ministries as well as GA, DS and municipalities in the Northern and Eastern Region. A list of the persons related to this Project is presented in Appendix 1.

1.3.2 Project Schedule

The schedule of the project implementation up to the preparation of this Draft Final Report is as presented below.

- 1) Commencement of the Project: March 2005
- 2) Field investigation and preparation for implementation: March-August 2005
- 3) Preparation of Progress Report(1): September 2005
- 4) Continuous study and analysis: September 2005-March 2006
- 5) Preparation of Interim Report: March 2006
- 6) Continuous implementation of the Project: April 2006-February 2007
- 7) Preparation of Draft Final Report 1: February 2007
- 8) Preparation of Draft Final Report 2: October 2007

Compiling the results of the whole studies and analysis, the Final Report was prepared in January 2008.

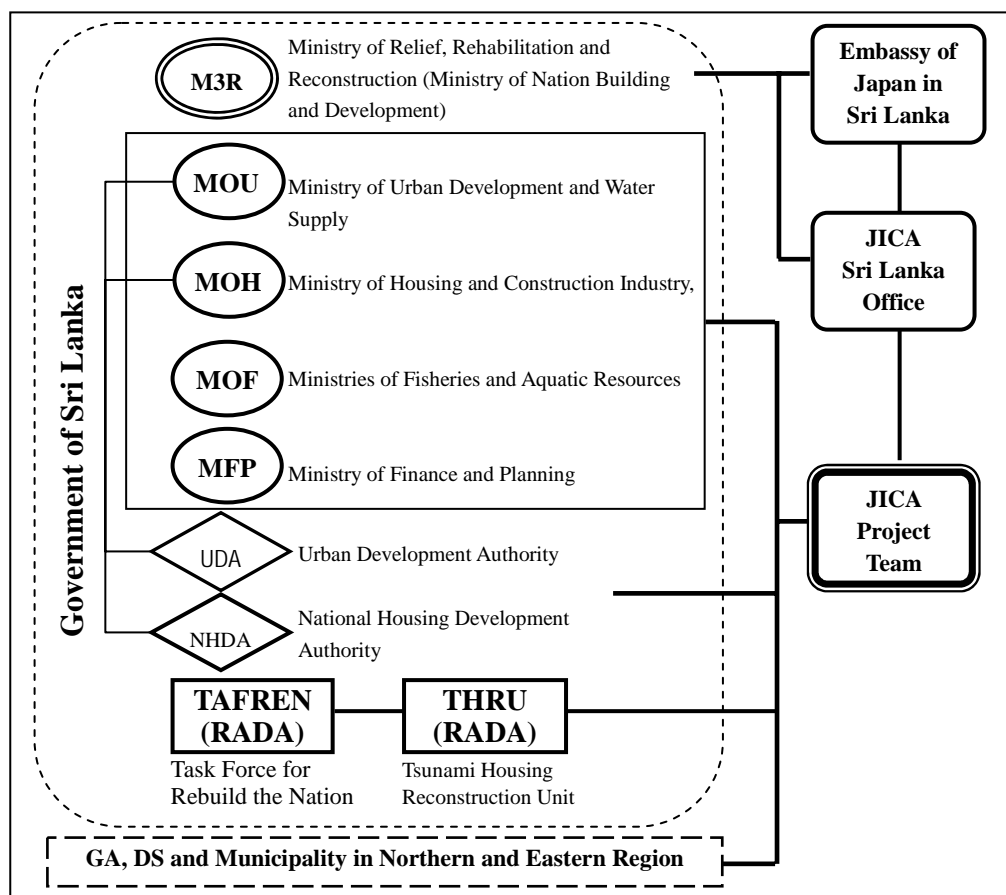


Figure1.3.1. The Organization of the Project

1.4 Report Structure

This report consists of two parts, namely, Part I for Project Background and Implementation of Urgent Works, and Part II for Plans for Redevelopment.

Part I covers five chapters. Background and objectives of the Project are briefly explained in Chapter 1, while needs and project approach are presented in Chapter 2. In this chapter, similar experiences in Japan were taken up and are planned to be introduced in the reconstruction and development of the affected areas. Chapter 3 presents the details of the urgent works, Japan Sri Lanka Friendship Village(JSFV) and Night Soil Treatment Facilities which were implemented during 2005-2007. Details of the CBO formation and implementation of the pilot project are introduced as well as their outputs. In Chapter 5, evaluation of the implemented urgent works and the pilot project was made through which various lessons were extracted.

Part II includes three chapters. In Chapter 6, the Kalmunai Township Redevelopment Plan is prepared that was formulated through the participation of stakeholders including community people. Priority programmes were selected among the various proposed projects and preliminary design for the selected priority project was prepared for early implementation of the redevelopment. Chapter 6 presents Fisheries Redevelopment Plan for Northern and Eastern Region including formulated priority projects. In Chapter 8, guidelines for rehabilitation/reconstruction and recommendations are presented by evaluating the overall process of the project implementation, and analyzing validation of planning hypothesis.

CHAPTER 2 APPROACH TO THE PROJECT

2.1 Needs in the Affected Areas

2.1.1 Needs Assessment

Based on the field investigation on the damages by the tsunami conducted from March to May 2005, preliminary evaluation on rehabilitation needs was made as summarized in Table 2.1.1.

Table 2.1.1 Preliminary Evaluation on Rehabilitation Needs

Item	Needs Assessment Result
Temporary Houses	Most of the tsunami affected people moved to transit camp. Temporary houses are planned to be constructed by international donors and NGOs for those who lost their own.
Living Environment of Temporary Houses	Living environment is sufficiently maintained though still facing shortage of water supply tank. Damages of temporary toilets and garbage collection are also arising problems
Permanent Houses	<u>Very high demand</u> exists. Total of 25,655 houses in the four provinces are required. Construction of the permanent houses is planned under the cooperation of international donors and NGOs, but, still waiting for their commitment.
Debris Clearance	Clearance works commenced under the scheme of Work for Money, while part of debris is used for local road reconstruction.
Night Soil Treatment	After introduction of gully sucker through Japanese non-project grant and other international donors, <u>construction of the treatment facilities became an important subject</u> in the tsunami affected areas.
Infrastructure	Urgent necessities are almost fulfilled and they are being followed by the activities of international donors such as JBIC-STAART and ADB-CAARP, NECORD.
<ul style="list-style-type: none"> • Water Supply 	Wells located near the coast were severely damaged as well as houses, where the water tank is introduced for the water supply. Rehabilitation of pipe water supply facilities is being implemented.
<ul style="list-style-type: none"> • Power Supply 	Urgent rehabilitation was conducted by NGOs and that is to be followed by international donors.
<ul style="list-style-type: none"> • National/Local Road 	Rehabilitation works are planned to be implemented by international donors. JBIC provides technical assistance for A4 road and fund for local roads.
<ul style="list-style-type: none"> • School and Health Facilities 	Education has restarted using the existing schools (two class system) and community facilities. Reconstruction of the damaged schools is committed by international donors. Major health facilities are also planned to be rehabilitated or reconstructed by international donors.
Livelihood of Victims	
<ul style="list-style-type: none"> • Damages on Fisheries 	The fact that most fishermen along the coast lost fishing boats and fishing gears seriously affected their livelihood. Although fishing boats and equipment are being provided by international donors and NGOs, <u>recovery of their livelihood through active participation of the community is highly required.</u>
<ul style="list-style-type: none"> • Damages of Farmers 	Farmers are also affected, particularly in Trincomalee where farm lands for onions and other crops are damaged by salinity. <u>Demand for livelihood improvement</u> by introducing additional inputs and equipment is high.

Source: JICA Project Team

From the results of the preliminary evaluation, this project focus the following plans as the urgent implementation for the rehabilitation and reconstruction of the Tsunami affected areas in the Northern and Eastern Region.

(1) Planning and Construction of Permanent Houses as a Model

Preparation of temporary facilities is well committed mainly by the NGOs and the living environment is being barely maintained in the current situation though partly facing shortages of basic human needs. Besides, the demand for the permanent houses is very high in number while implementation of the construction takes time even if the commitments of the international donors are secured.

Considering the fact that construction of permanent houses will provide solutions against various problems confronting the affected people, early implementation of the permanent houses is to be carried out from the early stage of the rehabilitation/reconstruction stage. Furthermore, the implementation process including land acquisition, environmental clearance, housing design and construction through community participation to be applied to this project can be a model for future implementation.

(2) Plan and Construction of Night Soil Treatment Facilities

Gully suckers have been introduced for collecting waste from the temporary facilities under the assistance schemes of Japanese grant and other donors. To solve the expected environmental problems caused by the discharge of the night soil to the sea, installation of the treatment facilities is urgently required for which local demand is very high (Around 10 facilities are required to be installed in the Northern and Eastern Region). Responding to the government request and local demand, planning, design and construction of the facilities are taken up in this project as a model plan for the installation.

(3) Livelihood Improvement for the Affected People

In the evaluation of the needs in the Northern and Eastern Region, importance of livelihood improvement of the victims is identified as parallel to the rehabilitation of the infrastructure. Regaining employment opportunity is the top priority of the residents in the temporary facilities. This necessity has been confirmed by the experience and lessons in Japan that is explained in more detail later. Fishermen who lived close to the sea and lost fishing boats, facilities and equipments were mostly affected by the tsunami. Farmers are also affected by the sea water intrusion. In this situation, needs for training and retraining of the affected people in order to enhance

their employment opportunity is quite high, and thus need to be tackled. Empowerment of women in the affected areas is also to be taken up for the livelihood improvement.

(4) Redevelopment Plans

Parallel to the implementation of the urgent works, needs for preparation of long term plans for township redevelopment and important sector were identified through the initial investigation. For the township redevelopment, Kalmunai township was chosen since the area was seriously damaged area by the tsunami and having the complex problems including ethnic mixture for rehabilitation and redevelopment. A redevelopment plan was also formulated for the fisheries sector in the northern and eastern region since this sector is one of the most seriously affected in which rehabilitation and redevelopment is the key for successful implementation of the overall development of the region.

2.1.2 Regional Characteristics

For planning and implementation of the Project, the following characteristics of the Northern and Eastern Region are fully taken into account.

(1) Poor Infrastructure and Adverse Socio-economic Situation

Due to the conflict prevailing for almost two decades, various infrastructures have been extensively damaged. Inevitably, that has seriously affected the economic activities in the region. As indicated in the following table, mean household income per month in Northern Province is estimated to be 64 percent of national average and in Eastern Province it is estimated to be 60 percent. These figures indicate the deteriorated economic situation of the region in comparison with other provinces in Sri Lanka.

Table 2.1.2 Mean Household Income per Month by Province

Province	Mean Household Income (Rs.)
Western	17,732
Southern	11,229
Central	11,175
North western	10,918
Uva	10,338
North central	9,926
Sabaragamuwa	8,439
Northern	8,155
Eastern	7,640
Sri Lanka	12,803

Source: Household Income and Expenditure Survey 2002, Results of the Household Income and Expenditure Survey 2002/03, Department of Census and Statistics

As for the social development situation, various human development indicators (Physical Quality Life Index, PQLI) shown in Table 2.1.3 reflects that the quality of life is far below the national average in many aspects in the Eastern Province, which indicates the deteriorated situation of the region.

Table 2.1.3 Human Development Indicators in the Eastern Province

PQLI	Batticaloa	Ampara	Trincomalee	National Average
Life expectancy at birth, years	62	64	68	70.7 Male, 75.4 Female
Literacy percentage	65	76.2	70	90.1
Crude birth rate, per 1000	25.7	20.16	32.2	19.1
Crude death rate, per 1000	3.43	8.85	9.55	5.8
Infant mortality rate, per 1000 live births	21.5	7.01	19.03	11

Source: Eastern Province Physical Plan Situation Analysis Vol. II

The damages caused by the tsunami aggravated the socio-economic situation of the region even further. Taking the situation into consideration, the goal of the recovery shall be set to surpass the pre-tsunami level, instead of recovering as before, in formulating the reconstruction/redevelopment plan.

(2) Ethnic Distribution

Coexistence of different ethnic groups such as Sinhalese, Tamil and Muslim is another characteristic of the region.

For the resettlement or township planning, it is vital to take this characteristic fully into account. The Japan Sri Lanka Friendship Villages (JSFV), which are to be constructed in this Project, have in fact required attentive consideration from the stage of land acquisition, layout planning, and allocation of houses to the stage of operation and maintenance. In Kalmunai, particularly, all different ethnic groups live in close proximity in the form of mosaic with chronic tension existing among them. Therefore, preparation of redevelopment plan in the area requires every possible consideration in this regard. Table 2.1.4 shows the ethnic composition in the Eastern Province in 2001.

Table 2.1.4 Ethnic Composition in the Eastern Province- 2001

Ethnic Groups	Ampara		Batticaloa		Trincomalee	
	No.	%	No.	%	No.	%
Sinhalese	231595	39.3	4323	0.8	145578	38.8
Tamil	110788	18.8	336669	62.3	40522	10.8
Muslims	245149	41.6	195084	36.1	187225	49.9
Others	1768	0.3	4323	0.8	1126	0.3

Source: District Profiles 2002 & Social Profile- NEIAP

(3) Peace and Order Situation

In the Northern and Eastern Region, some areas are still under the control of LTTE and friction between Muslim and Tamil have made the peace and order situation unstable. Particularly along the eastern coastal area, curfews called Hartal are issued very often, and as a result, progress of the implementation of the Project is seriously affected.

Besides the friction between ethnic groups, issues concerning people displaced by the conflict, or Internally Displaced People (IDP) had already made the socio-economic situation of the region very difficult. The new group of IDP left by the tsunami could create further risks by causing friction between IDP and other residents, and between two groups of IDPs.

For the formulation of redevelopment plans and their implementation schedule, it is necessary to pay careful attention to special situations.

2.2 Experience of Japan

2.2.1 Necessity of Community Empowerment

Major lessons learned from the reconstruction process in Japan, particularly through the Kobe earthquake, are:

- 1) The most important and indispensable aspect for the reconstruction is that the victims should initiate reconstruction activities by themselves (Self-reliance)
- 2) Community plays main roles in tackling issues that cannot be resolved by the affected people (Co-assistance)
- 3) Government should assist people and community activities (Administration support)

Combined efforts of the above three are indispensable and prerequisite for the successful implementation of recovery efforts after natural disasters like tsunami.

After the emergency relief period, it is necessary to start reconstruction activities. The first step of the reconstruction is to empower the community that is to be a body of co-assistance among people. Then, a community reconstruction committee is set up. That is a Community Based Organization (CBO) which intends to plan, implement and monitor the process of the reconstruction. The committee should represent the affected people who voluntarily join the committee.

The community reconstruction committee should try to solve the issues that the community faces in such a way as preparing reconstruction plans reflecting the needs

of the community, preparing rules and regulations on building design and environmental preservation and making agreements between the community and the government.

To strengthen the co-assistance in the course of rehabilitation and reconstruction, the necessity of community empowerment is not over-exaggerated.

2.2.2 Application of Transitional Township Concept

The notion of Temporary and Transitional Township was created after the experience of big earthquake in Kobe, which is applicable to the reconstruction activities suffered from similar natural disasters.

During the reconstruction period of the big earthquake in Japan, the local government tried to set up temporary camps very far from the affected areas without installing necessary facilities such as those for commercial and social activities. People who were forced to move to the camps had to face difficulty in doing mutual cooperation due to the separation of their original communities. Affected people had to live in inconvenience without shops and public facilities.

Since it takes a long time to realize the final goal of reconstruction, the temporary and transitional township should accommodate the people's transitional lives as comfortably as possible. The lessons from the temporary and transitional township are as follows.

- (1) Temporary and transitional township should be constructed at the nearest place from the affected area. This enables the affected people to exchange information among the community.
- (2) The affected people should be involved in the reconstruction process by utilizing their capacities. This can lead to realize the community driven reconstruction where the affected people themselves implement the reconstruction works.
- (3) The temporary and transitional township should include not only housings, but also other facilities such as commercial, educational, community centre, space for children, etc.

The above lessons gained through the implementation of the temporary and transitional township concept are to be fully used and applied to the planning and design of the facilities for the resettlement population.

2.2.3 Stage-wise Restoration

Various plans have been prepared in order to mitigate damages of disasters to occur in

near future in Tokyo, and to restore the Metropolis from the expected disasters. In the manual for restoration prepared by the Tokyo Metropolitan Government (TMG) in 2004, multiple approaches are applied in implementing the rehabilitation and reconstruction works most efficiently, namely, urban restoration, residential restoration, restoration of daily life and industrial restoration.

(1) Urban restoration

TMG and its municipalities will conduct “General Assessment of Structural Damages” in order to evaluate the extent of damages and to establish a system for restoration then draw up “Basic Policy for Urban Restoration”, which set out the basic approach for restoration work. Sequentially they compile the “Basic Programme for Urban Restoration” or “Restoration Programme for Community Development” which set regulations for restricting disorderly construction and detailing specific plans for restoration.

(2) Residential restoration

TMG will assess the extent of residential damages, announce the procedure for residential restoration at its early stage, and then offer temporary housing, support for self-funded reconstruction and public housing. Together with the implementation of diverse residential projects, community development projects will also be implemented.

(3) Restoration of daily life

In an effort to restore the lives of Tokyo citizens to the pre-quake state, TMG will promote comprehensive measures on public health, medical care, welfare and culture. These promotions will be designed to facilitate the operations of volunteers and NPOs, so that the affected citizens can creatively build a living foundation/environment under the coordination of such civic groups.

(4) Industrial restoration

TMG will offer assistance to businesses that bolster the local economy for early resumption of their business operations, and implement measures for the industrial restoration from the mid- to long-term perspectives. In the process of the restoration work, comprehensive assistance will be provided, such as assisting to find temporary business premises, providing financial assistance for facility reconstruction, facilitating business inquiries, and stabilizing logistics flows.

In this manual, necessity of community empowerment is also emphasized for the smooth implementation of the restoration, which is planned to be carried out in accordance with the following steps.

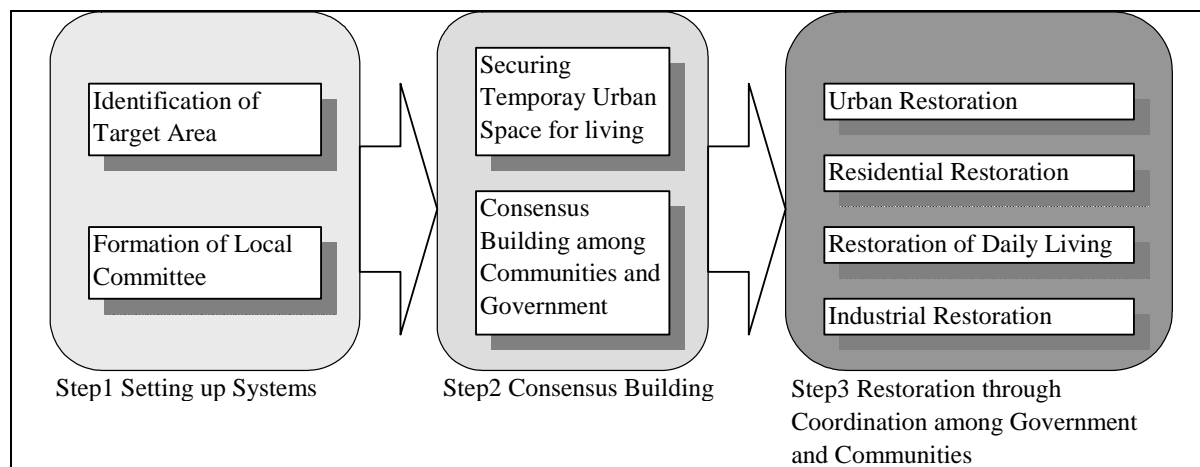


Figure 2.2.1 Stage-wise Restoration Work of TMG

2.3 Project Approach

2.3.1 Planning Strategies

On the basis of the needs analysis of the preceding sub-chapter (2.1) and in due consideration of the experience of Japan, the following planning strategies are applied to formulate this project:

(1) Positive Participation of CBO

As explained in the experience in Japan, combined efforts of self-reliance, community empowerment and administration support are indispensable for the successful implementation of the recovery and redevelopment. In the planning of this Project, the importance of community participation and community empowerment is strongly emphasized. Community Based Organizations(CBO) are planned to be established in each JSFV that will be involved in the project from the stage of planning, design and construction, and up to the stage of operation and maintenance of the project. In the planning of the Kalmunai Township Redevelopment, three layers of the committees are formulated, namely, national committee, district committee and project committee. A bottom up approach is taken for the long term planning, particularly at the level of district and project where various workshops and discussion meetings are held inviting all the stakeholders in Ampara district and Kalmunai municipality.

(2) Emphasis of Livelihood Improvement and Local Industry

For the recovery of the life of the affected people, regaining income opportunity is also very important in addition to the rehabilitation of the housing and the related infrastructure. Livelihood improvement is emphasized in the JSFV where various job training and income generating activities are conducted as pilot project. In the long term redevelopment plan, activation of local industry such as promotion of local goods

and fishery products is taken up as one of the priority project targeted at year 2010.

(3) Special Consideration of the Ethnicity

Mixed ethnicity is one of the special characteristics in the Northern and Eastern Region. Special consideration of this aspect is required even at the stage of land acquisition of the JSFV. JSFV is planned to accommodate both Tamil and Moslem for which careful preparation and arrangement are required through the formulated CBOs. Cooperation and integration of the different ethnicities is examined during the implementation of the JSFV. In particular, Kalmunai municipality is characterized by the existence of the mosaic of the Moslem and Tamil residence. For the planning of the Redevelopment of the Kalmunai, coexistence of the different ethnic groups is carefully taken into account.

(4) Establishment of Models for the Redevelopment of Affected People and Long Term Development

Through the implementation of the urgent works, particularly for JSFV, it is planned to establish a model for rehabilitation and reconstruction of the affected people. It is also intended to establish a model of long term reconstruction of the affected areas through preparation of the Kalmunai Township Redevelopment Plan and Fishery Redevelopment Plan in the Northern and Eastern Region. All the models prepared during this project are planned to be applicable to any other areas in Northern and Eastern Region for reconstruction and development.

2.3.2 Approach to the Project

Prior to the planning stage, a field investigation of the tsunami damage was conducted. Results of the investigation were analyzed in order to decide priority based on both urgent and long term schemes. Identified needs for an urgent scheme are construction of housing and urgent infrastructure (night soil treatment facilities) as well as livelihood improvement of the affected people, while those for the long term are long term redevelopment plans for Kalmunai Township and the fishery sector in the Northern and Eastern Region.

In the plan formulation and implementation of the project, lessons from similar experiences in Japan and special characteristics of the region are planned to be fully incorporated.

The overall approach to the project is summarized in Figure 2.3.1.

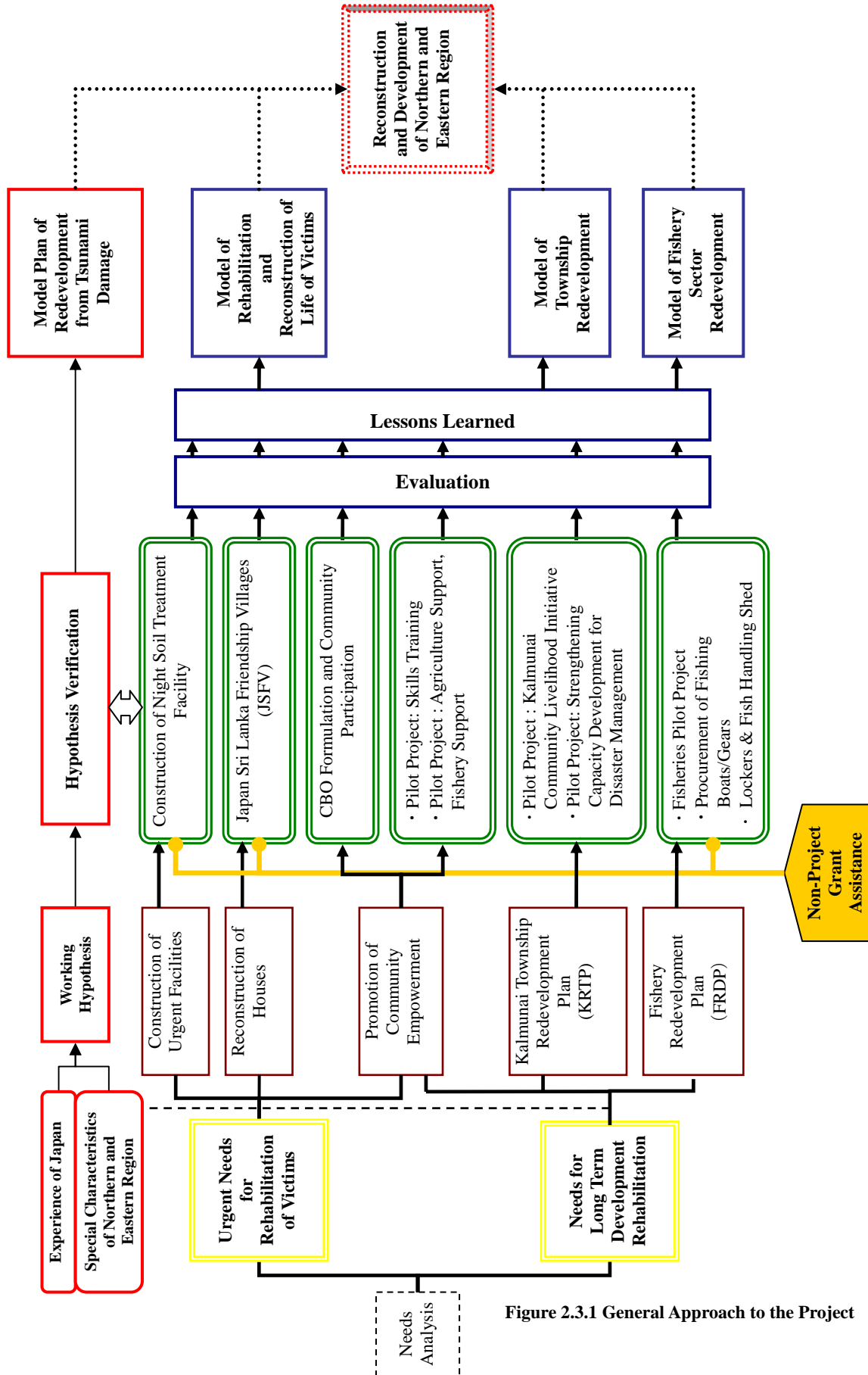


Figure 2.3.1 General Approach to the Project

CHAPTER 3 CONSTRUCTION OF FRIENDSHIP VILLAGES AND OTHER FACILITIES

3.1 Rationale for Implementation

From the needs analysis conducted through the investigation, priority of the construction of permanent houses (called Japan Sri Lanka Friendship Village: JSFV) and night soil treatment facilities were confirmed. Construction of the priority facilities are, therefore, planned to be implemented using the Japanese Non-project Grant and Programme under this project.

For the successful implementation of these facilities, particularly for JSFV, it is assumed that formulation of beneficiary group or Community Based Organization (CBO) and positive participation of the CBO during the stage of planning, design, construction up to operation and maintenance are indispensable. It is also assumed that not only houses for the victims, but also community facilities such as community centres, religious facilities, kindergarten, etc. are necessary to be installed to provide a sustainable living environment for the people to be resettled.

It is also planned to verify the effectiveness of the cooperation of the community people (Co-assistance) together with the government assistance during the reconstruction stage after the disaster like the tsunami in Sri Lanka and to establish a model for the reconstruction applying community participation.

3.2 Japan Sri Lanka Friendship Villages (JSFV)

3.2.1 Background

The success of the immediate relief phase after the tsunami was the result of the enormous efforts of the national agencies complemented by the aid coordination effort of various donor agencies.

Based on the initial assessment done by the JPT, several project components for reconstruction and rehabilitation in the study area have been identified. Construction of permanent houses for IDPs in the selected areas and implementation of the Community Empowerment pilot project to support JSFVs are taken up as the first priority project to be implemented for rehabilitation and reconstruction of the lives of the victims.

It is proposed that JSFV including permanent houses for the tsunami victims and common amenities as well as public facilities to be established at selected locations. These JSFVs are expected to be complemented by the community support programme concentrating on livelihood restoration for the tsunami victims. All related activities for JSFV would be facilitated by Community Based Organization (CBOs) to ensure a participatory approach in the implementation of these components as shown below.

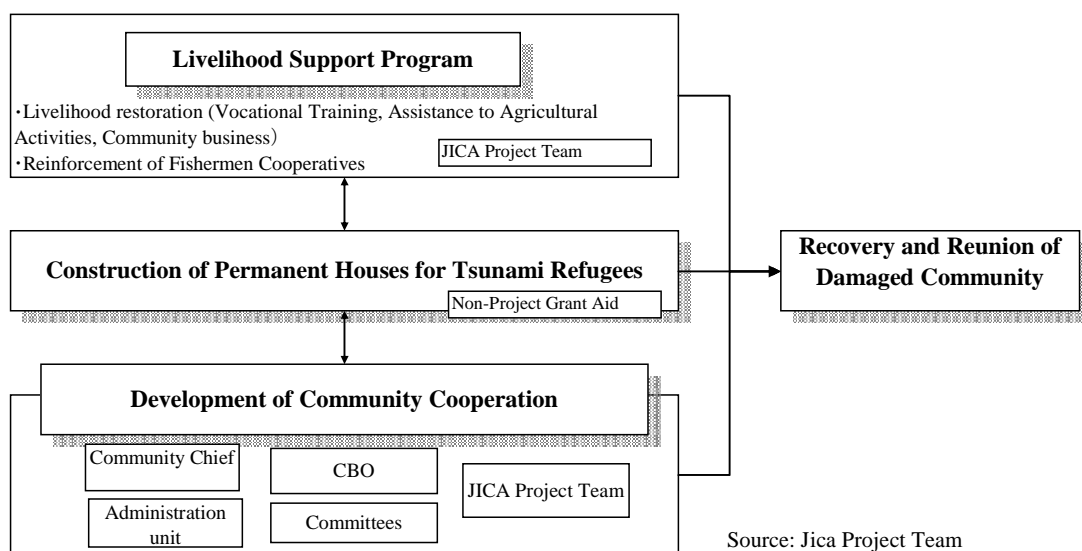
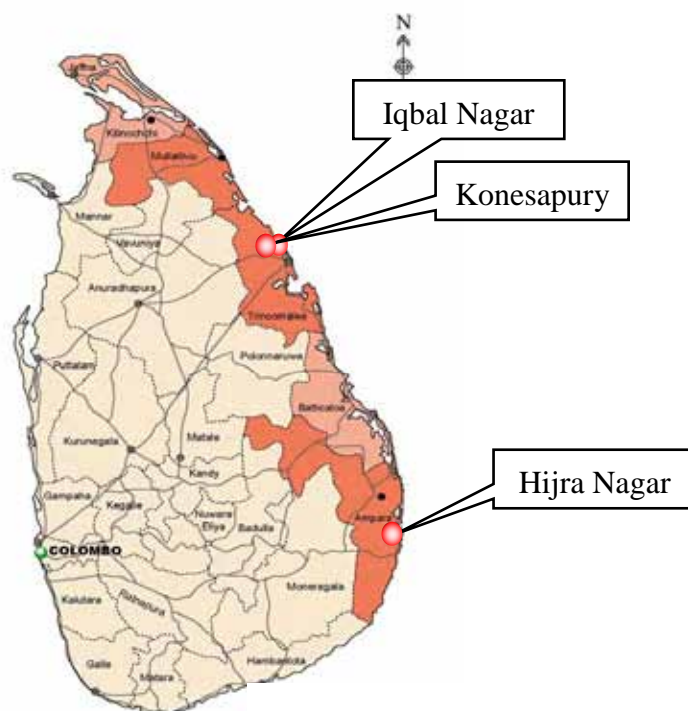


Figure 3.2.1 Comprehensive Approach of JSFV

3.2.2 Site Selection

Through a series of negotiations with GOSL official and site inspections, the JPT initially identified two sites - Alayadivembu in Ampara and Iqbal Nagar in Trincomalee. However, following the UDA site inspections, the agency suggested dropping the site of Alayadivembu in Amapara due to the high site preparation cost involved. Consequently, an alternative site at Hijra Nagar was selected as a JSFV site in Ampara. Various discussions and coordination were required for the final selection of the sites.

In addition to above two sites, MOHC requested assistance from the Japanese counterpart to the Konesapury site in Trincomalee in resettling the tsunami refugees from the town of Trincomalee. Since several NGOs had already committed to participating in the housing construction at Konesapury, only land preparation and construction of required infrastructures are determined to be implemented by JICA, while housing construction is to be done by the NGOs. The location of the above three sites for the JSFV are presented in the following figure.



Source: JICA Project Team

Figure 3.2.2 Japan Sri Lanka Friendship Village Sites

3.2.3 Environmental Clearance

The GOSL has environmental assessment procedures for physical development or construction works as the statutory provisions based on National Environmental Act No. 47 (of 1980 amended in 2000). There are two types of environmental assessments, i.e. Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA). Whether, one or both of these assessments are required or not depends on project characteristics. The steps as well as criteria are provided for such judgments.

However, while the housing development projects such as JSFV usually require both IEE and EIA, in light of urgency, the GOSL simplified the procedures and decided not to apply EIA to the tsunami recovery projects. Even IEE may not be required, if decided, so by the Central Environment Authority (CEA) under the Ministry of Environment. In the simplified procedure, the project owners are required to fill out the Basic Information Questionnaire (BIQ) and submit them to CEA. The BIQ consists of basic information about the project such as location, purpose, descriptions, land ownership, land characteristics in relation to environment, etc. CEA, after the examination of BIQ and site reconnaissance, announces its judgment on whether or not to proceed to IEE or not.

As a result, all three sites, namely Iqbal Nagar, Hijra Nagar and Konesapury, were not

required to go through IEE procedures and the CEA issued the Environmental Clearances in a relatively short period.

3.2.4 Development Concept and Design

(1) Beneficiary of JSFV

The number of beneficiaries was determined by the GOSL strictly on the basis of the regulations defined by TAFREN. The DS, which is the administrating organization for the JSFV sites, organized the selection of the beneficiaries. The number of beneficiaries planned is summarized below.

Table 3.2.1 Development Framework of JSFV

Site	Num. of beneficiaries	Site Area (acre)	Infrastructure and Facilities Included
Iqbal Nagar	Moslem 110 families Tamil 136 families Total 246 families	33	Housing, Infrastructure and common facilities will be constructed by Japanese grant aid
Hijra Nagar	Moslem 180 families Tamil 20 families Total 200 families	23	Housing, Infrastructure and common facilities will be constructed by Japanese grant aid
Konesapury	Tamil 343 families	58	Infrastructure and some common facilities will be constructed by Japanese grant aid. NGOs are responsible for houses construction.
Total	Moslem 290 families Tamil 499 families Total 789 families	114	-

Note: The numbers of family were finally reduced to 789 from original 875 due to the modification of the buffer zone policy by Sri Lankan Government and disappearance of beneficiaries during the construction period.

Source: JICA Project Team

The original residence and temporary houses of JSFV beneficiaries are summarized below and shown in Figure 3.2.3 and Figure 3.2.4.

Table 3.2.2 Original Residence and Temporary Camp of JSFV Beneficiaries

Site	Original residence before the tsunami	Temporary house camp
Beneficiaries of Iqbal Nagar	Veloor village in Kuchchaveli Ds Trincomalee District (1.5km from IN JSFV)	Three for Tamil and two for Moslem temporary house camps constructed by NGOs
Beneficiaries of Hijra Nagar	Moslem: Coastal area in Pottuvile Township Tamil: North beach of Pottuvile DS (5 km from HN JSFV)	6 temporary house camps constructed in Pottuvile Township
Beneficiaries of Konesapury	Coastal area in Trincomalee Township (7km from Trincomalee Township)	Temporary house camp constructed in Konesapury site premises and in Trincomalee Township

Source: JICA Project Team

The living environment of the beneficiaries in 2006 is presented in more detail in Appendix 3.

(2) Participation of CBO for Plan, Design and Construction

To promote the sense of ownership of the beneficiaries and sustainable operation and maintenance of the JSFV, participation of the CBO has been facilitated from the stages of planning, selecting house design, layout plan and up to construction. Details of the CBO participation are summarized in the following table.

Table 3.2.3 Participation of CBO in Planning/Design/Construction in JSFV Development

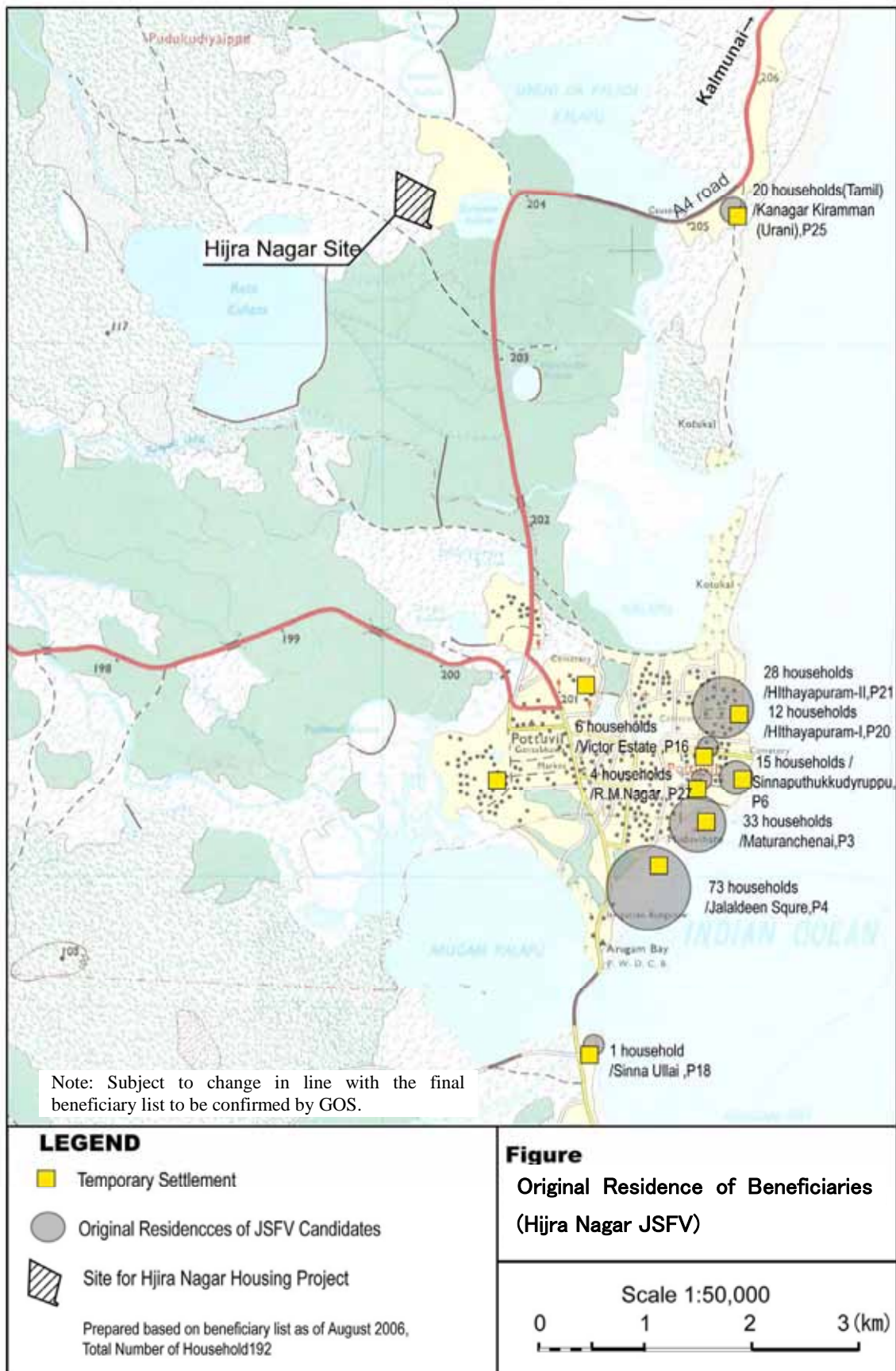
Item	Iqbal Nagar	Hijra Nagar	Konesapury
Layout plan making	Layout alternatives were shown for selection to CBO and finalized after several revisions were made in accordance with CBO's request.		Layout plan was proposed by JPT and consulted with relevant NGOs for the finalization.
Housing design	Three types of house models are proposed to beneficiaries. CBO disclosed the model to each family for preferential selection. Selection result is summarized below.		Each NGO designed in line with the TAFREN standard.
Common facility plan	Park, community centre and pre-school were proposed by JPT to CBO as common facilities in JSFV. Several facilities such as MPCS complex building with clinic, GN office, post office, shops, etc. were additionally requested by CBO and agreed upon by JPT.		Through the discussion with relevant NGOs, primary school was added. NGO committed construction of primary school.
Construction work	Block making and labor inputs are expected from beneficiaries on the basis of pay for work.	No participation is anticipated from beneficiaries	No participation is planned from beneficiaries.

Source: JICA Project Team



Source: JICA Project Team

Figure 3.2.3 Original Residence of Beneficiaries (Iqbal Nagar JSFV)



Source: JICA Project Team

Figure 3.2.4 Original Residence of Beneficiaries (Hijra Nagar JSFV)

(3) Design of JSFV and Layout Plan¹

Through various discussions with the related authorities such as NHDA, UDA and CBOs, infrastructure and facilities to be installed in the JSFV were determined as presented in Table 3.2.4.

Regarding the housing type for the JSFV, three models were formulated by the JPT under consultation with NHDA. Selection of appropriate housing type was made through hearing from the beneficiaries as summarized in Table 3.2.5 (Three models are presented in Figure 3.2.5)

Table 3.2.4 Infrastructure and Community Facilities to be Developed

Item		Iqbal Nagar	Hijra Nagar	Konesapury
House		10 perch (250m ²) land/ approximately 55m ² floor house		
Infrastructure		Road (access road, internal road), water supply (pipeline, water tower, well), electric supply (substation, electric line), drainage, bus stop Note: septic tank is designed in respective house and facility to treat night soil.		
Community Facility	Education facility	Preschool	Preschool	Primary school Preschool
	Medical facility	Clinic	Clinic	Clinic
	Administrative facility	Post office Local government office	Post office Local government office	Post office Local government office
	Others	Children park Centre park Community Centre Worship facility	Children park Centre park Shops Community Centre Worship facility	Children park, Centre park Shops Community Centre Worship facility
	Remarks	Worship facility will be constructed by community participation.		Primary school and worship facility will be constructed by NGOs.

Source: JICA Project Team

Table 3.2.5 Selected Housing Type in JSFV

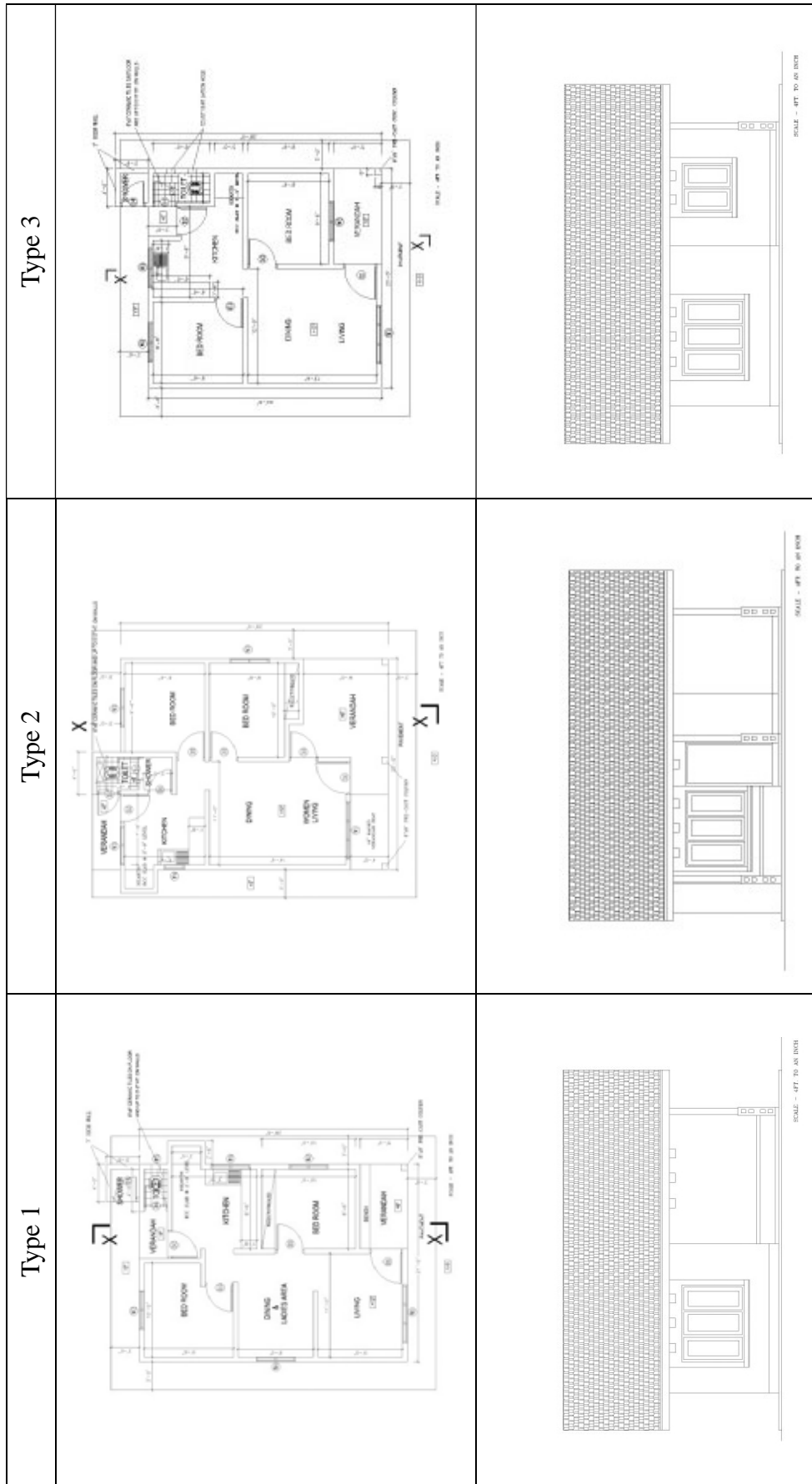
(unit: Houses)

		Type 1 (600SQF)	Type 2 (630SQF)	Type 3 (570SQF)	Total
Iqbal Nagar	Moslem	65	27	18	110
	Tamil	136	0	0	136
Hijra Nagar	Moslem	0	180	0	180
	Tamil		20		20

Note: every type has two bed rooms, kitchen, and dining room.

Source: JICA Project Team

¹ Design standard of NHDA and TAFREN (Presently RADA) and UDA guideline for housing design and layout and infrastructure were applied to the design of JSFV.



Source: JICA Project Team

Figure 3.2.5 Three Models of Housing

Layout plans prepared by the JPT were also presented to the CBOs for discussion and getting their comments particularly on the demarcation between Tamil and Moslem. Through this time consuming procedure, the layout plans were finally determined and later modified as presented in Figure 3.2.6 to 3.2.8.

In principle, water sources for the domestic use are planned by exploring wells in and around JSFV, while drinking water by the service of NWSDB. Later, it was proved that the water source for domestic use of Hijra Nagar JSFV was not available in and around the premises of the site. JPT decided to use a tube well constructed by USAID at a location 4 km south of the site. A water conveyance facility is planned to transport the tube well water to JSFV.

Water supply system for Iqbal Nagar, Hijra Nagar and Konesapury were finally determined as presented below.

Site	Temporary system	Permanent system
Iqbal Nagar	Adequate volume of drinking water will be provided from NWSDB water main pipeline. System will be operated and maintained by NWSDB. Wells drilled in the IN-JSFV site will provide water for bathing and washing purposes. System should be maintained by CBO.	Adequate water for all purpose will be supplied from the NWSDB water system. System will be developed within a couple of years by NWSDB. O&M will be done by NWSDB.
Hijra Nagar	Drinking water will be provided by NWSDB utilizing the bowser. Water for bathing, washing , etc. will be provided by the well and conveyance system developed 4km south of HN-JSFV. System should be operated and maintained by CBO until the completion of permanent system.	NWSDB is now developing the water supply system for Pottuvil Township covering Arugam Bay tourism area. Completion of the system is scheduled for March 2008. HN-JSFV water system will be connected with permanent water system of NWSDB in Pottuvil.
Konesapury	Same as Iqbal Nagar	

*The Pottuvil Water Supply System is briefly summarized in Appendix 4.
 Source; JICA Project Team

Since the additional construction of conveyance pipeline and pumps in Hijra Nagar increased costs, the construction of a fence was cancelled. The fence was originally designed according to the request by Moslem beneficiaries to provide privacy. However, CBO agreed finally to prioritize the construction of water facilities instead of the fences.

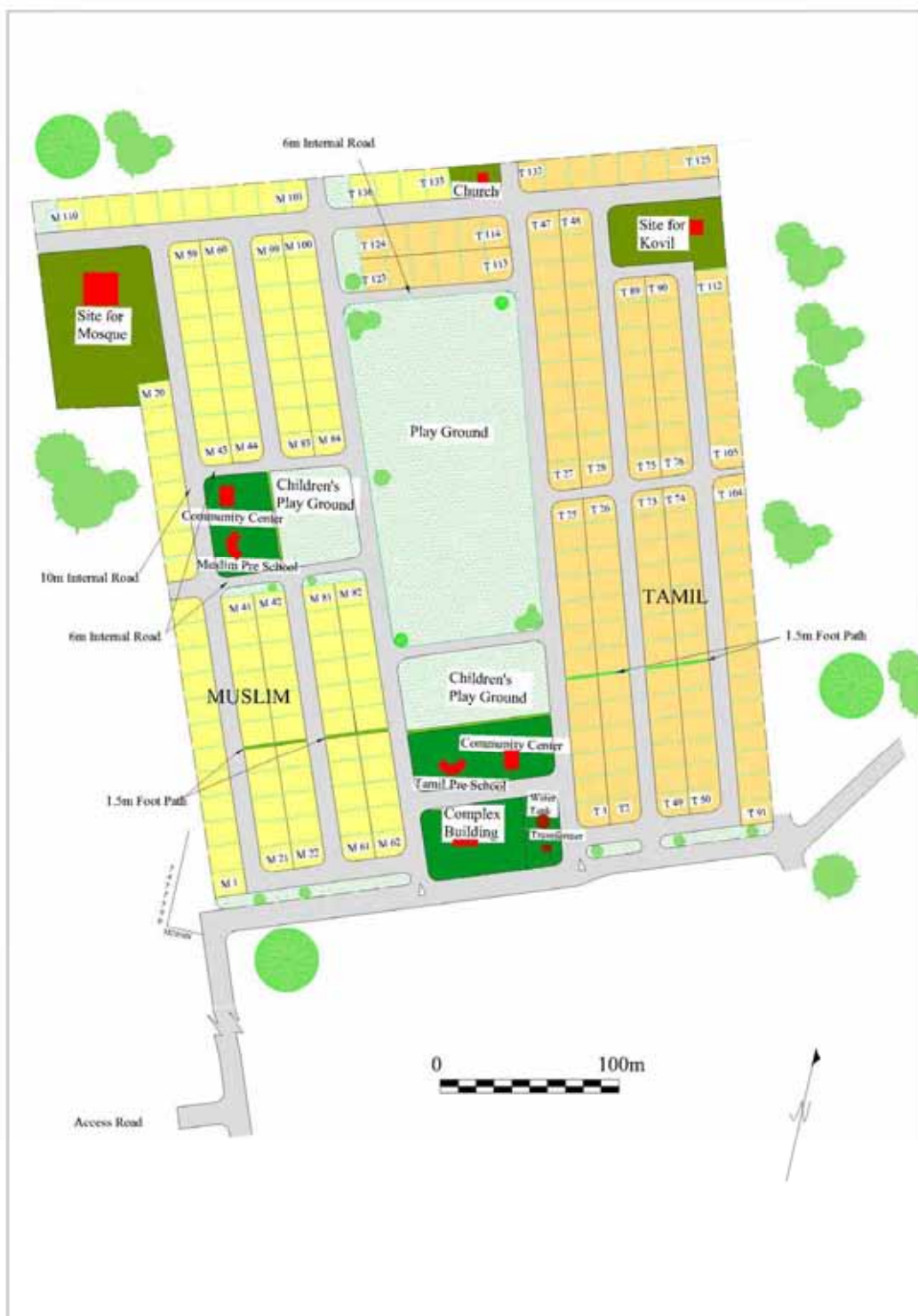


Figure 3.2.6 Layout Plan of Iqbal Nagar JSFV



Figure 3.2.7 Layout Plan of Hijra Nagar JSFV

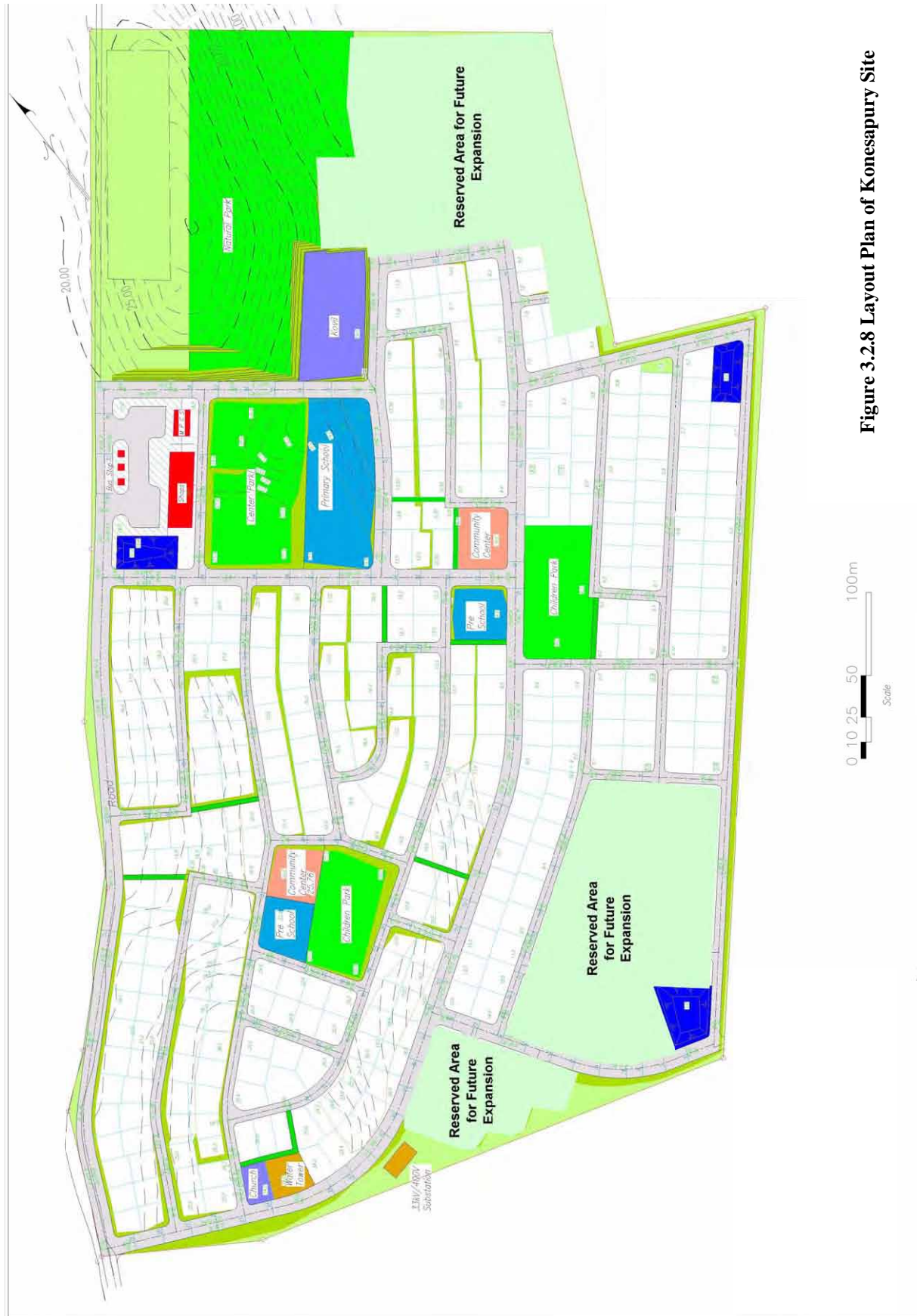


Figure 3.2.8 Layout Plan of Konesapury Site

3.2.5 Tender Process and Monitoring of Construction

It took five months to prepare the plan, preliminary design and environmental assessment, and another five months for tendering and contractor selection. Construction of the JSFV took around 20 months.

The following are special characteristics for the implementation of the JSFV.

- 1) For the contractor selection of JSFVs, a longer tender process was required because of the inflationary increase of the construction cost after the tsunami.
- 2) However, to keep transparency for the contractor selection, a common tendering process was applied, including PQ, bidding, evaluation and negotiation. It took five months for the selection of contractors for the JSFVs.
- 3) Construction work was often suspended due to security problems in the region. The completion target date was revised several times from October 2006 and finally to August 2007.

After the construction work was completed at the end of July (Iqbal Nagar) and August (Hijra Nagar) 2007, the beneficiaries immediately moved in JSFVs from the temporary houses/accommodations. In Konesapury, NGOs responsible for housing construction continued work targeting the completion by the end of November 2007.

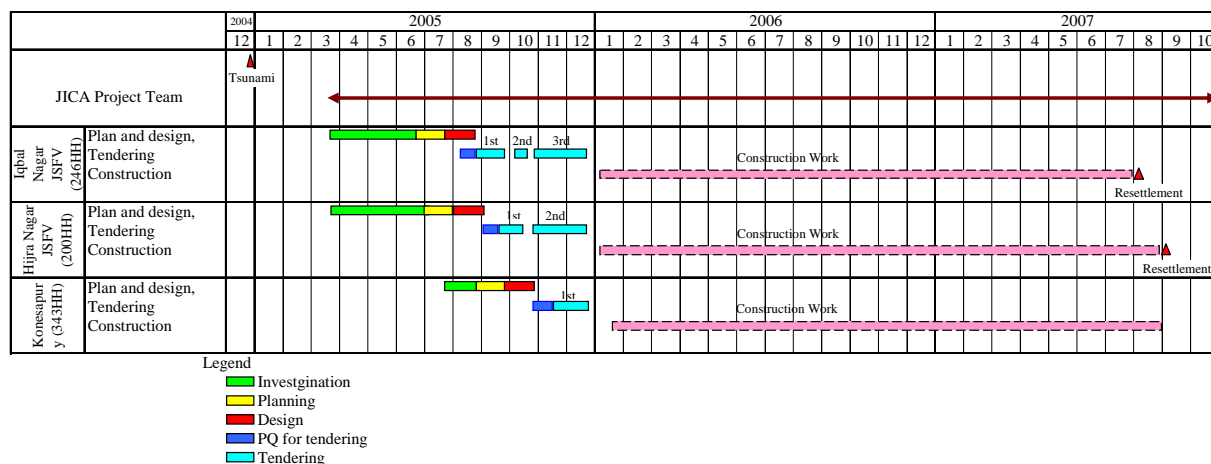


Figure 3.2.9 Implementing Progress of JSFV

- Note:
- 1) Ministry of Environment of Sri Lanka Government decided to simplify EIA/IEE procedures for Tsunami recovery projects with the consideration for their urgency. As the results, above three projects passed the environmental clearance only after the examinations of Basic Information Questionnaires (BIQ) provided by JICA/UDA.
 - 2) Tendering was carried out based on the preliminary design instead of detailed design.
 - 3) Site selection of Hijra Nagar was once amended because of high reclamation cost and therefore period of plan/design of HN-JSFV is one month longer than IN-JSFV.
 - 4) For Konesapury, resettlement was being arranged by concerned NGOs and the site was partially occupied in October 2007.

3.3 Night Soil Treatment Facilities

3.3.1 Background and Site Selection

From the needs analysis conducted through the investigation, priority of the construction of night soil treatment facilities was confirmed.

The objectives for constructing the night soil treatment facilities (NSTF) are to establish a model for the treatment facilities, and to promote implementation of similar facilities through preparation of a manual.

Through field investigations and evaluation of several districts in the target area carried out by municipalities under the direction of NWSDB, two sites for NSTF were finally selected at Batticaloa and Hambantota.

3.3.2 Environmental Clearance

As in the case of JSFV, NSTF went through simplified environmental assessment procedure for tsunami recovery projects (ref. section 3.2.3). The BIQs attached with the project brief documents for both Batticaloa and Hambantota NSTFs were filled out and submitted for CEA examination, and CEA issued the Environmental Clearance without requiring IEE and EIA procedures.

3.3.3 Concept and Design

Design Principles

The night soil treatment plant was designed as a temporary facility to meet the urgent requirements after the tsunami damage. Sewage generated from refugee camps and temporary house camps should be promptly treated in order not to contaminate the environment. This is why NSTF is urgently requested and its capacity and facility life was designed as a temporary facility.

Major Facilities

The layout plan of Batticaloa NSTF is shown in Figure 3.3.1. The major facilities of NSTF are as follows:

- 1) Anaerobic Pond
- 2) Facultative Pond
- 3) Evaporation and Percolation Mound

4) Sludge Drying Bed.

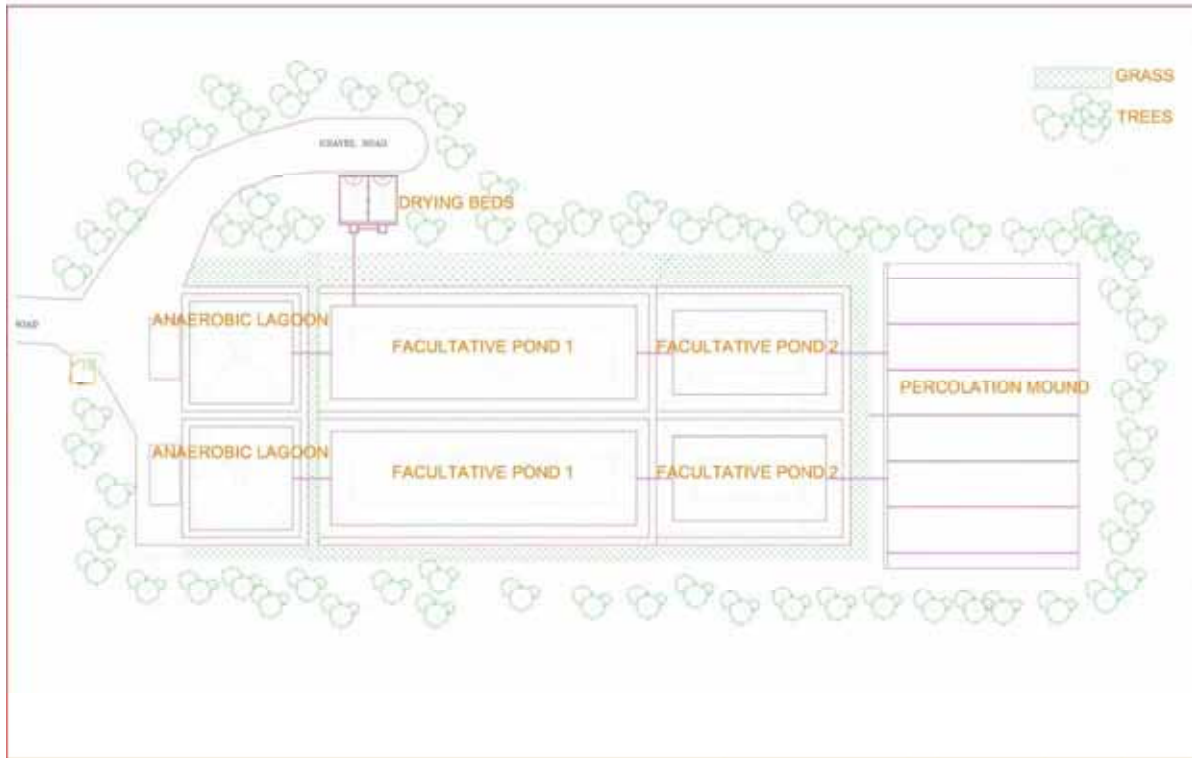


Figure 3.3.1 Layout Plan of Batticaloa NSTF

Source: JICA Project Team

Manual

A manual for future planning, development and O&M for similar NSTF by GOSL was prepared by JPT and submitted to NWSDB for application to other sites.

3.3.4 Monitoring of Construction

The progress of the construction and the current status as of October 2007 of the night soil treatment facilities are summarized below.

(1) Batticaloa NSTF

Construction work commenced in February 2006. Construction work was suspended several times due to security reasons and the limited capacity of the local contractor. Approximately 90% of construction was completed as of October 2007, with the remaining work soon to be accomplished.

(2) Hambantota NSTF

Although the construction commenced in April 2006, the work has been suspended since October 2006 because of the environmental problems. Needs of the facility were reconfirmed among NWSDB, GA and local community representatives, and GA. Then NWSDB identified a new site and consulted with neighboring communities. However the community opposed the construction of NSTF. NWSDB plans to carry out an engineering investigation secure the third site.

CHAPTER 4 CBO FORMATION AND IMPLEMENTATION OF PILOT PROJECT

4.1 Rationale for Community Empowerment

As mentioned earlier, livelihood improvement of the affected people is indispensable for their recovery and redevelopment in addition to the rehabilitation of the physical facilities such as infrastructure and housing. To improve the livelihood, community empowerment through the formation of CBO and its strengthening are critically important. It is assumed that co-assistance through positive participation of the community people supplemented by government assistance will accelerate the rehabilitation process.

The pilot project is proposed to verify the relevancy of the proposed approach and the effect of improving the livelihood of the affected people, and includes the following components:

- 1) Skills training for income generation for the affected people
- 2) Agriculture support for recovery of agriculture production
- 3) Fishery support through strengthening of fishery cooperatives
- 4) Disaster management and local livelihood improvement

To achieve the above objectives, CBOs are first formed for each of the JSFV, namely at Iqbal Nagar and Hijra Nagar, and organizational training of CBOs and skills training for its members are conducted by local government offices and the JPT.

Skill training was designed to help improve the livelihood of the affected people. In addition, for the livelihood improvement of farmers, necessary agricultural inputs such as seeds and pumps are provided through agriculture cooperatives as well as technical assistance, while strengthening of fishery cooperatives together with improvement of landing facilities was provided for fishermen. Disaster management and local livelihood improvement activities were also carried out in Kalmunai Township.

By implementing these pilot projects, the community empowerment in the JSFV and the livelihood improvement of its residents are expected, so as to facilitate the recovery and redevelopment of the lives of affected people.

4.2 CBO Formation and Empowerment

4.2.1 Background

After the tsunami devastated and destroyed many houses along coastal lines, GOSL decided to resettle people who resided within a 200m buffer zone¹ before the tsunami. GOSL established the framework for such works including establishment of TAFREN and THRU, and issued the guidelines² for implementation. In accordance with the guidelines, GOSL selected beneficiaries to be resettled to the new permanent houses in the JSFVs at Hijra Nagar, Pottuvil and Iqbal Nagar, Trincomalee. The beneficiaries selected for two JSFVs are from two different ethnic groups, namely Tamil and Moslem, who came from different villages. For the smooth implementation of the housing development scheme and community empowerment, there existed an urgent need to organize the CBOs as the central coordination and implementation body.

4.2.2 Objectives and Components

(1) Objectives

The objectives of CBO formation are:

- 1) To establish the community organization representing each JSFV
- 2) To identify real community needs and to reflect them in designing the JSFV
- 3) To share information among community members and to facilitate their participation in the development process of the JSFV
- 4) To implement the pilot projects for livelihood improvement
- 5) To establish the sustainable operation and maintenance system for JSFVs

(2) Beneficiaries

Beneficiaries are people to be resettled to two JSFVs. The total number of the households is 446 as shown in detail below.

¹ Later the buffer zones were modified according to the location.

² i.e. Assistance Policy & Implementation Guidelines Housing & Township Development, June 2005 by MoUD, MOHC, Presidential Secretariat, and TAFREN

Table 4.2.1 Number of Households to be Resettled to JSFVs

	Hijra Nagar	Iqbal Nagar
Tamil	20	136
Moslem	180	110
Sub Total	200	246
Total	446	

Source: JICA Project Team

(3) Project Components

Project components are:

- 1) Establishing CBOs
- 2) Registering CBOs
- 3) Strengthening of CBOs through:
 - Training of CBO board members
 - Identifying CBO roles and preparing for operation and maintenance of common facilities in JSFVs

4.2.3 Achievement

The process and achievement of the CBO formation and empowerment are summarized below.

(1) Community Profiling Survey

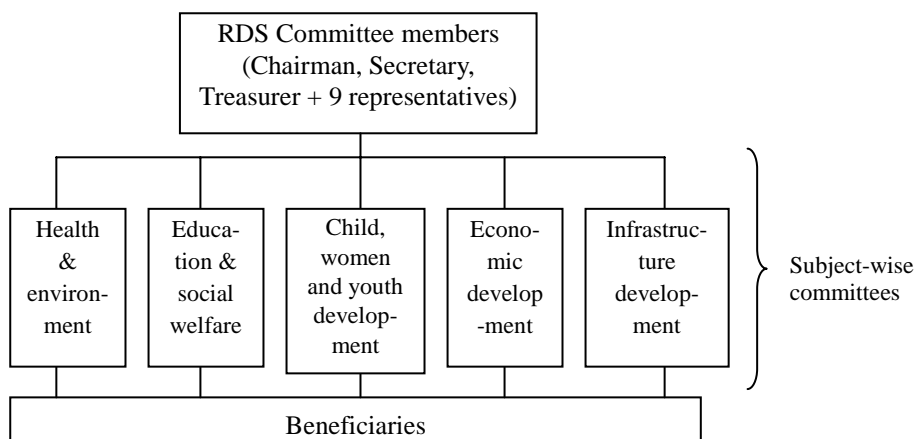
To identify the characteristics of the target community, a questionnaire survey on individual households was conducted to obtain basic information about their living and housing conditions before the tsunami disaster.

(2) Formation of CBO

After the awareness programme, Rural Development Societies (RDSs) were formed as CBO to represent beneficiaries of the JSFVs. In Iqbal Nagar, two RDSs, one for Moslem beneficiaries and the other for Tamil beneficiaries, were formed, and a common forum was formed to share information and discuss about resettlement and development of JSFV. In Hijra Nagar, a RDS was formed to represent both Moslem and Tamil beneficiaries as the latter consisted of 20 families which did not wish to form a separate organization.

In Hijra Nagar, the RDS committee consists of 12 members including chairman, secretary, treasurer and representatives from the different GNs was formed as a central

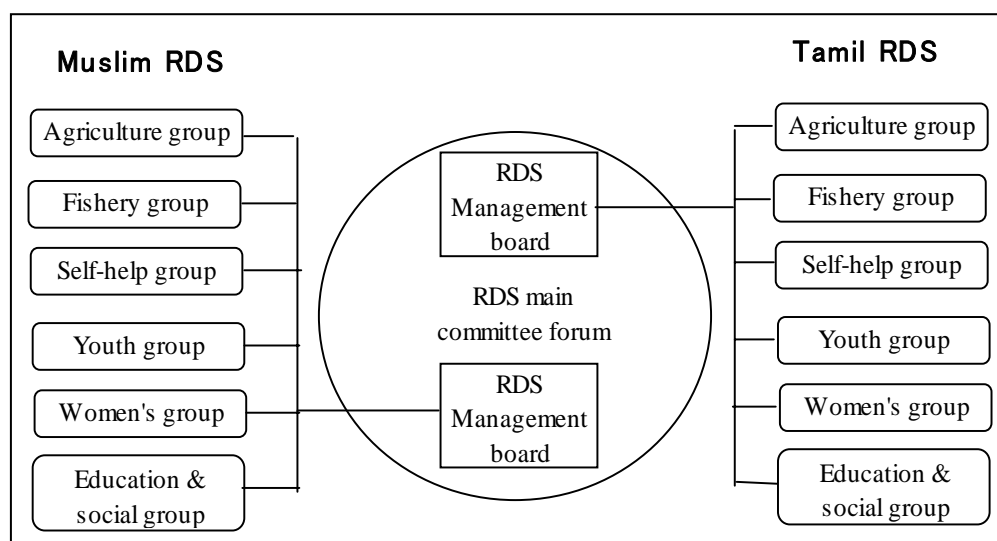
coordination body of the beneficiaries. In addition to that, subject-wise committees were formed in 2006 as structures to undertake O&M and development of the JSFV. The organizational structure of the RDS and the subject-wise committees are shown below.



Source: JICA Project Team

Figure 4.2.1 Planned Structure of RDS (Hijra Nagar)

In Iqbal Nagar, the organization structure was planned as presented below for undertaking O&M and development of JSFV. However, due to the deterioration of the security situation, the displacement of the Tamil beneficiaries and the delay of the construction of the JSFV, the subject-wise groups were not formed. The RDS management boards from both Tamil and Moslem sides were established to function as representatives of the beneficiaries and to shape one forum for the entire JSFV.



Source: JICA Project Team

Figure 4.2.2 Planned Structure of RDS (Iqbal Nagar)

(3) Strengthening of CBO

To strengthen activities of RDSs, the following activities were conducted in addition to the social harmony workshop and action planning workshop.

1) Registration

The RDS in Hijra Nagar and two ethnic-wise RDSs in Iqbal Nagar were registered and each RDS opened bank accounts for their future economic activities.



Photo 4.2.1 CBO Meeting (Iqbal Nagar)



Photo 4.2.2 CBO Meeting (Hijra Nagar)

2) Regular activities

In Hijra Nagar, the RDS committee, consisting of 12 representatives, held monthly meetings and discussed issues pertaining to the resettlement, monitored the construction and arranged events, such as workshops and beneficiaries' meetings. In Iqbal Nagar, due to the deterioration of the security situation³ and displacement of the Tamil beneficiaries,⁴ regular meetings were not held. However, meetings were organized as and when necessary.



Photo 4.2.3 Meeting of RDS leaders



Photo 4.2.4 Meeting of RDS leaders

³ In 2006, conflict arose between the government forces and the LTTE and frequent bombings, shootings, killings and robberies occurred in the surrounding villages of the welfare camps where the beneficiaries stayed.

⁴ As of October 2006, 57 out of total 136 Tamil beneficiary families fled to India.

3) Training Programme

As soon as the RDSs were registered, basic training on the organizational management was conducted for the board members of the RDSs under the collaboration with the respective District Rural Development Officers (DRDO). It includes the basics of developing organizational capacity such as recording, bookkeeping and conducting the meetings and institutional capacity such as awareness of the roles and responsibilities of government and non-government organizations, etc.

In addition to basic training, a 3-day leadership training session was held for the board members of the RDS in Hijra Nagar in August 2006. The objective of the training was to create awareness among participants on the importance of working as community leaders.



Photo 4.2.5 Leadership Training 1 (HN)



Photo 4.2.6 Leadership Training 2 (HN)

The leadership training was conducted with the collaboration of the Sri Lanka Foundation Institute that covered topics such as self-concept, working with organizations, group work and communication skills, mind empowerment, time management, etc. It has been observed that the board members of the RDS have become more responsible and active as a result of the training. In Iqbal Nagar, leadership training could not be held due to the deteriorated security situation.

4.3 Implementation of the Pilot Project

4.3.1 Skills Training

According to the profiling survey carried out by JPT in July and August 2005, 77% to 85% of households were classified as poor with an income of less than Rs 5,000 per month, before the disaster.

Income sources affected by the tsunami were small businesses (35%), fishing (32%), farming (24%), and others according to the survey. The survey results shows approximately one third of households affected by the tsunami were engaged in small

business such as trading, running small shops, and producing local goods to sell.

Regarding the disaster relief and tsunami-related government assistance, the assistance has not been smoothly implemented. The affected households were to receive Rs 5,000 per family per month, plus Rs 375 per person per week in food coupons. However, most of them received only one payment in May 2005 for 3 months, and food coupons only once in June 2005 for 4 months.

In light of the above, supporting the livelihoods of the people affected by the tsunami to be moved to JSFV by providing skills training was considered necessary in parallel to the construction of permanent houses.

(1) Objectives and Components

The objective of this pilot project is to improve the livelihood of the target households by providing technical and managerial training, providing equipments, and establishing business plans. The pilot project also planned that CBO would participate in the construction of JSFVs for their income.

The beneficiaries of this pilot project are assumed to be all household members in JSFV including the people outside of JSFVs in neighboring communities. The total number of target households is 516, as detailed shown below.

Table 4.3.1 Number of Target Households

	Hijra Nagar	Iqbal Nagar
JSFV	200	246
Neighboring Community	70	Nil
Sub Total	270	246
Total	516	

Source: JICA Project Team

The activities were implemented in the following manner.

- 1) Providing training
- 2) Establishing a livelihood support system with micro-finance scheme in cooperation with JICA regional office in Ampara and providing equipment for OJT (on the job training) through the scheme
- 3) Establishing the system to provide construction material and workers for construction of JSFVs
- 4) Monitoring and follow-up activities

5) Transferring of the know-how in community empowerment to the neighboring communities

Implementation schedule is shown in the following table.

Table 4.3.2 Implementation Schedule (2005/6)

Items	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Needs assessment		■	■	■					
Establishing of supporting system		■	■	■	■				
Providing skill training and management training		■	■	■	■	■	■	■	■
Providing basic equipments							■		■
Monitoring and follow-up activities					■	■	■	■	■
Establishing system to provide construction materials and workers						■	■	■	■

■ :Implemented ■ ■ :Partially implemented

Note: Monitoring and follow-up activities were continuously done by the sub-contracted local NGO throughout the year 2006.

Source: JICA Project Team

(2) Achievement

1) Skills Development Training

As mentioned above, the skills development training was one of the main components of the pilot project. An assessment was conducted from July to August 2005 to identify training needs and preferences of the individuals. Based on the needs assessment, JPT developed the training activities in selected fields including animal husbandry, construction-related skills and small businesses, such as food processing, management training and follow-up activities. 340 people in total completed the training courses. Detailed information on the training is provided in the Table 4.3.3 and 4.3.4.

Table 4.3.3. Details of the Skills Development Training – Hijra Nagar

Training item	Period of training (days)	No. of participants completed the training		
		Male	Female	Total
Animal Husbandry	5	0	32	32
Block making	4	40	0	40
Masonry	7	6	0	6
Carpentry	10	7	0	7
House wiring	10	12	0	12
Food processing	2	0	9	9
Rice processing	1	0	17	17
Tailoring	6	0	13	13
Business training	3	7	0	7
Tailoring II (advance)	7	0	20	20
Total		72	91	163

Source: JICA Project Team

Table 4.3.4. Details of the Skills Development Training –Iqbal Nagar

Training item	Period of training (days)	No. of participants completed the training		
		Male	Female	Total
Animal Husbandry	5	49	0	49
Block making	4	20	0	20
Masonry	7	15	0	15
Carpentry	10	15	0	15
House wiring	10	19	0	19
Small scale business	3	10	20	30
Tailoring	6	0	9	9
Business training	1	0	20	20
Total		128	49	177

Source: JICA Project Team

In order to evaluate the effects of skills development trainings, a questionnaire survey was conducted from June to August 2007 in both Hijra Nagar and Iqbal Nagar.

The following case studies illustrate the performances of the trainees.

Case Study in Hijra Nagar 1

Ms. G. Kirubalani is 30 years old. Her house was severely damaged by tsunami. She has been engaged in tailoring at home on a small scale. After she underwent the training, she obtained a motor as the OJT equipment through a micro finance scheme of the Project. She attached it to her sewing machine. With the motorized machine and improved skill, she expanded her business and is now handling sufficient numbers of orders that keep her occupied every day. She is currently earning around Rs 5,000 per month which is close to the income of her father. During the training, she made a specific effort to learn fabric painting. She is keen on improving her skills, so that she will be able to sew trousers and shirts. She has been repaying the loans for the equipment as scheduled. (Oct. 2006)



Case study in Hijra Nagar 2

Mr. M. Suthakavan is 30 years old. He had lost all his property in the tsunami. He restarted his cigar manufacturing business after he settled in a temporary hut. He participated in the training on house wiring, with the intention of obtaining extra income, as cigar making brings him only around Rs 3,000 per month. Now, he is in a position to earn Rs 500 per day, by engaging in house wiring work. He is trying to get more house wiring orders to further increase his income.

(Oct 2006)



Case study in Hijra Nagar 3

Mr. Hussein has a wife and four children. Among the four children, three are of school age and one is an infant. His house is located within 100m from the beach and was affected by the tsunami. He has a speech disability. Before training, he worked as an unskilled laborer and received daily wages of Rs 350-400. He was not able to find a job every day due to his disability and lack of skill. After participating in the carpentry training, he obtained further practical training at the workshop where he is currently working for. Currently, he earns Rs 800-1,500 daily as a carpenter. For example, he made a chair set consists of five chairs in four days and earned Rs 6,000.



The owner of the workshop mentioned that his disability is not a problem at all for working as a carpenter, as he can calculate necessary measurements for production. The socio-economic status of his family became better as he can earn more as a skilled laborer. The school attendance of his three children has improved, and he and his wife are not worried about the economic burden of a new child in the family. (June 2007)

Case study in Iqbal Nagar 1

Mrs. Ayesha Beevi is 44 years old. Her family's properties in Veloor were destroyed by tsunami. They had a small boutique which was also destroyed. After tsunami, they were living in the Thamaraiikulam camp and facing economic difficulty as there was no way of earning to meet the family requirements. One of her daughters brought her information about skills development training. She applied and received training on making food items and she also got a gas cooker and some utensils as OJT equipments valued around Rs 5,000. Now she makes food items such as string hoppers, rotties, pittu, thosai and curries and sells them in their hut.



As a result, they now have sufficient income to cover their needs. The families of her two daughters are living together with them and help making the food items. Her husband gives his fullest support in this business. Their monthly turnover is more than Rs 9,000. They have repaid Rs 2,750 of the loan. (July 2007).

Case study in Iqbal Nagar 2

Mr. Kaleel Rahuman is a father of 5 children. He was living in Veloor, Nilaveli before tsunami. His wife and a six-month old daughter were killed by the tsunami waves and his entire property was destroyed. He went to live in the Thamaraiikulam camp. He married a widow with 12 year-old son. The new family also has a 1 1/2 year old daughter. Before the tsunami, his profession was fishing. He went through the carpentry training course with the intention of earning extra money during the off-season. He didn't have any knowledge about carpentry before the training. He diligently studied the carpentry techniques within the training period. He was provided with a hand saw, a drill, a hammer, a chisel, a plane, a vise and a ruler as OJT equipment.

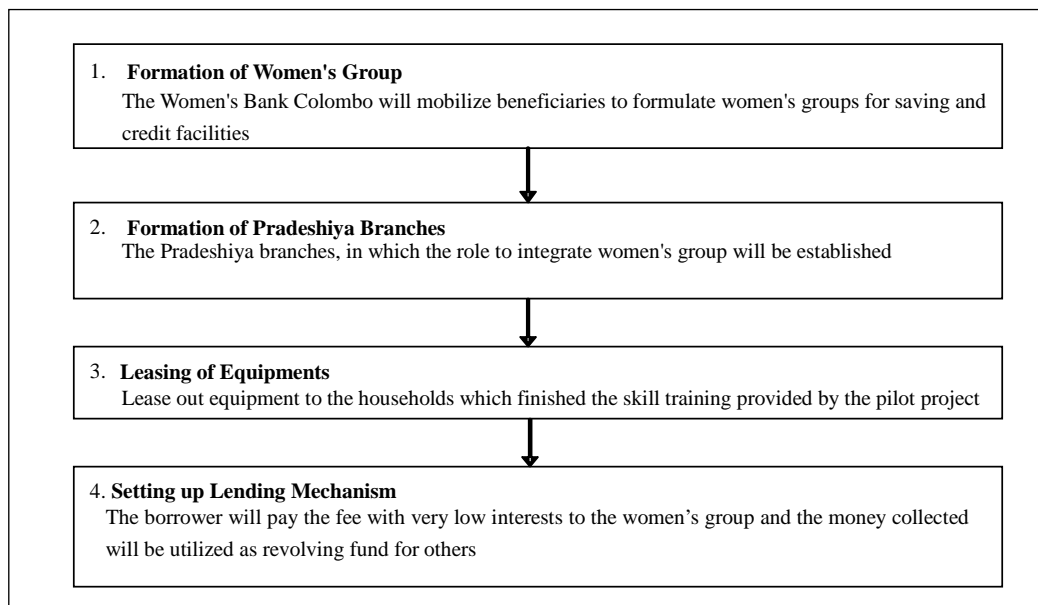


Now, he is able to make furniture such as chairs, beds, tables and cupboards. For example, he constructed 34 poultry huts and earned Rs 500 per hut for 30 of the huts and Rs 700 per hut for the 4 other huts. He is repaying his loan little by little. He said that the training was useful, as he could earn some money during the period when fishing was restricted. Now he has started fishing again but he says the skills he gained are still important because he can make household furniture for himself and his neighbors. (July 2007)

2) Assistance through Micro-Finance Scheme

After getting the skills training, the trainees were provided OJT equipment for their livelihood activities. The pilot project set up a mechanism for the micro-finance activity through the collaboration with Women's Bank supported by JICA regional office in Ampara.

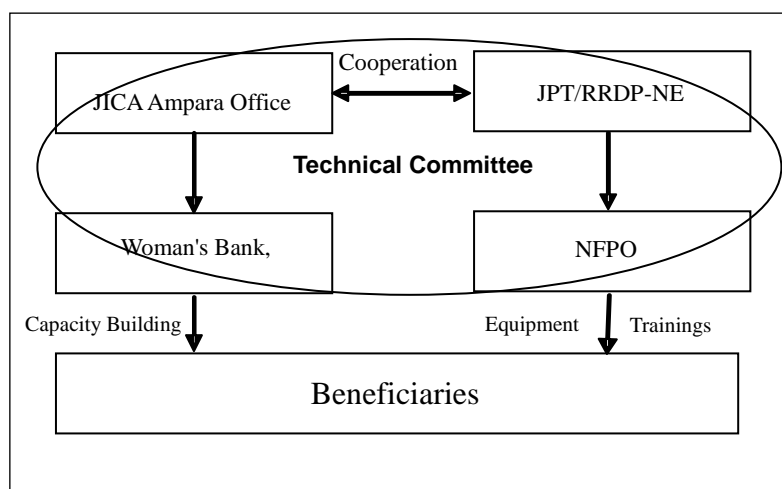
The mechanism of this micro financing scheme leased the equipment purchased by the pilot project to the beneficiaries of JSFV who obtained membership from Women’s Bank. The process of the scheme is shown in the following figure.



Source: JICA Project Team

Figure 4.3.1 Lending Scheme

This activity is a collaboration between Women’s Bank Colombo, JICA Ampara office, NFPO (implementing NGO), and JPT. A technical committee was formed among these organizations to discuss the problems and issues during the operation. The management structure is shown below.



Source: JICA Project Team

Figure 4.3.2 Management Structure of Lending Scheme

In Hijra Nagar, 14 groups which consist of 163 members in total were actively involved in the Women's Bank programme as of July 2007. The total amount of savings and loans is approximately Rs 1,100,000. Most of the recipients of the OJT equipment are re-paying their loans according to the schedule. For example, all the trainees in tailoring, carpentry, rice processing, and half of the trainees in masonry and house wiring are re-paying their loans as scheduled.

In Hijra Nagar, the Women's Bank provided 109 loans, utilizing the revolving fund created by savings and loan repayments. The amount of each loan is Rs 5,000-20,000. All the loans have been settled as scheduled. The purposes of the loans are for business, farming, poultry, etc. The loan scheme of the Women's Bank is very popular among the members, as the interest rate is lower than other loans, and the repaid money is saved as a revolving fund which can be effectively utilized again among the members.

In Iqbal Nagar, 11 Moslem women's groups, totaling 110 members, are actively involved in the Women's Bank activities as of July 2007. The total amount of the revolving fund, created by savings and repayment of the loans for OJT equipment, is Rs 513,000 as of July 2007.

In Iqbal Nagar, most of the OJT equipment was provided in 2006. However, the loan repayments started only in February 2007. Deterioration of the employment and economic situation amidst unstable security situation, absence of a monitoring team from Women's Bank Colombo, and less monitoring by the JPT are the main reasons for the delay of payment. The trainees in tailoring and small business, however, are repaying their loans successfully.

In Iqbal Nagar, the Tamil women's groups faced great difficulty due to deteriorated security situations in 2006. Not a small number of members in the groups fled to India or other districts in Sri Lanka. In January 2007, the remaining members resumed the activities. As of July 2007, there were five groups which consisted of 50 members. They started the activities with a weekly savings of Rs 5. They also collect Rs 16 per month from a member for the welfare fund, which grants Rs 500 for a new birth in the family and Rs 4,000 for a funeral of a family of a member. Loan repayments for the OJT equipment have not started yet.



Photo 4.3.1. Women's Bank Meeting 1



Photo 4.3.2. Women's Bank Meeting 2

3) Participation to Construction of JSFVs

Participation to the construction of JSFV was planned through provision of cement blocks and provision of laborers from the RDS. The project provided skills and managerial trainings to the beneficiaries. In addition, the list of individual semi-skilled and unskilled laborers from the beneficiaries were prepared by the RDS and handed over to the contractor. Discussions were made between the RDS and the contractor.



Photo 4.3.3 Needs Assessment



Photo 4.3.4 Skill Training- Block making

As a result, RDSs of Iqbal Nagar showed their willingness to participate in construction work. Although it was not particularly organized, the beneficiaries, including some of the trainees of the skills development training, worked in the construction site of the JSFV as manual laborers. After the security situation became worse, the site became an ideal workplace for the beneficiaries, as it was near from their living places-the camps, where they can commute without going through many security check points. Around 20-30 beneficiaries on average had worked daily in the site as laborers and security guards.

The RDSs of Iqbal Nagar were also keen on undertaking manufacture of cement blocks which will be used for the walls of JSFV. This work was planned to provide income for the beneficiaries and profit for the RDSs. Although they repeatedly had

meetings with the CECB and NHDA to make the necessary arrangement, the preparation work, such as installation of the machinery, construction of a hut for the work and procurement of the materials, had been delayed. Unexpected incidents, such as robbery cases at the site and frequent closing-downs of the site due to security reasons, were the causes of the delay.

As a consequence, cement block making just began in April 2007. As of July 2007, 41,000 blocks were produced. The production was far behind the schedule, as the RDSs planned to produce 200,000 blocks before settlement. The absence of timely supplies of cement, water and electricity were the main reasons for the slow progress. There was also a serious shortage of cement in the entire Trincomalee.

Rs 1 for the production of one block was set aside as profit. So far the two RDSs gained a net profit of Rs 41,000 by undertaking the work. The supervisor of the work mentioned that the work provides good employment opportunities for the beneficiaries. The RDS committee members commented that they will utilize the profit to purchase necessary materials to construct walls.

After the resettlement, they are still keen on carrying out the work. It is worth mentioning that the Moslem RDS dug a well to overcome the shortage of water. However, the shortage of cement is still a hindrance to the work.



Photo 4.3.5. Site of Cement Block Making



Photo 4.3.6. A Well Dug by RDS

In Hijra Nagar, beneficiaries' participation in the construction work was not realized due to the reasons such as i) the purchasing price of the a cement blocks proposed by the CECB was lower than what the RDS expected, ii) the sub-contractors under the CECB preferred to employ their own groups of skilled laborers who came from rural areas and stayed in the sites, and iii) the trainees did not prefer the by-weekly payment schedule adopted by the sub-contractors.

4.3.2 Agriculture Recovery Support

The tsunami disaster severely affected the agriculture sector in the coastal area of North and East provinces. Lands were inundated, crops and agro-wells were destroyed, and agricultural production inputs, such as water pumps, seeds and fertilizers, were also washed away by the tidal waves.

Among the JSFVs in Trincomalee (Iqbal Nagar) and Ampara (Hijra Nagar) districts, the percentage of farmers in the JSFV resettlers is high in Trincomalee. The damage to their farming activities were also heavy especially on onion farming which was heavily damaged. Therefore, the pilot project was planned to be implemented in Trincomalee district, as a model activity to seek for the recovery of living standards of tsunami affected farmers by providing agriculture support.

As the result of a needs assessment held in July 2005, the component of this pilot project was decided as follows.

- Support for establishment of Farmers' Group
- Support for registration of Farmers' Organization
- Training for management of Farmers' Organization, such as leadership, accounting and handling of revolving fund, and
- Supply of agricultural inputs: water pump, onion seed, paddy seed, fertilizer, and wire for fence

(1) Objectives and Beneficiaries

The objective of this pilot project is to restart the agriculture activities of the farmers affected by the tsunami through the strengthening of the Farmers' Groups established.

Beneficiaries of the pilot project are the farmers who live in the camps which were selected as the target of JSFV in Iqbal Nagar, Trincomalee. The total number of beneficiaries is 118 farmers. The numbers per camp are shown in the table below.

Table 4.3.5 Number of Beneficiaries

Veloar Tamil Farmers' Group				Veloar Moslem Farmers' Group			
Name of Camp	JSFV	Out of JSFV	Total	Name of Camp	JSFV	Out of JSFV	Total
Periyakulam Camp	28	11	39	Thamaraikulam Camp	24	21	45
Adambodai Camp	16	0	16	Iqbal Nagar Camp	5	6	11
Veloar Camp	4	0	4	Out of Camp *	3	0	3
Total	48	11	59	Total	32	27	59

* Although these three farmers are not living in the target camp, they are counted as the beneficiaries because they are in the list of resettlers to JSFV.

Two Farmers' Groups were established, the Veloor Tamil Farmers' Group (59 farmers), and the Veloor Moslem Farmers' Group (59 farmers). Although the total number of farmers who resettled to JSFV was only 80 farmers (Tamil 48, Moslem 32), the farmers who did not move to JSFV (38 farmers) are also counted as the beneficiaries, taking into account the importance of future water management plan in this area.

The implementation schedule of this pilot project is shown in the following table.

Table 4.3.6 Implementation Schedule

Items	2005				2006			
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	March
Implementation of Pilot Project								
- Awareness Workshop	■							
- Establishment of Farmers' Group	■							
- Management Training for Farmers' Group (1)	■							
- Procurement of Agriculture Items	■							
- Handover of Items to Farmers' Groups		■						
Monitoring								
- Registration of Farmers' Organizations		■						
- Operation of Revolving Fund by FO			■	■	■	■	■	■
- Monitoring of Farming Activities			■	■	■	■	■	■
- Water Quality Monitoring							■	

Source: JICA Project Team

Note: Monitoring of the pilot project was implemented by a sub-contracted local NGO.

(2) Achievement

1) Registration of Farmers' Organizations

Two Farmers' Organizations (FOs) were registered in September 2005 under the guidance of ADO (Agriculture Development Officer). The details of each FO are shown below.

Table 4.3.7 Details of Farmers' Organizations

Ethnic Group	FO Name	Registration No.	No. of Member (Registered Member)	Collection of Membership Fee
Tamil Group	Veloor Ambal FO	DAD/16/2/160	110 (59)	45 (40%)
Moslem Group	Thamaraikulam FO	DAD/16/2/163	154 (60)	138 (90%)

Source: JICA Project Team

The number of members increased from 59 to 110 in Veloor Ambal FO, from 60 to 154 in Tamaraikulam FO after registration. The membership fee (Rs 100 per member) was not collected from some farmers who did not receive any agriculture production items handed over by this project.

2) Handover of Agriculture Inputs

After two FOs were registered formally, the following agriculture inputs were handed over to both FOs in September 2005.

Table 4.3.8 Agriculture Inputs Handed Over to FOs

Items	Tamil Group	Moslem Group	Total
Water pumps with hose	10 sets	10 sets	20 sets
Seed paddy	1,600 kg	1,600 kg	3,200 kg
Seed onion	6,000 kg	6,000 kg	12,000 kg
Fertilizer			
Urea	1,600 kg	1,600 kg	3,200 kg
TSP	500 kg	500 kg	1,000 kg
MOP	600 kg	600 kg	1,200 kg
Wire for fence	2,500 kg (100 roles)	2,500 kg (100 roles)	5,000 kg (200 roles)

Source: JICA Project Team

Both FOs agreed to manage the above inputs under the following manner, which was introduced during the management training held in August 2005.

- Decide on the beneficiary farmers, who will receive the above items and the amount for each beneficiary under the supervision of local NGO,
- Prepare a list of beneficiaries who will receive the items under approval of GN Officer,
- Sign on a lease agreement with a witness of ADO,
- Collect advance payment from beneficiaries when the items are leased from FO to beneficiaries,
- Collect the balance of payment by the due date mentioned on the lease agreement correctly,
- Deposit the collected payment to the bank as a revolving fund, and
- Confirm the next beneficiaries and purchase the necessary inputs using the revolving fund.

3) Operation of Revolving Fund

FOs held a general meeting and decided the following payment conditions for establishing the revolving fund.

Table 4.3.9 Payment Conditions for the Agricultural Inputs

Items	Total amount to be paid per unit	Advance Payment	Balance of Payment	Payment Duration
Water pump with accessories	Rs 48,000/1set	Rs 1,000	Rs 47,000	2 years
Seed paddy	Rs 9,075/300kg	Rs 1,000	Rs 8,075	1 year
Seed onion	Rs 10,800/300kg	Rs 1,000	Rs 9,800	2 years
Fertilizer				
Urea	Rs 1,150/100kg	Rs 100	Rs 950	1 year
TSP	Rs 1,580/50kg	Rs 100	Rs 1,480	1 year
MOP	Rs 1,580/50kg	Rs 100	Rs 1,480	1 year
Wire for fence	Rs 4,960/50kg	Rs 1,000	Rs 3,960	1 year

Note) After the completion of all payment, the property right will be transferred from FO to the farmer.

Source: JICA Project Team

The FOs signed the lease agreement with beneficiary farmers and collected advance payment from the beneficiaries. Some beneficiary farmers requested to be provided the inputs without advance payment because their lack of financial capacity after tsunami disaster. FOs held several meetings and finally decided that beneficiaries who cannot afford to provide the advance payment can pay after the first harvest.

While most of the beneficiaries have paid the advance payment, only few have paid the 2nd payment, as shown in the following table. In the case of Tamil FO, displacement of the members and economic difficulty are the main reasons for the outstanding payment. In the case of the Moslem FO, the sense of responsibility for payment was weak due to the lack of close monitoring.

Table 4.3.10 Number of Beneficiaries and Collection of Payment (as of Dec. 2006)

FO	No. of Beneficiaries	No. of Payers for Advance Payment	2 nd payment	Total amount collected	Given to 2 nd batch
Velloor Ambal FO (Tamil)	39	25 (64%)	0 (0%)	Rs 61,000	Rs 40,000 5 persons
Thamaraikulam FO (Moslem)	54	47 (87%)	3 (5%)	Rs 85,300	Rs 85,000 4 persons

Source: JICA Project Team

4) Restarting of Farming Activities

Beneficiary farmers who received paddy seeds restarted paddy cultivation in the middle of November 2005, and they succeeded in harvesting from the middle of February to the middle of March 2006.



Photo 4.3.5 A paddy farmer who received 300 kg of paddy seeds (Thamaraikulam FO)



Photo 4.3.6 Paddy Harvesting in mid-February 2006 (Thamaraikulam FO)

Beneficiaries who received onion seeds or water pumps also started onion cultivation in the beginning of January 2006 and reaped the harvest from the beginning to the end of March 2006.



Photo 4.3.7 An onion farmer who received a water pump (Velloor Ambal FO)



Photo 4.3.8 An onion farmer who received 300 kg of onion seeds (Velloor Ambal FO)

According to the interview with beneficiaries of onion farmers, the growth of crops was almost equivalent to the pre-tsunami level. The case study of one of the beneficiaries in the box below explains the way they restarted the farming activities.

Case study for agriculture support pilot project

Mr. Gunasekaram lives in Adambodai welfare camp. He is the chairman of the Tamil RDS. He did not have the financial capacity to restart agricultural activity for a period of one year after tsunami. He restarted onion cultivation in December 2005, by obtaining seed onions from the Project and loans from other organization. In March 2006, he had good harvest and obtained Rs 50,000 for a net profit. He is very much satisfied with the profit. He will start next cultivation in May, 2006. (April 2006)



All farmers who received the agriculture inputs started farming in 2006. However, some of them achieved less harvest than they expected. Some missed appropriate timing for cultivation and others cultivated without knowing that the land and agro-wells they were using were damaged by salt water due to tsunami waves.

As for the Moslem FO, all of the ten farmers who received water pumps are utilizing them continuously. Among the 20 farmers who received onion seeds, eight enjoyed successful harvests, while 12 did not due to the problems mentioned above. Among the five farmers who received seed paddies, one was successful, three were modest, and one was not successful. As of July 2007, income levels of the members of the Moslem FO achieved almost the same levels as before the tsunami.

As of July 2007, the Tamil FO was not functioning. No meetings have been held for the past few months. This situation was caused by the fact that the members of the organization, including the chairman and the treasurer, fled to India in 2006 due to deteriorated security in the area. In addition to that, some FO members also quit farming due to security reasons. The FO secretary is, however, active and provided ten FO members with 15 kg of seed onions each by utilizing the revolving fund created by the repaid money for the agriculture inputs. The secretary is planning to reorganize the FO after resettlement to JSFV.

4.3.3 Fishery Support

As described earlier, tsunami affected many fishers in NER who lost houses as well as fishing gears. Among 200 beneficiaries of JSFV at Hijra Nagar, there are 73 fishers households (37%) while there are 97 fishers households (40%) at Iqbal Nagar.

Besides the high percentage of fishers in JSFVs, these fishers faced difficulties to restart their fishing activities due to lack of fishing gears and storage facilities.

Through discussion with fishers of JSFVs, the following needs have been identified.

- Fishing gears for fishers to reengage in fishing activities
- Safe place to keep their outboard motors and fish handling shed near the beach
- Knowledge regarding the management of provided equipment and facilities

Based on their needs, the Fishery Support pilot project was planned with the aim to recover the working condition for the fishers.

(1) Objectives and Components

The objectives of the Project are:

- To support the fishers of JSFV to restart fishing activities to enhance their livelihood.
- To learn lessons for livelihood empowerment and to establish a model for redevelopment.

The pilot project supported fishers through empowering Fisheries Cooperative Societies (FCS), namely, Hidayafuram FCS/ Pottuvil Division/ Ampara District (Hijra Nagar) and Veloor FCS/ Kuchchaveli Division/ Trincomalee District (Iqbal Nagar).

Locations of fishing operation area for each FCS are indicated in the following figures.

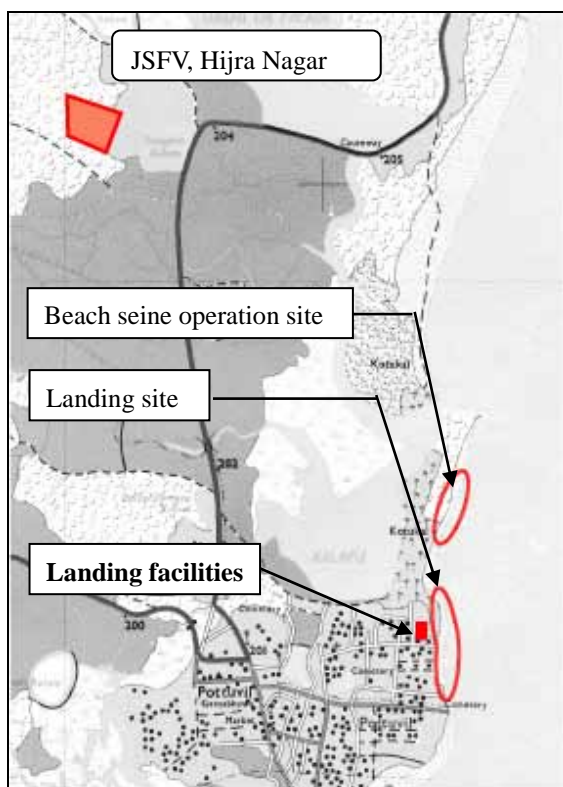


Figure 4.3.3 Location of JSFV, Landing Facilities, and Landing Sites, Pottuvil, Ampara District

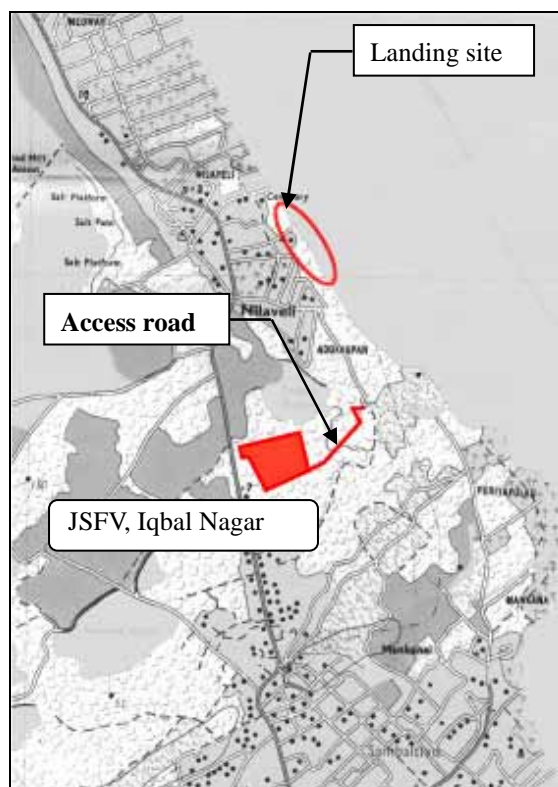


Figure 4.3.4 Location of JSFV, Access Road, and Landing Site, Kuchchaveli, Trincomalee District

The number of beneficiaries under the pilot project is presented below.

Table 4.3.11 Number of Fishery Support Beneficiaries

Name of	Fishers moving to JSFV	Other members of FCS	Total
Hidayafuram FCS, Ampara (Hijra Nagar)	*70	**286	356
Veloor FCS, Trincomalee (Iqbal Nagar)	97 (Tamil: 53) (Moslem: 44)	**56 (Tamil: 5) (Moslem: 51)	153
Total Number of Beneficiaries			509

Source: JICA Project Team

Note: *Total number of fishers moving to JSFV is 73, yet 3 Tamil fishers are not members of FCS. Therefore, they are not included as beneficiaries for the pilot project.

**As the number of FCS often varies, the figure is still subject to change.

To achieve the above objectives, the pilot project includes following components:

- (a) Support fishing activities; and
- (b) Build management capacity of FCS

Each component consists of several activities listed in the table below.

Table 4.3.12 Project Components and Activities

Components	Activities	
	Hijra Nagar (Hidayafuram FCS ⁵)	Iqbal Nagar (Veloor FCS)
Support fisheries activities	Provision of cast nets (20 numbers)	Provision of gill nets (31 numbers)
	Provision of materials for a beach-seine net	
	Construction of a landing facility	Construction of an access road between the JSFV and toe landing site
	Provision of lockers (14 numbers)	
Build management capacity of FCS	Implementation training for FCS for capacity building	
	Collection of leasing fee/ usage fee by FCS	
Monitoring	Monitoring of the above-mentioned activities	

Source: JICA Project Team

The type and components of landing facilities and fishing gears were decided in consideration of the different fishing situation and restrictions between Hidayafuram and Veloor FCS.

In the Hidayafuram FCS, fishers kept outboard motors and fishing gears in their houses or huts along the beach before tsunami. Since the fishers who lived near the beach are moving to JSFV, they need facilities to keep outboard motors and fishing gears at the beach on Hidayafuram. Therefore, locker rooms and a fish handling shed

⁵ Fisheries Cooperative Society

are designed to be constructed under the pilot project. Figure 4.3.5 and 4.3.6 show landing facilities for Hidayafuram FCS.

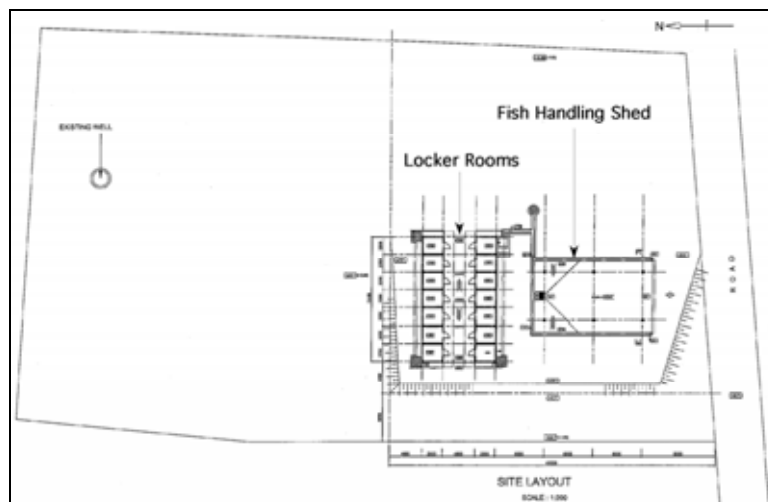


Figure 4.3.5 Site Layout for Landing Facilities for Hidayafuram FCS, Ampara

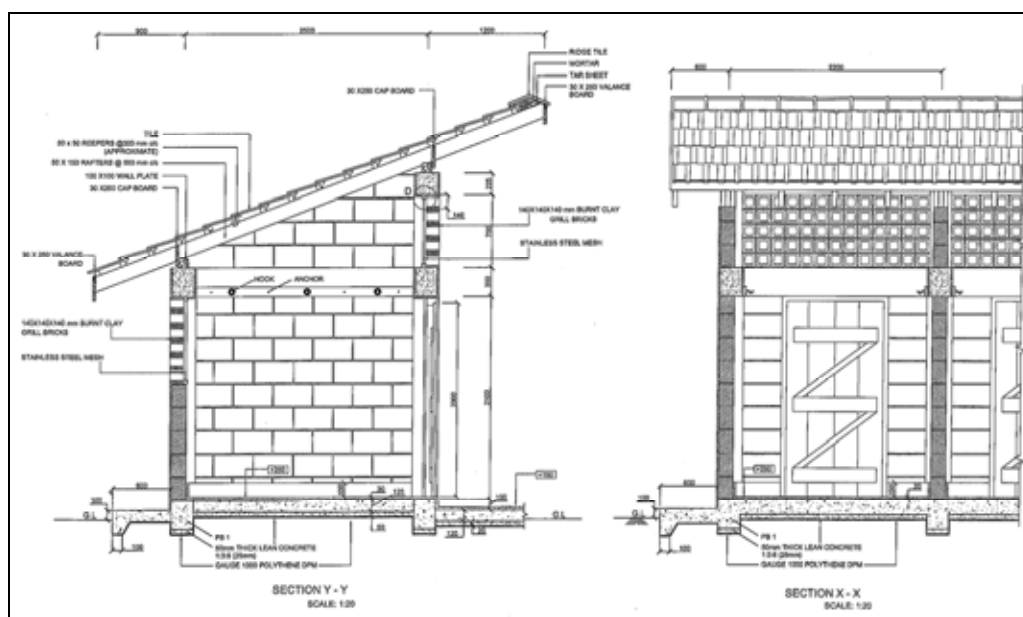


Figure 4.3.6 Section of the Locker Rooms Building

For Veloor FCS, members have already restarted their fishing operation at their original landing site, keeping outboard motors in their tsunami destroyed houses. Despite the fact that there was no available land for construction of landing facilities, they still wish to continue their operation after moving to JSFV. Therefore, an access road which cuts the distance between JSFV and the original landing site was constructed.

The implementation schedule is shown in Table 4.3.13.

Table 4.3.13 Implementation Schedule

	Activities	2005				2006		
		Sep	Oct	Nov	Dec	Jan	Feb	Mar
(a) Support fisheries activities	Constitution of landing facilities							
	Hidayafuram FCS, Ampara							
	Veloor FCS, Trincomalee							
	Procurement of fishing gears			▲				
	Fisheries operation using procured gears							
(b) Build management capacity of FCS	Implementation of FCS training on capacity building	▲			▲		▲	
	Collection of leasing fee/ usage fee by FCS							
(c) Monitoring	Monitoring of above activities							

Note: Monitoring activities was continuously conducted by sub-contracted local NGO throughout the year 2006.

Source: JICA Project Team

(2) Achievement

Progress of each components and activities are described below.

1) Construction of Landing Facilities

Construction of landing facilities was completed in March, 2006. 14 lockers and a fish handling shed are constructed for Hidayafuram FCS, Ampara, and an access road is constructed for Veloor FCS, Trincomalee.



Photo 4.3.10 Lockers and Fish Handling Shed, Hidayafuram FCS, Ampara



Photo 4.3.11 Access Road, Veloor FCS, Trincomalee

2) Provision of Fishing Gears and Their Operation

Materials for fishing gears were handed over to Hidayafuram FCS in December and to Veloor FCS in November 2005. Materials for a beach seine and 20 cast nets were provided to Hidayafuram FCS, whereas 31 gill nets were provided to Veloor FCS.



Photo 4.3.11 Handing over Materials for Fishing Gears, Hidayafuram FCS, Ampara



Photo 4.3.12 Handing over Materials for Fishing Gears, Veloor FCS, Trincomalee

➤ Cast nets (Hijra Nagar)

- All the 20 beneficiaries are utilizing the cast nets every day. The recovery of the leasing fee started soon after the provision of the nets. As of June 2007, 19 out of 20 beneficiaries completed the repayment of the loan. Usually, a cast net is durable only for 4-5 months. Therefore, the beneficiaries purchased new nets by themselves and continue fishing. See the box for the case study of a beneficiary of cast nets.

Case study

Mr. P.M.Jarook is a self-employed small-scale fisherman living on daily cash income. He was provided with a cast net by JICA Project, utilizing it everyday from 4AM to 11AM, and sells the catch to the venders who come near the lagoon. He obtains revenue of Rs 600-1,200 daily. He is satisfied that he became able to restart fishing with the assistance of the Project. He is making the payment of the leasing fee (Rs 100 per week) to the FCS as scheduled.



• Material for a beach-seine net (Hijra Nagar)

- FCS made a beach-seine net using materials provided by the project with their own cost of Rs 90,000 for the mending. This was delayed from the initial schedule due to reorganization of the FCS to solve conflicts among members.

- Reorganized FCS changed their activity plan about beach seine. FCS plans to purchase another type of canoe with its own funds to start the operation.
- Lockers and a fish handling shed (Hijra Nagar)
 - 14 lockers and a fish handling shed were constructed as scheduled. However, they were underutilized at the initial stage, as the FRP boats, which were provided to the beneficiaries of the lockers by the Department of Fisheries, were cracked soon after they were delivered.
 - In September 2006, only two beneficiaries used the lockers, as other beneficiaries were not in a position to start fishing without a boat. Later on, as the financial situations of the beneficiaries gradually improved, more beneficiaries started fishing using the rental boats. Currently, all at the 14 lockers are utilized during the fishing season at Hidiyafuram beach (August to March). The collection of the fees for the lockers has not started yet, as the beneficiaries are still having financial difficulties by fishing with rented boats.
 - The fish handling shed is used more frequently by beneficiaries to sell their catch and mend the fishing nets, as more beneficiaries have started fishing.
 - As a result, although there were several problems, the majority of the beneficiaries have restarted fishing activities by utilizing the equipment provided by the project.



Photo 4.3.13. Fish Handling Shed



Photo 4.3.14. Lockers

- Gill nets (Iqbal Nagar)
 - In December 2005, 29 out of 31 gill nets were mounted and ready to be used. However, in January 2006, all fishers were asked to register their boats to MFAR and the Navy due to the tensed security situation in the area. In February 2006, the beneficiaries were in the process of obtaining the permission and the pass, and are temporary away from the fishing operation.

- Due to security reasons, fishing was banned in 2006. In 2007, fishing was restarted, though it has been restricted from 7 AM to 5 PM, for 4 days a week.
- As for the Moslem group, among 14 gill nets provided by the Project, 7 have been utilized as of June 2007. As for the rest of the nets, many were stolen in August 2006, when the security situation in the area worsened. As a fishing ban was declared very suddenly, the fishermen in the area could not collect the gill nets they had set in the sea. One of the beneficiaries of the gill nets was killed by terrorists. All 14 beneficiaries of the gill nets have repaid the monthly amount of Rs 1,500 in November 2005. The repaid amount is saved in the bank account of the FCS. After that, the payment was suspended, as the beneficiaries were in financial difficulty due to the above-mentioned fishing ban and restrictions.
- As for the Tamil group, the beneficiaries repaid the loan for the gill nets for two months during the fishing season in 2006. Every beneficiary paid Rs 1,700 per month. The repaid money is saved in the account of FCS. However, the payment was stopped due to the same reason as mentioned above for the case of the Moslem group. As of June 2007, the FCS Tamil group was not functioning, as some members were displaced to India, and some gave up fishing and working as laborers due to the fishing restrictions. Monthly meetings have not been held for the last several months. Among the 17 gill nets provided by the Project, 10 are utilized while the rest were either stolen or lost due to the displacement of the owners.
- Access road
 - Construction of the access road between the JSFV and the landing site was completed in March 2006. It is expected to be fully utilized when the beneficiaries resettled in the JSFV.



Photo 4.3.15 Access road

3) FCS Training and Collection of Net Leasing Fee

Three trainings on FCS management capacity building were completed (Feb. 06) for both Hidayafuram and Velloor FCS. As a result, Hidayafuram FCS is collecting fees

for lockers and cast nets, and Veloor FCS is collecting fees for gill nets, as mentioned earlier.



Photo 4.3.16 1st FCS Training on Capacity Building, Hidayafuram FCS, Ampara



Photo 4.3.17 1st FCS Training on Capacity Building, Veloor FCS, Trincomalee

4) Comparison of Fisheries Situation

The Table 4.3.14 and 4.3.15 summarize situations before and after the pilot project implementation for each FCS. A activities carried out under the pilot project are highlighted in bold lettering in the right column.

Table 4.3.14 Before and After the Pilot Project for Hidayafuram FCS, Pottuvil

	Before Tsunami	After Tsunami	After implementation of the pilot project
Fishing operation	All members engaged in fisheries and fisheries related businesses in Hidayafuram FCS.	Most of fishers FSC could not go fishing in June 2005.	All the members of the Hidayafuram FCS restarted fishing. 60% of them engaged in lagoon fishing, and 40% of them engaged in sea fishing.
Number of FRP boats	DFEO reported that 16 FRP boat, 13 mechanized canoe, and 62 non- mechanized canoe were in the Hidayafuram FCS.	All FRP boats were destroyed due to tsunami.	29 FRP boats were operated at the beach on Hidayafuram (Feb. 06).
Fisheries facilities	Boat owners kept their outboard motors and fishing gears in their houses or huts along the beach. Some huts were also used for storing catches.	All fishers houses and huts along the beach were destroyed. There is no place to keep outboard motors or to handle fish at the beach.	<ul style="list-style-type: none"> • Lockers were constructed for providing safety storage of outboard motors and fishing gears. 14 lockers are used. • A fish handling shed also was constructed for recovering landing condition at the beach. It is used by the members of the FCS for selling the catch and mending nets.

	Before Tsunami	After Tsunami	After implementation of the pilot project
Fishing gears	91 boat owners had fishing gears such as gill nets, long line and cast nets. Some fishers conducted cast net fishing without boats.	Fishers lost all fishing gears. Though Sewa Lanka has provided 50 cast nets during the pilot project, majority fishers in FCS did not have nets. Fishers are still short of gears.	<ul style="list-style-type: none"> • A beach seine and cast nets were provided for fishers to restart fishing activities. • 20 cast nets were provided and all the beneficiaries are utilizing the nets every day. It brings them the revenue of Rs 600-1,200 daily.
FCS activities	FCS held monthly meeting every last Friday of the month. FCS also had been running eco-tourism and mangrove nursery business as a source of income.	FCS activities were suspended and no monthly meeting was held. The members split to get more tsunami aids.	<ul style="list-style-type: none"> • Trainings were carried out to enhance their FCS management capacity. Fishers re-elected the Committee members and reunite FCS. • FCS collected the leasing fees for the cast nets.

Source: JICA Project Team

Table 4.3.15 Before and after the Pilot Project for Veloor FCS, Trincomalee

	Before Tsunami	After Tsunami	After implementation of the pilot project
Fishing operation	All members engaged in fisheries and fisheries related businesses in Veloor FCS.	Only some fishers went to fishing by use of 6 FRP boats.	All members of Veloor FCS restarted fishing in October 2005. However, in 2006, fishing in the area was banned by the Navy. In 2007, fishing was allowed only 4 days a week and in daytime.
Number of FRP boats	31 FRP boats operated in Veloor villages.	All FRP boats were destroyed except 6.	Any FRP boat was not provided by the pilot project. Many NOGs provided the FRP boats to Veloor FCS and there were 75 FRP boats in Veloor village in October 2005.
Fisheries facilities	Boat owners kept their outboard motors and fishing gears in their houses or huts along the beach. Some huts were also used for storing catches.	Fishers restarted their fishing operation at Veloor, and keep their equipment in deserted houses. Some fishers rebuilt the huts by themselves for selling fish.	The access road by JSFV was built for smooth transportation between the JSFV and landing sites in Veloor (Mar. 06).
Fishing gears	Those boat owners had fishing gears such as gill nets and long line	Some boat owners are not able to operate fully due to the lack of fishing nets. Their catch is low although they use hooks and lines.	<p>Gill nets were provided to boat owners through FCS (Nov. 05) for recovering fishing activities. Moslem FCS utilized the nets and paid the first repayment in 2005.</p> <p>Tamil FCS utilized the nets and paid the first and second repayment in 2006.</p>
FCS activities	No specific activities have been done as FCS. The Veloor FCS divided into two groups internally, i.e. Moslem group and Tamil group. Tamil group was eager to establish their own FCS.	Moslem group started to hold monthly meeting. Tamil group had no specific activity. Some NGOs support FCS for recover tsunami damages.	Management capacity of FCSs were strengthened through the trainings carried out by the pilot project. Both Moslem and Tamil FCSs started to hold monthly meeting regularly, and shares and membership fees were collected. Both FCSs plan to continue the project activities for a benefit of members. However, the function of the Tamil FCS was suspended due to the displacement of the members.

Source: JICA Project Team

4.3.4 Disaster Management

(1) Objectives and Components

The Kalmunai municipality was one of the most severely affected cities in Sri Lanka by the tsunami. Through the miserable experience, local community people in Kalmunai understood that they had limited knowledge and needed countermeasures for disaster management and mitigation.

On the basis of the local needs, a pilot project on strengthening capacity development for disaster management was planned to be implemented in Kalmunai Municipality.

The main objectives of the pilot project are:

- To establish and strengthen disaster management system in the community-level
- To formulate a community disaster management plan, and
- To train community people for disaster management.

The pilot area is Periya Neelavanai area in Kalmunai which was selected by local stakeholders and the JPT in the Kalmunai Township Redevelopment (KTR) meeting in consideration of socio-cultural aspects. The profile of the area is shown in the table below.

Table 4.3.16 Population and Death Toll by the Tsunami in the Pilot Area

Division	Moslem Div. 1	Moslem Div. 2	Moslem/Tamil Div.
No. of households	496	378	723 (436/287)
No. of dead by the tsunami	12	272	159

Source: GNs

Main beneficiaries in the pilot area are:

- Community people in the above three (3) Divisions
- Primary students of the Pulavarmani Sarfdeen Vidyalaya School (Total number of students is 312 and the number of deaths by the tsunami among the students was 80.)



Figure 4.3.7 Map of Pilot Project Area: Periya Neelavanai in Kalmunai

(2) Achievement

The pilot project was partly implemented through local participation including community people, CBO members and stakeholders under the supervision of a NGO and the JPT.

The following programme was planned to be conducted by the end of February 2006. However, the programme was not carried out and the implementation was postponed due to security reasons in Kalmunai.

- Workshops on preparation of a community disaster management plan
- Model activities on awareness campaign for disaster management to primary school students including installation of evacuation board and facilities.



Photo 4.3.18 First workshop to discuss disaster issues in October 2005



Photo 4.3.19 Evacuation Panel (sample)



Photo 4.3.20 Primary School Students who Participate in the Programme



Photo 4.3.21 The tsunami Picture Painted by a Primary School Student

4.4 Preparation for Resettlement

4.4.1 Consensus Building

(1) Beneficiaries' General Meetings

- The First Beneficiaries' General Meeting in Hijra Nagar (August 2006)

The First Beneficiaries' General Meeting was held in Hijra Nagar for four days from July 31 to August 3, 2006. A total of 195 beneficiaries participated in the meeting. The main objectives of the meetings were to inform the beneficiaries of the progress of the Project and the revised schedule for resettlement. The meetings were also utilized to create awareness among the beneficiaries of their responsibility in operation and maintenance (O&M) of the common facilities in the JSFV. During the meetings, the beneficiaries obtained opportunities to express their opinions and questions with regard to the settlement. The meetings were held with active participation of the beneficiaries as per indicated in the table below. It was remarkable that the Divisional Secretary's office, GN and the members of the RDS committee were actively involved in organizing the meetings.



Photo 4.4.1 Beneficiaries' Meetings (1)



Photo 4.4.2 Beneficiaries' Meetings (2)

- The First Beneficiaries' General Meeting in Iqbal Nagar (June 2007)

After the security situation was improved, the First Beneficiaries' Meeting in Iqbal Nagar was held on June 9, 2007. A total of 155 beneficiaries participated in the meeting. Representatives from NHDA, NWSDB, Pradeshiya Sabha, Divisional Secretary's Office and Ministry of Housing also participated in the meeting. The project coordinator of the Ministry of Housing delivered a message to the beneficiaries on topics such as limited ownership of the houses, maintenance of the houses, limited provision of water, O&M of the common facilities, etc. The beneficiaries were provided with information sheets and the instructions on settlement.

- The Second Beneficiaries' Meeting in Hijra Nagar (July 2007)

The second beneficiaries' meeting was held in Hijra Nagar on July 7, 2007. The number of beneficiaries who participated in the meeting was 184. Representatives from NHDA and GN in the region also participated in the meeting. The beneficiaries in Hijra Nagar were provided with instructions for resettlement and information sheets. A proposal on rules and regulations for the water supply system was explained by the chairman of RDS and approved by the beneficiaries.



Photo 4.4.3 Moving to participate in the beneficiaries' general meeting



Photo 4.4.4 Beneficiaries are carefully listening to instructions

(2) Progress Review Meetings with Stakeholders

The JPT facilitated a series of Progress Review Meetings with the participation of RDS, NHDA, CECB (a contractor of the JSFV), Pradeshiya Sabha, Divisional Secretary's Office and JICS. The objectives of the meetings were to find solutions and build consensus on the various issues with regard to the resettlement and to share information on the progress of construction and the timing for resettlement. Roles and

responsibilities for the operation and maintenance of the common facilities and infrastructure were also discussed and agreed upon in the meetings. As a result, the beneficiaries were well informed of the matters pertaining to the resettlement and provided with the opportunities to express their opinions. In Hijra Nagar, the progress review meetings were held two times, on February 6, 2007 and May 14, 2007. In Iqbal Nagar, the meetings were held three times, on March 29, 2006, April 17, 2007, and May 17, 2007.

4.4.2 O&M of Related Facilities

(1) Demarcation between Government and Community

The JPT facilitated discussion for getting consensus between the RDS Committee members and the representatives of the public sector organizations on the roles and responsibilities on O&M of the common facilities and infrastructure in JSFVs through the progress review meetings and the beneficiaries' general meetings. The demarcation of the O&M responsibilities were finally agreed upon by the representatives of the respective Divisional Secretary's Office, Pradeshiya Sabha, NHDA and RDSs as attached in Appendix 4.

(2) Workshop with Government Officers

“A workshop with government officers” was held on 4 September, 2006 in Pottuvil, near Hijra Nagar JSFV. Twenty three government officers, including the Divisional Secretary (DS), Additional DS, Public Health Inspector (PHI), 10 GNs, and 31 community members, including the members of the RDS committee and the subject-wise committee and leaders of the Women's Bank attended the meeting.



Photo 4.4.5 Workshop with Government Officers

The community leaders and the government officers had dialogue on how they could contribute to the O&M of the JSFV. For example, the community leaders and the PHI discussed how to organize mobile clinics in the JSFV. The workshop provided the community leaders and government officers, a valuable opportunity to start planning self-help activities after the resettlement. Due to the unstable security situation, workshop was not organized in

Iqbal Nagar.

(3) O&M of the Infrastructure and Common Facilities, especially Water Supply

The RDSs are in the process of undertaking responsibilities of the O&M of the common facilities of the JSFVs. In both Hijra Nagar and Iqbal Nagar, the beneficiaries are starting to undertake the O&M of the common facilities. The O&M of the water supply system is arranged as follows:

- Iqbal Nagar

Water is supplied by the NWSDB to each household in the JSFV. However, the quantity of the water will only be sufficient for the drinking use until the capacity of NWSDB main-line water pipeline is increased in 2009. The beneficiaries showed understanding to the limitation, and agreed to use the bathing facility to be constructed in the JSFV for domestic use. They also agreed to take the responsibility of O&M of the bathing facility by collecting user fees, making payment for the fuel for motor and carrying out minor repairs.

- Hijra Nagar

Water for domestic use will be supplied from a well outside of the JSFV to each household in Hijra Nagar, and this community water supply scheme will be utilized until it will be connected to the main supply system of the NWSDB in 2008. The RDS agreed on this arrangement and will undertake the responsibility of O&M by collecting tariff from households and making payment for the necessary expenses, such as costs of running electric pump and minor repairs. A Water Supply Division was established in the RDS, and members were selected to undertake various works for O&M of the scheme. A workshop and necessary training were conducted for the representatives of the beneficiaries. Until the system will be connected to NWSDB main system, the water for drinking will be supplied by Pradeshiya Sabha by water bowsers, as the quality of the water to be supplied to each household is not suitable.

(4) Financial Plan of the Water Supply

A financial plan of the water supply system is prepared under the following conditions to confirm the financial soundness of the water supply system.

- Iqbal Nagar

For the management of the public bathing facilities, it is recommended to collect a fixed amount from each household. Assuming that each house uses 100 l/day for bathing purposes, electricity cost for pumping is estimated at Rp 5,400. If RDS

collects Rp 30 per household, revenue is Rp 7,380 per month that covers the cost of electricity and minor repairs.

Table 4.4.1 Iqbal Nagar Water Supply O&M Cost Estimation

Revenue			Expenses		
No.	Item	Rp	No.	Item	Rp
1	Water fee Rp 30 from each household	7,380	1	Electricity	5,400
			2	Other purposes (minor repairs)	1,980
	Total	7,380		Total	7,380

Source: JICA Project Team

- Hijra Nagar

Hijra Nagar sets the water tariff as presented below through the operation and maintenance training in June 2007.

Table 4.4.2 Hijra Nagar Water Tariff Structure

No.	Item	Rp.
1	Refundable deposit	750
2	Monthly fixed charge	100
3	Water tariff (volume of consumption per month)	
	0 ~ 10 m ³	5 Rp./m ³
	11 ~ 15 m ³	7 Rp./m ³
	16 m ³ ~	10 Rp./m ³

Source: JICA Project Team

Assuming that one family consists of 5 persons and per capita consumption is 100 liters per day as shown in the NWSDB guideline, each family pays Rp 185 per month and total revenue is Rp 37,000. Electricity cost is estimated at Rp 21,720 per month and the remaining amount of Rp 15,280 can be allocated to personnel expenses, minor repair, and deposit and others.

Table 4.4.3 Hijra Nagar Water Supply O&M Cost Estimation

Revenue			Expenses		
No.	Item	Rp.	No.	Item	Rp.
1	Water fee 185 Rp. from each household	37,000	1	Electricity	21,720
			2	Other purposes (personnel expenses and minor repairs)	15,280
	Total	37,000		Total	37,000

Source: JICA Project Team

4.4.3 O&M Training of Water Supply System

Due to its complicacy as well as importance, the O&M trainings of the water supply system were conducted for the RDS of Hijra Nagar JSFV, while for Iqbal Nagar it was not arranged since the water-related O&M responsibility is limited to rather simple, public bathing facility.

(1) Basic Training for Water Supply System Management

A basic training of the water supply system management was held for three days (June 18 - 20, 2007) for the selected members of Hijra Nagar RDS. It was arranged by JPT with the collaboration of NWSDB Ampara office who prepared the curriculum and the lecturers. The curriculum was as follows.

Table 4.4.4 Curriculum of Basic Training for Hijra Nagar Water Supply System Management

Day	Subjects
1 st (June 18)	Current water supply situations (in Sri Lanka, Ampara District, and Pottuvil area)
	Basics of O&M (water source, pumps, storage tank and distribution system)
2 nd (June 19)	Examples of community-managed water system O&M
	Waterborne infectious diseases and their prevention
	Necessities and roles of water management committee
3 rd (June 20)	Basics for water bill issuance and fee collections
	Setting of the water fee appropriate for Hijra Nagar JSFV
	Preliminary selection of RDS Water Division members
	Basics for bookkeeping and accounting
	Basics for water treatment

Source: JICA Project Team

Through this session, the preliminary selection of the RDS Water Division members consist of 7 people including one professional plumber was made.

(2) Technical Training for Water Supply System

Technical training was conducted on September 6, 2007 in order to learn practical knowledge and skills on the operation, maintenance and minor repairing works for the community water supply system of JSFV. Eight (8) persons including the RDS leader and 2 persons from neighboring villages participated in the technical training.

In the morning session, NWSDB explained water meter reading, water fee calculation, preparation of bill, water fee adjustment method, and settlement of dispute and claims from household using NWSDB manuals. After the lectures, the participants carried

out the water meter reading under the NWSDB supervision. In the afternoon session, NWSDB gave lectures about pipe repairing methods showing the pipes and fittings samples. Afterward, the participants went to the pipe repairing site to understand how to actually do the repairs.

The training programme deepened the participants' knowledge about water supply facilities operation and maintenance methods and enhanced their sense of responsibilities.

4.4.4 Resettlement of Beneficiaries

The JPT facilitated resettlement as soon as the houses and water supply system became ready to use without waiting for the completion of construction of the JSFV, because of the following reasons:

- The construction of the JSFV was delayed for around 10 months mainly due to security reasons. The majority of beneficiaries were forced to stay in temporary huts for more than two and half years. They were very keen to resettle in the houses without any delay.
- When the construction of the houses is nearly completed, the rest of the work such as electrical connections and final finishing can be done while beneficiaries are occupying the houses.
- The staff of NHDA left the site at the end of July 2007 when the contract period was over, weakening the security at the site. It was considered preferable for the houses to be handed over and occupied by the beneficiaries as soon as possible, rather than keeping them empty, so that thefts of electrical fittings, water and electricity meters, windows and door materials, etc. would be prevented.

For the resettlement, door keys with the following documents were handed over to the beneficiaries:

- A settlement permit signed by the District Secretary and the District Manager of NHDA
- An inventory of the interior fittings of the house
- A layout plan of the water supply pipeline and electrical wiring
- A letter of the NHDA District Manager (instructions for beneficiaries)
- A letter of JPT with the household survey sheet to be carried out after resettlement

It was indicated in the settlement permit and the letter of NHDA that the ownership of the houses will be kept with NHDA in keeping with the policy guideline set by the Japanese Government. The documents prohibit the beneficiaries from selling,

mortgaging, transferring or leasing the property during this period.

1) Resettlement in Iqbal Nagar JSFV

Handing over of the documents and keys started from August 1, 2007. Within a week, all the beneficiaries except those who were displaced to India and other districts of Sri Lanka received the documents and the keys. Most of the beneficiaries moved to JSFV as soon as they got keys. By the beginning of October 2007, all beneficiaries who received the keys settled into JSFV.

It seems that the beneficiaries were delighted to move into the new houses after surviving for two and half years in welfare camps, temporary shelters and temporary accommodations. As soon as the beneficiaries moved in, some started cottage businesses by opening grocery shops in the houses, others bought potted plants for gardening, and children started playing cricket and volleyball happily in the playground.



Photo 4.4.6 District Secretary handing over settlement permit



Photo 4.4.7 Cleaning before settlement



Photo 4.4.8 A grocery shop in a house



Photo 4.4.9 Playing cricket in the playground

The beneficiaries had a hard time in the first month after resettlement, as the water supply system was not functioning due to a sudden breakdown in the main pipeline as well as several defects in the distribution lines. As an alternative measure, the contractor of JSFV supplied water by bowsers. However, the quantity of water supplied by the contractor was not sufficient. There was not enough water in the common bathrooms either, as the contractor had a limited budget for buying diesel for the water pumps in them. The situation improved in the fourth week of August, when electricity was supplied to the water pumps in the bathrooms. Finally, repairs of the main line as well as distribution lines were completed in the first week of September 2007, and the water supply system became functional.

However, for the first two and half months, there was no electricity supply to the houses and common facilities, as electricity meters were not installed. During that period, electric meters were out of stock in Sri Lanka. By the end of September the installation of the electricity meters started.

2) Resettlement in Hijra Nagar JSFV

In August 2007, 33 households in the 200 beneficiaries list in Hijra Nagar JSFV were reported to be ineligible by the police station in Pottuvil. As a result, the NDHA did not allow them to settle in JSFV until they establish eligibility by an investigation of Government Agent, Ampara.

Due to this problem, handing over of the documents and keys started from September 4, 2007 and within a week, all the beneficiaries except 33 households whose eligibility was questioned, received the documents and keys.

The beneficiaries in Hijra Nagar JSFV did not have any problems with the water supply. However, as in Iqbal Nagar, they did not have electricity supply to the houses and common facilities, except the pump house for water supply until the last week of September when the electricity meters arrived and were fixed.

Only 14 households settled in JSFV one week after the keys and documents were handed over. By the beginning of October, street lights in the JSFV were functioning and all 167 households moved into JSFV, except 33 households questioned for their eligibility.

At October 5, 2007, the Government Agent of Ampara finally made a visit to Pottuvil and announced the investigation results that prove 28 of those 33 households are fully eligible and remaining 5 households are tentatively eligible and allowed to resettle

with a condition if their eligibility cannot be finally proven they have to vacate the premises. A few days after this announcement, the remaining keys and documents were handed over to those 33 households.



Photo 4.4.10 A Moslem family settled into Hijra Nagar JSFV



Photo 4.4.11 Large trees were preserved in Hijra Nagar JSFV

4.4.5 Results of Household Survey Conducted after Resettlement

After about a month from the date the resettlement was started, a simple household survey was conducted for both Iqbal Nagar and Hijra Nagar JSFV. For Iqbal Nagar, it was conducted in the first half of September, and for Hijra Nagar in the first half of October, 2007. The questionnaire used for this survey is attached as Appendix 5.

The objectives to conduct this survey are to grasp the beneficiary's first hand impression of the JSFV after they have finally moved in, as well as to listen to their words on the course to present and the paths to go, with regard to their lives in JSFV.

(1) Sampled Households

Table 4.4.5 Sampled Households

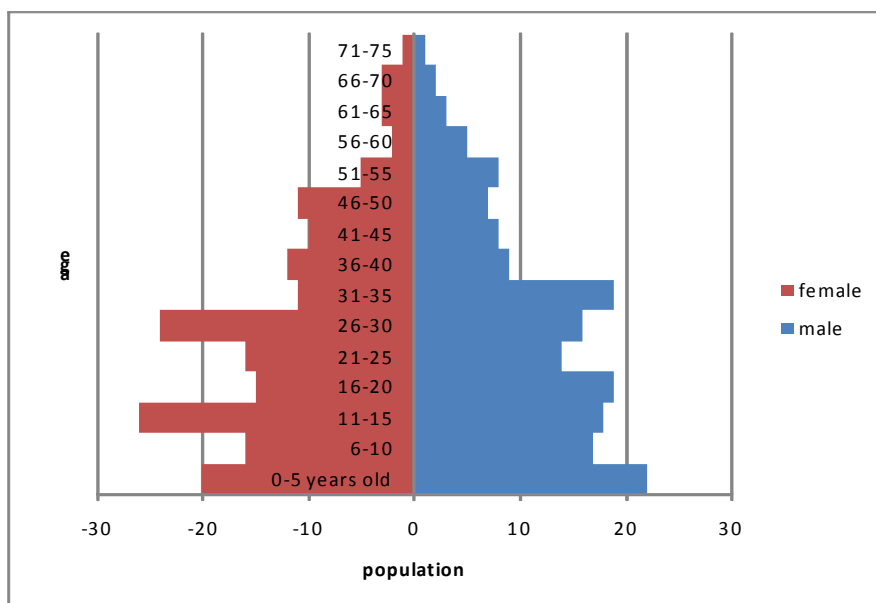
	Iqbal Nagar JSFV		Hijra Nagar JSFV	
	Households	Family members	Households	Family members
Tamil	97	346	19	84
Moslem	110	453	143	626
Total	207	799	162	710

Source: JICA Project Team

For Iqbal Nagar, at the time of the survey 97 out of total 136 Tamil households were surveyed since not a small number of Tamil households were temporarily displaced to India or to other parts of Sri Lanka, or not yet moved into the houses allocated to them, while all Moslem households were surveyed. For Hijra Nagar, 162 out of total 200 households were accessible at the time of the survey, with 33 households waiting for

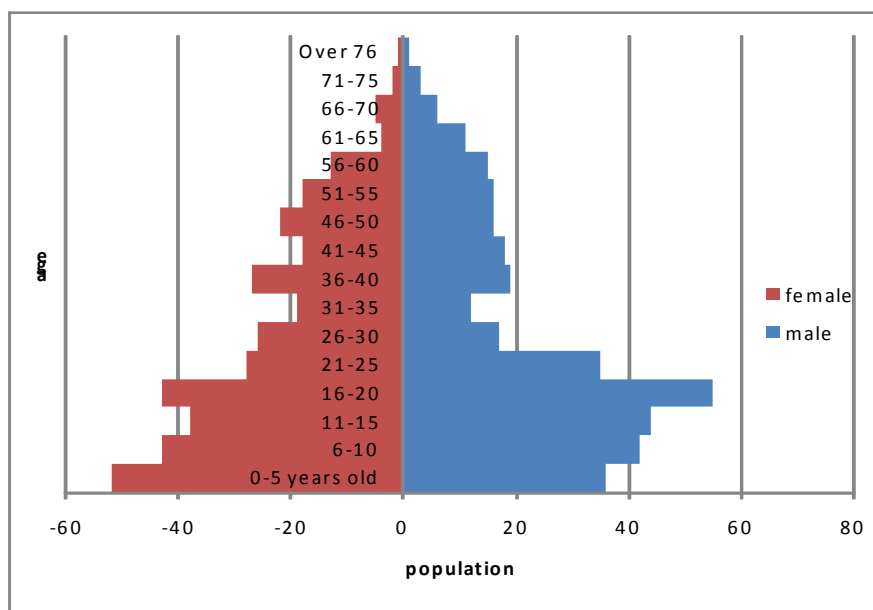
the investigation to ascertain their eligibility as explained above, and 5 were not settled due to personal reasons.

The total numbers of family members of the sampled households were 799 in Iqbal Nagar and 710 in Hijra Nagar, respectively. The average numbers of family members were 3.9 in Iqbal Nagar and 4.4 in Hijra Nagar. As for the age distribution of population, infants, children and young adults consist of the majority in both locations, as shown in following figures.



Source: JICA Project Team

Figure 4.4.1 Age Group Distribution of Sampled Population (Iqbal Nagar)



Source: JICA Project Team

Figure 4.4.2 Age Group Distribution of Sampled Population (Hijra Nagar)

(2) Locations Stayed before and after Tsunami

Table 4.4.6 Location Stayed Before Tsunami (Iqbal Nagar)

Locations Stayed	%
Veloor, Nilaveli	93.1%
Iqbal Nagar, Nilaveli	5.4%
Other	1.5%
Total	100%

Source: JICA Project Team

For Iqbal Nagar, most of the residents were living in the same village before tsunami and knew each other. This might have contributed to the smooth communication among them as well as for the decision making in various occasions. 98.5% of the houses they resided before the tsunami were privately owned by family members.

Table 4.4.7 Location Stayed Before Tsunami (Hijra Nagar)

Location Stayed	%
Jaldeenpuram P4	34.6%
Hithayapuram P 21	12.3%
Hithayapuram P 20	8.0%
Muthuranchenai P 3	7.4%
Selvanayagapuram P 20	5.6%
Sinnapputhikkudiyappu P 6	5.6%
Kottukkal P 20	3.7%
Other	22.8%
Total	100.0%

Source: JICA Project Team

For Hijra Nagar, the residents lived various different places before Tsunami, and did not know each other. This factor along with the frequent revisions of the beneficiaries' list, made it difficult for the Project Team to facilitate smooth communication and create a unity among them. 88.9% of the houses people lived in before the tsunami were privately owned by family members.

Table 4.4.8 Location Stayed after Tsunami

Locations Stayed	Iqbal Nagar (%)	Hijra Nagar (%)
Welfare camp/Temporary hut/Tent	93.2%	50.6%
Relative's or friend's house,	1.0%	42.6%
Family member's house	5.8%	6.8%
Total	100%	100%

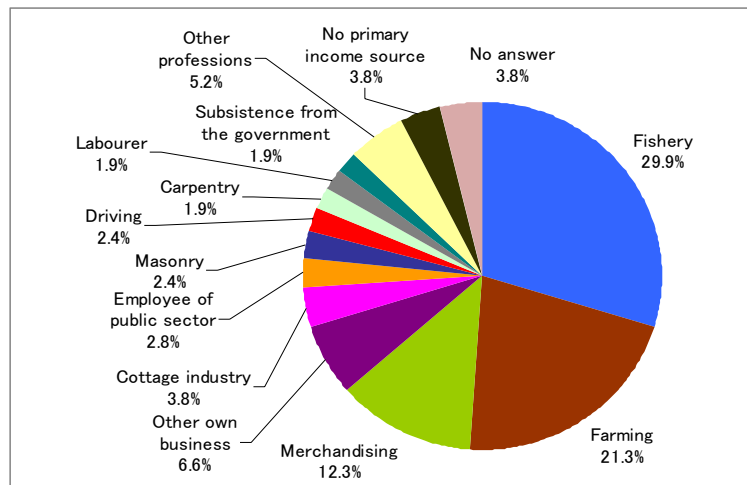
Source: JICA Project Team

For Iqbal Nagar, most of the residents lived in emergency housing such as welfare camps, temporary huts or tents. In contrast, for Hijra Nagar half of the residents lived in such emergency accommodations, while another half lived at their relatives' or friend's house and at their family member's house.

(3) Occupations and Income

The figure below depicts the current "primary" income sources of the residents in Iqbal Nagar JSFV. Although diverse, the major income sources are fishery and farming. For the question on whether the present income increased or decreased compared

before tsunami, 74% answered it was decreased, while 22% answered unchanged. For the reasons of their income decrease, major reasons they explained are fishing restriction (33%), security reasons (20%), and no finance scheme available (18%).

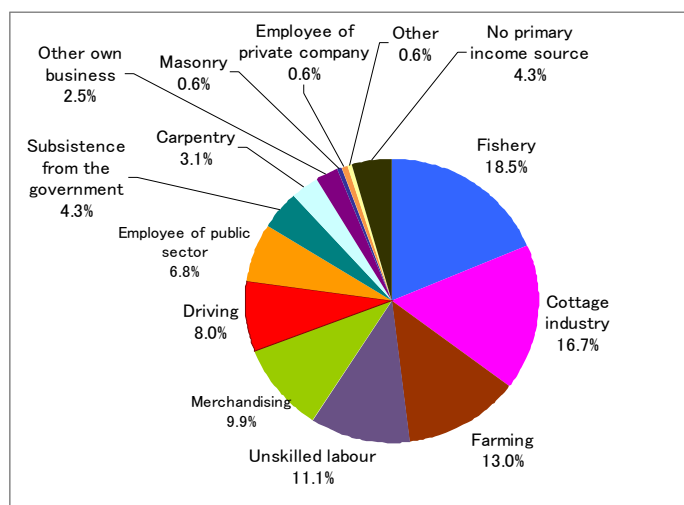


Source: JICA Project Team

Figure 4.4.3 Current Primary Income Source (Iqbal Nagar)

For the Iqbal Nagar residents, security-related reasons (fishery restriction is imposed by for military purpose) are overwhelming the tsunami damage (e.g. loss of property or assets to put for collateral or for production), for their income recovery.

The income sources of the Hijra Nagar residents are diverse as in Iqbal Nagar, with some differences in their compositions. To the question on their present income compared with that of before tsunami period, 46.3% answered it was decreased, while 32.1% answered unchanged and 2.5% answered increased. The major reason of the income decrease was less employment opportunities (19.1%).



Source: JICA Project Team

Figure 4.4.4. Current Primary Income Source (Hijra Nagar)

(4) Participation to JSFV-related and Pilot Project Activities

Table 4.4.9 Participation to JSFV-related and Pilot Project Activities

Items of Participation	Iqbal Nagar (%)	Hijra Nagar (%)
Communication of JSFV-related information (construction, housing types and facilities, etc.) were sufficient	94.7%	85.2%
Attendance to the meetings/workshops/trainings: yes	93.2%	70.4%
Opportunities to express the opinions with regard to JSFV: yes	70.0%	71.6%
Acceptance of opinions expressed by beneficiary on design of houses, quality, facility, etc.: yes	77.8%	71.0%
JSFV construction (as laborer or watcher): yes	25.0%	4.3%
Cement Block making : yes	16.0%	-

Source: JICA Project Team

- Iqbal Nagar

As shown in the above table, the reach of the information was sufficient among beneficiaries in Iqbal Nagar. This is also considered due to their relationships as village neighbors prior to the tsunami. Attendance of the JSFV or Pilot Project-related activities is also high, and in such occasions chances to express their opinions were provided, and the majority considers that their opinions were accepted.

25% (55 persons) had worked at the JSFV construction site. Especially for Tamil beneficiaries, it was one of the few income opportunities when the security situation was deteriorated in 2006 and restricted their traveling beyond the checkpoints. For the cement block making, 16% (33 persons) have participated to date. This figure is not high due to various reasons (i.e. security, material, water and power supply problems). The block making activity had been halted until just recently.

- Hijra Nagar

The reach of JSFV-related information, participation to the meetings, and opportunities to express opinions and its acceptance with regard to JSFV are high in Hijra Nagar, although the figures are lower than those of Iqbal Nagar. This is mainly because in Hijra Nagar, some of the residents did not have opportunities to participate in meetings and activities, as they were recently listed as beneficiaries after the changes of the beneficiaries list, while the beneficiaries list of Iqbal Nagar was never revised. The participation to the JSFV construction was limited in Hijra Nagar, due to several reasons as explained earlier. The project of cement block making was not

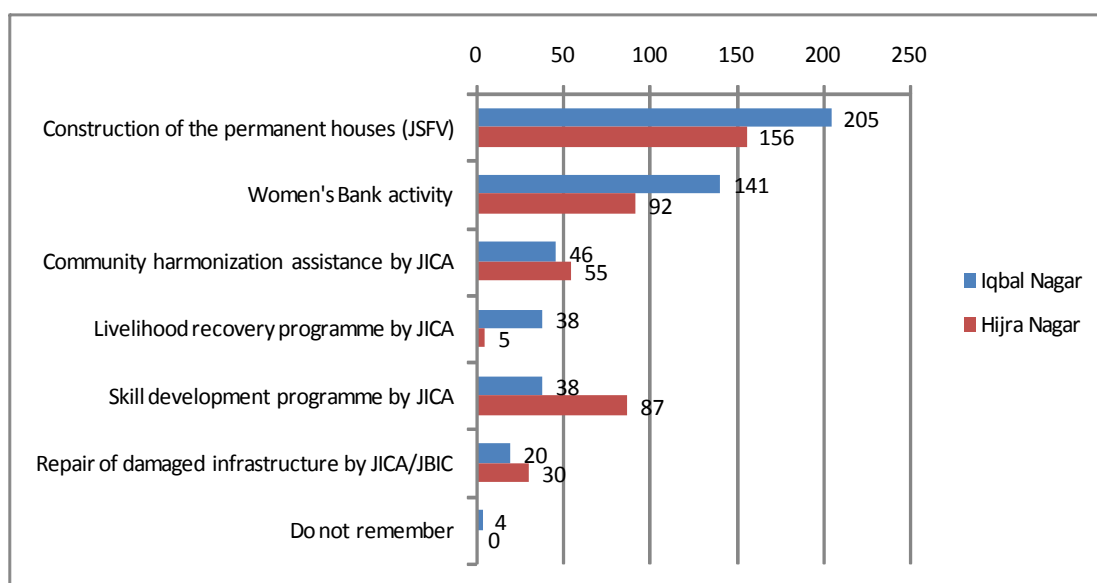
carried out in Hijra Nagar.

(5) Beneficiaries' Evaluation of JSFV

1) On Assurances Provided by Japanese Agencies

The Figure below shows the results of a multiple choice (up to 3 choices) question for beneficiaries' judgment on useful assurances provided by Japanese agencies including JICA. Both in Iqbal Nagar and Hijra Nagar, provision of the permanent houses is highly evaluated as one of the most valued assurances, while Women's Bank activities provided through collaboration between Women's Bank, JICA Ampara Office and JPT was also highly appreciated.

Also notable is that the beneficiaries are appreciating the community harmonization activities (e.g. workshop held in August 2005) carried out by JPT amidst deteriorating security situation in the surrounding area. The skill development programme is highly appreciated by the beneficiaries in Hijra Nagar. The reason why the livelihood recovery programme was relatively less appreciated in Hijra Nagar, is that the number of people benefited is limited.



Source: JICA Project Team

Figure 4.4.5 Most Useful Assurances Provided by Japanese Government

2) On JSFV Scheme (Housing and Common Facilities)

Evaluation of the housing in JSFV compared with the housing the beneficiaries lived in before the tsunami was inquired. The results were approximately 73% of Iqbal

Nagar residents think the housing in JSFV is better or much better than the housing they lived in before the tsunami, while in Hijra Nagar it was 99.4 %.

Table 4.4.10 Housing in JSFV Compared with Housing Beneficiaries Lived Before Tsunami

Items	Iqbal Nagar (%)	Hijra Nagar (%)
House in JSFV is much better	36.7%	97.5%
House in JSFV is better	36.7%	1.9%
The house lived before tsunami is better	13.0%	0.6%
No difference/almost same	9.2%	0.0%
The house lived before tsunami is much better	4.3%	0.0%
Total	100%	100%

Source: JICA Project Team

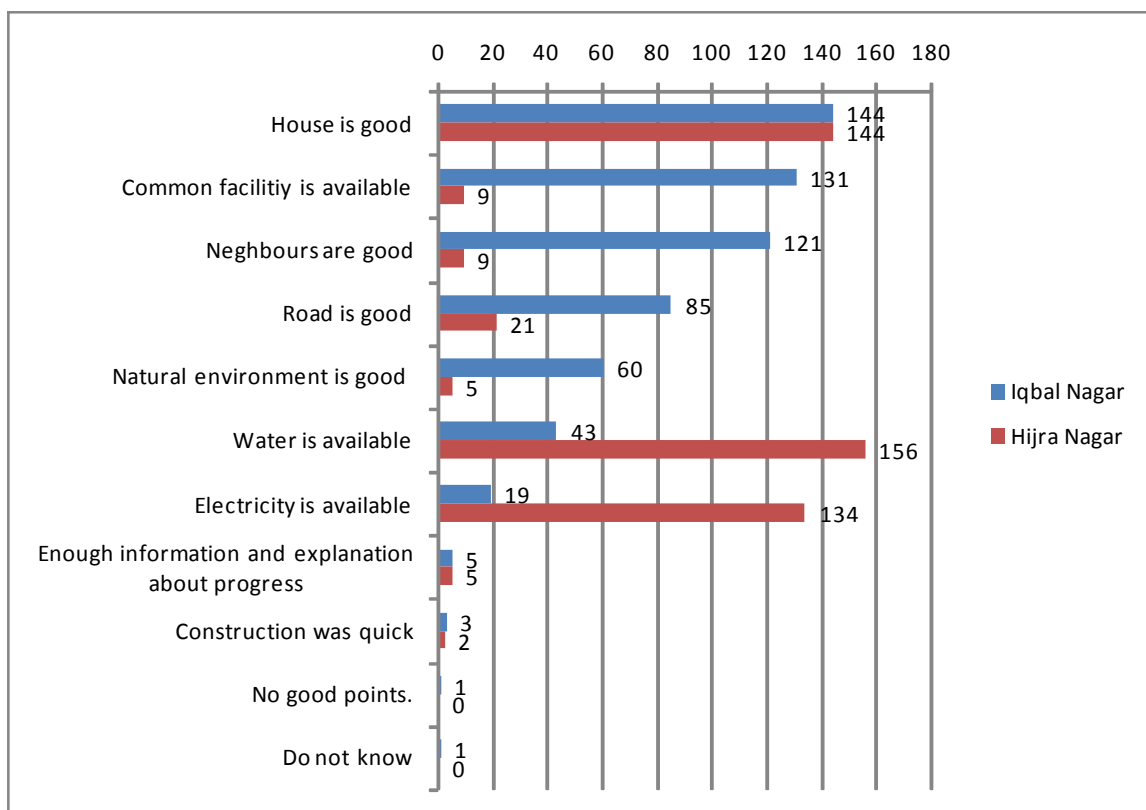
The JSFV housing scheme compared with other schemes implemented for tsunami-affected people was also inquired. As a result, approximately 80% of the Iqbal Nagar respondents answered that JSFV is better or much better, while in Hijra Nagar it was nearly 100%.

Table 4.4.11 Housing in JSFV Compared with Other Tsunami Housing Schemes

Items	Iqbal Nagar (%)	Hijra Nagar (%)
JSFV is much better	46.1%	96.9%
JSFV is better	34.3%	3.1%
No difference/almost same	7.4%	0.0%
Other scheme is better	1.0%	0.0%
Other scheme is much better	0.0%	0.0%
Other	0.5%	0.0%
Do not know	10.7%	0.0%
Total	100%	100%

Source: JICA Project Team

The Figure below shows the results of a multiple choice (up to 3 choices) question for the good points of JSFV in comparison to other schemes implemented for tsunami affected people.



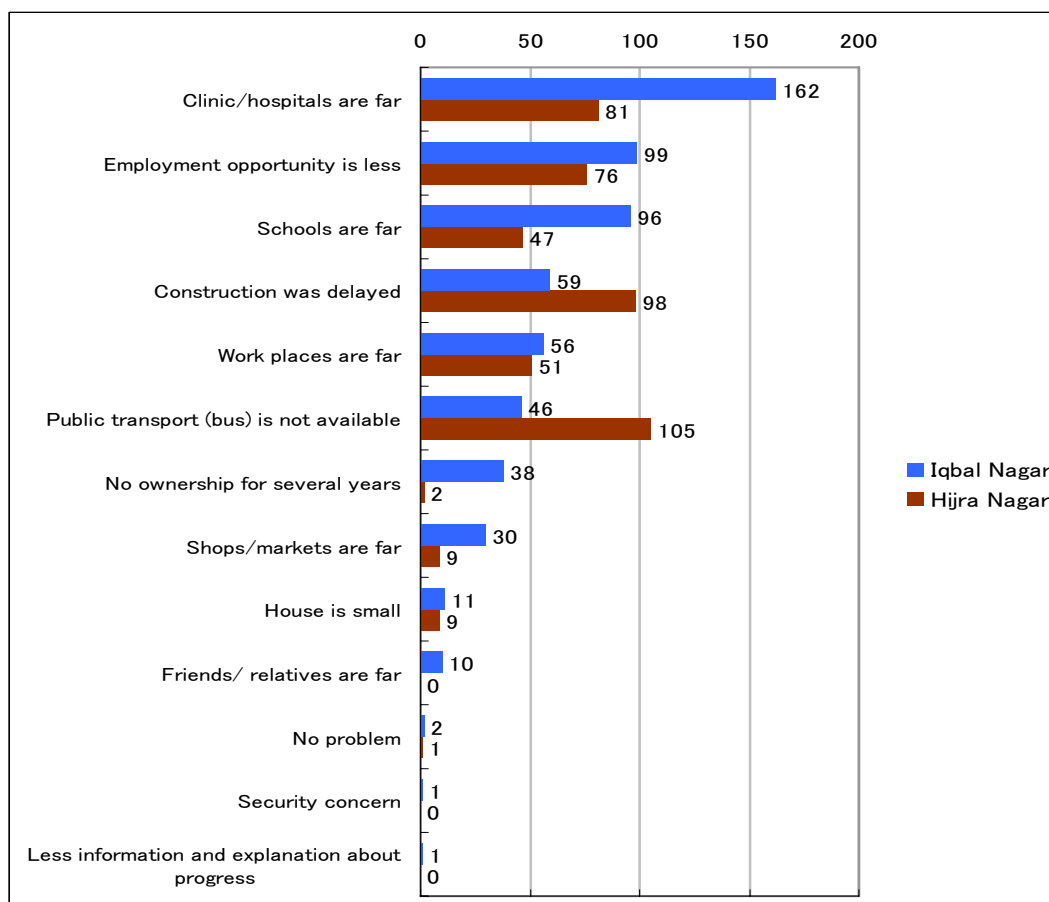
Source: JICA Project Team

Figure 4.4.6 Good Points of JSFV Compared with Other Schemes

For Iqbal Nagar, the results indicate that not just housing quality but also availability of common facilities is appreciated. The good relationship among neighbors is also highly appreciated and this can be credited to the policy adopted in Iqbal Nagar in which JSFV tried as much as possible to resettle the previous village neighbors into it. A few respondents expressed their appreciation for the availability of water and electricity, since at the time of the survey, tap water and electricity supplies were not yet available in Iqbal Nagar JSFV.

For Hijra Nagar, the housing is also rightly appreciated, though the common facility, neighbors, road and natural environment are less appreciated in comparison to Iqbal Nagar. One of the main reasons for these differences may be that before moving into Hijra Nagar those residents lived scattered in suburban areas where relatively better amenities are available with their relatives/friends, while in Iqbal Nagar the majority lived in camps in which the living condition was much harsher. In other words, for Hijra Nagar residents, moving into JSFV meant moving away from towns to rural area, while for Iqbal Nagar residents it meant moving into the town from temporary camps. Since tap water and electricity were properly provided to the beneficiaries in Hijra Nagar at the time of the survey, those utilities were highly appreciated by the beneficiaries.

Contrary to the above, the unsatisfactory points of JSFV compared to other schemes, were also inquired through the multiple choice (up to 3 choices) question.



Source: JICA Project Team

Figure 4.4.7 Unsatisfactory Points of JSFV Compared with Other Schemes

As shown in above figure, many respondents listed that the “distances” to medical facilities, schools, and work places are the unsatisfactory points. Low employment opportunity is also related to this distance issue. The delay of construction was also complained about by the residents of both locations. The beneficiaries in both locations have ideas to organize mobile clinic services in the JSFVs with the collaboration of the Medical Officer of Health in the areas, which will contribute to solve the concern about the distance to the clinic/hospital. The residents in Hijra Nagar JSFV have concerns about the unavailability of public transport services that is also planned to be solved by diverting the public bus route between Pottuvil Town and Akkaraipattu.

An inquiry was made with regard to the two ethnic groups living side by side, and the answers turned out as follows.

Table 4.4.12 Two Ethnic Groups (Moslem and Tamil) Living Together in JSFV

Responses	Iqbal Nagar (%)	Hijra Nagar (%)
Very Good	68.0%	96.9%
Good	30.0%	3.1%
Bad	2.0%	0.0%
Total	100%	100%

Source: JICA Project Team

In Iqbal Nagar, only a fraction (2%) of respondents answered as two ethnic groups living together as “bad,” while the overwhelming majority takes it positively. In Hijra Nagar, all the respondents answered either “very good” or “good” to the question. There is no notable difference between Moslem and Tamil for the answers to this inquiry.

The level of satisfaction in general with JSFV is also inquired and the results turned out as follows.

Table 4.4.13 Level of Satisfaction on JSFV

Response	Iqbal Nagar (%)	Hijra Nagar (%)
Very satisfied	37.2%	83.3%
Satisfied	48.8%	14.8%
Not satisfied	8.2%	0.6%
Not satisfied at all	0.0%	0.0%
No idea	5.8%	1.2%
Total	100%	100%

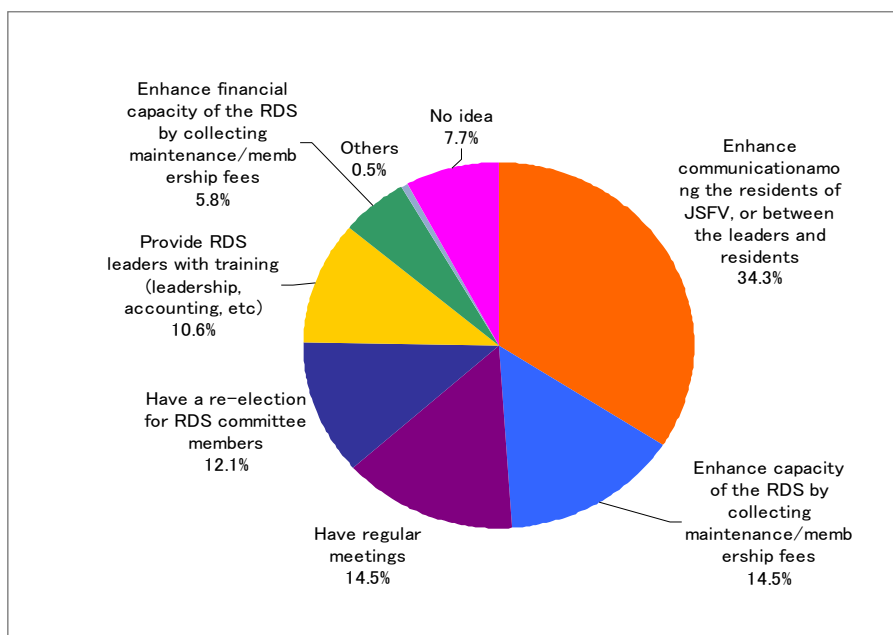
Source: JICA Project Team

86% of the respondents in Iqbal Nagar and 98.1% in Hijra Nagar are satisfied with the housing and facilities of the JSFV. The reason for this difference comes from different quality of houses. Geographical and security situation of Hijra Nagar enabled the contractor to engage qualified sub-contractors, skilled labors and supervisors from neighboring districts which contributed to the better quality of the houses in Hijra Nagar.

3) O&M of JSFV

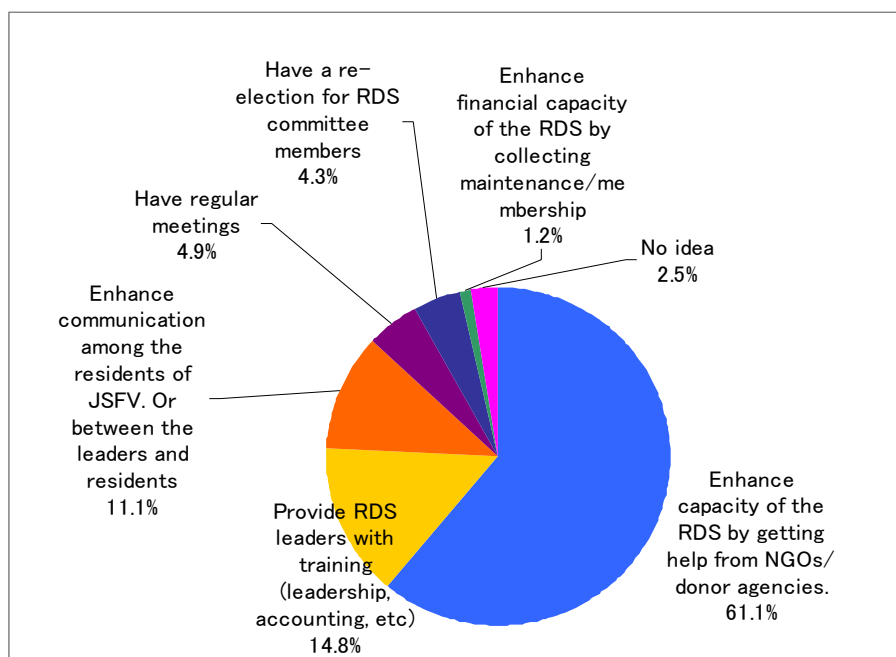
In both locations, approximately 95% of the respondents expressed their willingness to participate into the operation and maintenance activities of JSFVs.

As for the inquiry on what is most important to effectively carry out O&M activities through RDS, the respondents gave various answers, as shown in the following.



Source: JICA Project Team

Figure 4.4.8 Important Aspects to Effectively Carryout O&M Activities (Iqbal Nagar)



Source: JICA Project Team

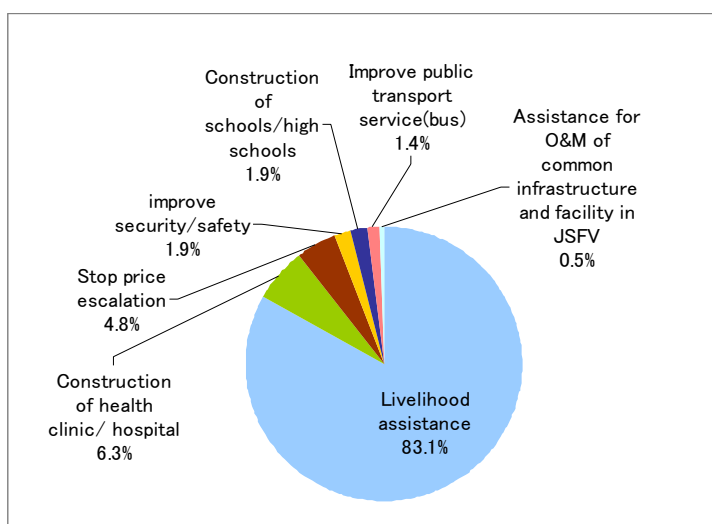
Figure 4.4.9 Important Aspects to Effectively Carryout O&M Activities (Hijra Nagar)

As seen in above figures, the priorities between two JSFVs turned out quite different. While the residents of Iqbal Nagar put a higher priority on “communication among the residents or between leaders and residents,” the majority of the residents in Hijra Nagar feel “getting help from donors/NGOs to enhance capacity” are most important.

This is an interesting difference. The communication in Iqbal Nagar has been better than in Hijra Nagar because the residents of Iqbal Nagar have been the neighbors in villages and in camps before and after the tsunami disaster, while the residents in Hijra Nagar were mostly from different neighborhoods and therefore their communication have been less in comparison to Iqbal Nagar. An inference made here is that based on their experience, the residents of Iqbal Nagar already knew the importance of communication, while the residents of Hijra Nagar have not yet realized that but are focusing on the help from outside, more than any other aspects.

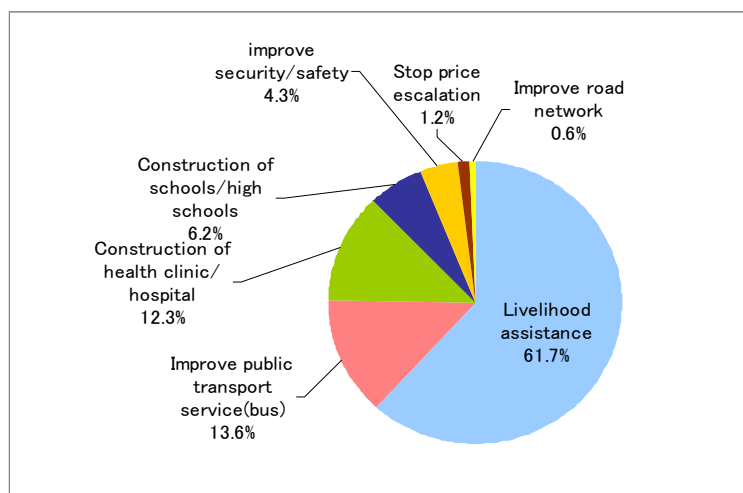
4) Expectations to Sri Lankan Government

To the inquiry on what respondents expect from GOSL, they answered as follows.



Source: JICA Project Team

Figure 4.4.10 Expectations to GOSL (Iqbal Nagar)



Source: JICA Project Team

Figure 4.4.11 Expectations to GOSL (Hijra Nagar)

As seen in the above figures, assistance for livelihood improvement is highly expected. After securing their residence, income gain to sustain their lives becomes the first priority. Construction of health clinic/hospitals and improvement of public transport are also expected under the assistance of the government, especially in Hijra Nagar.

5) Other Comments on JSFV

Other comments on JSFV are as follows:

- Iqbal Nagar

The majority of the comments (114 comments) concerned the side ditches in the JSFV requesting the repair of soil-walled side ditches, followed by 47 comments on the minor defects of the housing (e.g. roof leaking, kitchen smells, crooked window frames, etc.).

- Hijra Nagar

Most of the comments were related to the appreciation to the Japanese Government and JICA. Only 2 responded negatively as saying “there are some shortfalls to be fulfilled,” without clarifying the shortfalls.

4.4.6 Peacebuilding Needs and Impact Assessment (PNA) for JSFVs

As the Project was approaching its end, JICA decided to conduct an assessment called “Peacebuilding Needs and Impact Assessment” (PNA) to the JSFV component of this project. PNA is designed to analyze the factors contributing the enhancement and mitigation of the conflict as well as the impacts the particular development project(s) can produce to these factors, so as to enable JICA to effectively plan its assistance in light of peace building. For Sri Lanka, while PNA can be conducted for different levels such as national, regional and project levels, only a national level PNA was conducted in 2005.

For JSFV component of the Project, the lives of the beneficiaries in the JSFVs have just started and to further ensure the reestablishment of their lives, continuous support is considered necessary. To this end, another JICA technical assistance project called T-CUP was launched since 2006 which will monitor and follow up with the activities related to the JSFVs. The project level PNA of the Project is expected to enable T-CUP to monitor the JSFV situation in light of factors related to ethnic and political conflicts and to avoid such incidents to occur in and around JSFVs.

In October 2007, with the guidance of a PNA expert from JICA headquarters who is also in charge with updating the existing national level PNA, JPT and T-CUP jointly conducted the project level PNA of the JSFV component of the Project.

The main points identified through project level PNA that need to be monitored by T-CUP, are as follows.

Table 4.4.14 Project Level PNA: Main Points need to be Monitored by T-CUP

Types of Impacts	Related Items Needs to be Monitored
Impacts from ethnic rivalry among three ethnic groups	<ul style="list-style-type: none"> - Number of beneficiaries firmly settled in JSFVs according to their ethnicity, and the trend of their relationships - Population trend of surrounding villages according to the ethnicity, and the trend of their relationships - Influence by the Sinhalese (including government officers) people to the Project
Impacts from the Project to the ethnic rivalry among three ethnic groups	<ul style="list-style-type: none"> - Relationship between Tamil and Moslem residents within JSFVs (cooperation, non-cooperation, coexistence, independence, etc.) - Relationship between JSFV residents and Tamil and Moslem population living in the villages near JSFVs. - Relationship between Sinhalese with other two ethnic groups - Modeling effect of JSFV as a good example of coexistence
Impacts from stagnant peace process and conflict between the government and LTTE	<ul style="list-style-type: none"> - Handling of the crises, e.g. when residents of JSFVs and surrounding villages were involved - Repatriation of Tamil beneficiaries fled to India
Impacts of infrastructures developed for JSFVs to the surrounding villages	<ul style="list-style-type: none"> - JSFVs produce pump-priming effect to attract other public services including to the surrounding area, or - JSFVs will widen the gap in the living standard between its residents and surrounding villages and become the reason of social instability e.g. jealousy, etc.

Source: JICA Project Team, T-CUP, and JICA Social Development Department

The results of the project level PNA including the main points listed in the above table were compiled in Project Level PNA Matrices and will be continuously utilized and updated by T-CUP, during its operation.

CHAPTER 5 EVALUATION AND LESSONS LEARNED FROM IMPLEMENTING URGENT WORKS AND PILOT PROJECT

5.1 Evaluation

5.1.1 Summary of Evaluation

Evaluation was made for the urgent works such as JSFVs and the night soil treatment facilities (NSTF) and the pilot projects on the basis of the five evaluation criteria. The results of the evaluation are summarized in the following.

(1) JSFV Development

Achievement

JSFVs including houses, infrastructure and community facilities are implemented successfully.

Comparing with NGO-base resettlement housing projects being slowed down due to fund lacking for infrastructure development and environmental concern such as solid waste management issues, human encroachment into animal habitats, etc., JSFV, planned with integrated infrastructure and facility development and designed under appropriate environmental consideration are implemented advantageously.

(2) NSTF Development

Achievement

Implementation of NSTF in Batticaloa was almost complete and it is expected to serve as a model facility in Sri Lanka.

Plans of NSTFs both in Batticaloa and Hambantota were prepared and construction is underway in Batticaloa (90% progress as of January 2008 and expected to be completed by March 2008). This model can be replicated to the tsunami affected area throughout the country.

Challenge

Alternative site of the Hambantota is now under engineering investigation to correspond the environmental impact concerns. Engineering works and the succeeding construction in Hambantota is to be accelerated.

(3) CBO Formation and Capacity Building for JSFV

Achievement

Functional RDSs were established in both Hijra Nagar JSFV and Iqbal Nagar JSFV by assistance of local governments and JPT.

RDSs played important roles to make the resettlement programme participatory such as 1) represent the needs of the beneficiaries, 2) participatory decision making, 3) information sharing among the beneficiaries, 4) monitoring of the construction of the JSFV. RDS contributed to smooth out the development of JSFV and formulation of O&M organization.

Challenge

The capacity of the RDSs should be further enhanced, so that they can play an important role for O&M of JSFVs. More close communication among the beneficiaries, and participation of all the beneficiaries to the decision making process should be encouraged. For achieving the above, it is critical to work with the people listed in final beneficiaries who will not change during the implementation.

(4) Livelihood Improvement of JSFV Beneficiaries

Achievement

Beneficiaries of JSFV and adjoining community members successfully re-started their livelihood activities by participating in pilot projects.

All 73 fishermen of Hijra Nagar JSFV beneficiaries and 286 fishermen of adjoining communities successfully restarted fishing activities. 97 fishermen of Iqbal Nagar JSFV beneficiaries and 56 adjoining community fishermen also restarted fishing activities in Trincomalee.

All 80 farmers of Iqbal Nagar JSFV beneficiaries and 38 onion farmers of adjoining communities also successfully re-started agriculture activities from late 2005, by utilizing the inputs and empowerment provided by the pilot project of JPT.

The skills development training for the livelihood improvement created satisfactory results. The trainees in tailoring (Hijra Nagar and Iqbal Nagar), rice processing (Hijra Nagar), carpentry (Hijra Nagar) and small business (Iqbal Nagar) utilized OJT equipment and are improving their livelihood most successfully. Most of the trainees are re-paying loans for the OJT equipment as scheduled for securing the revolving

fund. The Women's Bank programme plays an important role in making the revolving fund system functioning properly. It is remarkable that the Women's Bank in Hijra Nagar provided 109 new loans utilizing the revolving fund.

Challenge

The Moslem FO in Iqbal Nagar financed few new loans to their members by utilizing the revolving fund. However, the capacity of the leaders of the FO should be enhanced to strengthen their skills on record keeping and leadership to make the loan scheme and revolving fund more functional. The Tamil FO in Iqbal Nagar should be re-organized.

Members of the FCS in Iqbal Nagar are facing difficulty even at present, due to the strict fishing restrictions. Activities of FCS were weakened since the restriction was imposed. It is expected to re-activate FCS and the revolving fund scheme in the future after fishing restrictions are relaxed.

Capacity building and monitoring of the activities of FOs and FCSs as well as utilization of the skills and OJT equipment should be continued further.

The results of five items evaluation is summarized in Table 5.1.1.

Table 5.1.1 Evaluation of Urgent Works and Pilot Project

Project		Five Evaluation Items					Overall Evaluation	
		Relevancy	Effective-ness	Efficiency	Impact	Sustaina-bility		
JSFV	Iqbal Nagar	AA	AA	A	P	AA	AA	
	Hjira Nagar	AA	AA	A	P	AA		
	Konesapury	AA	AA	A	P	AA		
NSTF	Batticaloa	A	B	A	P	AA	A	
	Hambantota	A	B	A	P/N	AA	B ⁺	
CBO Empowerment	Iqbal Nagar	AA	AA	B	P	A	A ⁺	
	Hijra Nagar	AA	AA	B	P	A	A ⁺	
Livelihood Restoration	Skills development	Iqbal Nagar	AA	B	A	P	A	A
		Hijra Nagar	AA	B	A	P	AA	A
	Agricultural support	Iqbal Nagar	AA	A	A	P	B	A
	Fishery support	Iqbal Nagar	AA	B	B	P	A	B ⁺
		Hijra Nagar	AA	AA	A	P	AA	AA

AA: High A: Relatively high B: Moderate P: Positive N: Negative (For impacts)

Note: Evaluation on NSTF is provisional due to delay of completion.

Source: JICA Project Team

5.1.2 Evaluation Sheet

Detailed evaluation of the urgent works and pilot project is presented in Table 5.1.2. – 5.1.10.

Table 5.1.2 Evaluation on JSFV Development

1. Summary of Evaluation
<p>(1) Relevancy The relevancy of the project is HIGH.</p> <ul style="list-style-type: none"> ➤ Construction of 789 resettlement houses corresponds to the highest priority of the government policy of the tsunami recovery assistance in reply to the request of the GOSL, and proves to be a model for resettlement.
<p>(2) Effectiveness The effectiveness of the project is HIGH.</p> <ul style="list-style-type: none"> ➤ The community empowerment component for JSFV beneficiaries conducted in parallel to the housing construction contributed to achievement of high effectiveness of the project.
<p>(3) Efficiency The efficiency of the project is Relatively HIGH.</p> <ul style="list-style-type: none"> ➤ Construction cost of JSFV increased due to the material and labor cost inflation affected by the post-tsunami rehabilitation boom. However, the contract prices are within reasonable range compared to the similar resettlement housing projects developed by NGOs. ➤ Actual construction period was reasonably short enough though suspended periodically due to the security problems.
<p>(4) Impact The impact of the project is POSITIVE IMPACT.</p> <ul style="list-style-type: none"> ➤ Since the livelihood restoration programmes were carried out including the adjacent communities, negative impact to the adjacent communities is relieved. ➤ Cooperation among Moslem and Tamil after tsunami is promoted during planning and construction work of JSFV through empowerment support to the communities.
<p>(5) Sustainability Sustainability of this project is HIGH.</p> <ul style="list-style-type: none"> ➤ Sustainability of JSFV is highly supported by the livelihood restoration pilot project and to be measured by the replicability mentioned below. ➤ Iqbal Nagar JSFV: Replicable as a model for development of resettlement house with different ethnic groups. ➤ Hijra Nagar JSFB: Replicable as a model for development of resettlement house that accommodate victims from different locations. ➤ Konesapury JSFV: Replicable as a model for collaboration with infrastructure and facility development by Japanese government and house construction by NGOs. This is a practical development model for assisting restoration of housing considering the limitation of Japanese aid on housing.
<p>2. Factors Promoting Sustainability and Impacts</p> <ul style="list-style-type: none"> • Community co-assistance should be strengthened to create new harmonized society in JSFV. • Community participation to operation and maintenance of JSFV facilities with the cooperation of local government and NHDA should be encouraged.
<p>3. Factors Inhibiting Sustainability and Impacts</p> <ul style="list-style-type: none"> • Support to CBO activity should be continuously carried out until the stability of new livelihoods in JSFV be achieved. • Operation and maintenance skill training on community members and CBO is necessary especially in Hijra Nagar for its community water supply scheme.
<p>4. Conclusion Major objectives have been achieved even under the unstable security condition.</p>

Source: JICA Project Team

Table 5.1.3 Evaluation on Night Soil Treatment Facility (NSTF) Development

<p>1. Summary of Evaluation</p>
<p>(1) Relevancy</p> <p>The relevancy of the project is RELATIVELY HIGH.</p> <ul style="list-style-type: none"> • Provision of gully sackers to collect the night soil of disaster refugee camp and transitional houses was initially decided. Then, construction of NSTF was proposed to solve a projected environmental negative impact without comparative studies.
<p>(2) Effectiveness</p> <p>The effectiveness of the project is MODERATE.</p> <ul style="list-style-type: none"> • Although NSTF was planned to serve mainly for evacuation camp and transitional houses, some tsunami refugees resettled in the permanent resettlement houses before the completion of NSTF.
<p>(3) Efficiency</p> <p>The efficiency of the project is RELATIVELY HIGH.</p> <ul style="list-style-type: none"> ➤ The NSTF were designed as the temporary facility and construction cost is relatively low. • However, completion of NSTF was postponed several times due to unsuitable construction management by the local contractor and environmental problems raised by neighboring communities.
<p>(4) Impact</p> <p>The impact of the project is POSITIVE IMPACT and NEGATIVE IMPACT</p> <ul style="list-style-type: none"> ➤ Night soil is being discharged without treatment in Batticaloa and Hambantota. After completion of the NSTF, good impact on environment is expected concerning water quality. • Alternative site of Hambantota NSTF is under engineering investigation due to the adverse impact on social environment.
<p>(5) Sustainability</p> <p>Sustainability of this project is HIGH.</p> <ul style="list-style-type: none"> ➤ On the basis of the results of the two spearhead projects in Batticaloa and Hambantota, NWSDB will replicate treatment facility in coastal areas of Sri Lanka.
<p>2. Factors Promoting Sustainability and Impacts</p> <p>Comparative analysis should be done for the decision of NSTF project.</p>
<p>3. Factors Inhibiting Sustainability and Impacts</p> <p>NSTF should be developed appropriately under the consent of local community.</p> <p>Adverse impact should not occur in neighboring communities during the operation of NSTF.</p>
<p>4. Conclusion</p> <p>Moderate level evaluation was given to relevancy and effectiveness.</p> <p>Process of project decision was unclear and beneficiaries of the project were defined incorrectly because inadequate studies were made at the initial proposal of NSTF.</p> <p>NSTF in Hambantota especially will be rearranged to achieve appropriate and adequate project goal.</p>

Source: JICA Project Team

Table 5.1.4 Evaluation on Community Empowerment Pilot Project (Iqbal Nagar)

CBO Empowerment
<p>1. Summary Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The CBO empowerment was relevant as a key approach to implement the housing programme participatory approach and to unite the beneficiaries who belong to different ethnicities and villages.
<p>(2) Effectiveness The effectiveness of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The RDSs took leadership on decision making process on the common issues pertaining to the resettlement. ➤ The RDSs functioned as a body to represent the needs of the beneficiaries. With their initiatives, the beneficiaries took part in monitoring the progress of the construction. As a result, the needs of the beneficiaries were reflected in the process of housing construction and they are very much satisfied with the quality of the houses and facilities of the JSFV.
<p>(3) Efficiency The efficiency of the project is MODERATE from the following standpoints. However, the efficiency was affected by external factors, which could not be controlled by the JPT:</p> <ul style="list-style-type: none"> ➤ The unity of the two RDSs and among the beneficiaries was a positive factor to implement the planned activities efficiently. For example, the beneficiaries were good at sharing information and kept collaboration among them from the beginning. JPT observed that the facts that the beneficiaries were known to each other, living in nearby villages before the tsunami, had contributed to keep the unity among them. ➤ Due to the deterioration of the security situation, the regular activities of the RDS and inputs from the JPT (arrangement for workshops, trainings, etc) were not carried out in 2006.
<p>(3) Impact The following POSITIVE impacts were observed:</p> <ul style="list-style-type: none"> ➤ It was remarkable that two different ethnic groups have been in cooperative and friendly relationships. ➤ The JPT observed that the presence of the JPT encouraged and provided emotional support to the beneficiaries, especially after the security situation became worse, and most of the NGOs and other organizations worked in the area had left. For example, some beneficiaries often made telephone calls to the staff of the Team, in order to confirm that the assistance rendered by the Team is continuing.
<p>(4) Sustainability The sustainability of the project is relatively HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ Even in the tensed security situation, the RDSs had kept working. The Tamil RDS is in the process of re-formation, after the displacement of several of its leaders. These factors indicate that there is a strong need among the beneficiaries to make RDS active and functional, which is a contributing factor for sustainability. ➤ The financial capacity of the RDS was not strengthened yet. Membership fees, authorization by gazette notification, etc. should be arranged.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning to planning CBO empowerment was carried out under the guidance of RDO, who is the government representative work for CBO empowerment, is a promoting factor for sustainability.</p> <p>(2) Factors concerning to the implementation process</p> <ul style="list-style-type: none"> ➤ Strong and urgent needs of the beneficiaries towards the permanent houses encouraged them to be united and support the project. ➤ The two local staffs work for the project under the JPT in 2006 were capable enough to facilitate the RDS. They stayed with the beneficiaries, even at the time when the Japanese staff of the Team was unable to enter Trincomalee under the deteriorated security situation. ➤ The RDSs is going to construct shop-buildings by utilizing the materials to be provided by the Japanese Government. The financial capacity of the RDSs is expected to be enhanced by collecting rental fees of the tenants of the shops. Profit of the cement block making project is also expected to contribute the capacity building of the RDSs.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning to planning</p> <ul style="list-style-type: none"> ➤ Delay of the water and electricity supply to the JSFV made the beneficiaries frustrated for the first few months of the resettlement. As a result, JPT had to face difficulty to start facilitating the community to discuss detailed rules and regulations on O&M of the common facilities. <p>(2) Factors concerning to the implementation process</p> <ul style="list-style-type: none"> ➤ Deteriorated security situation and displacement of the large number of the Tamil beneficiaries made the JPT and the RDS difficult to implement planned activities in time.
<p>4. Conclusion Even under the tensed security situation, the RDSs played an important role to represent the needs and opinions of the beneficiaries. It facilitated the communication and decision making process among the beneficiaries. The beneficiaries are satisfied with the quality of the houses and facility of the JSFV.</p>

Source: JICA Project Team

Table 5.1.5 Evaluation on Community Empowerment Pilot Project (Hijra Nagar)

<p>CBO Empowerment</p> <p>1. Summary Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The CBO empowerment was relevant as a key approach to implement the housing programme participatory approach and to unite the beneficiaries who belongs to different ethnicities and villages.
<p>(2) Effectiveness The effectiveness of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The RDS took leadership on decision making process on the common issues pertaining to the resettlement. ➤ The RDS functioned as a body to represent the needs of the beneficiaries. With their initiatives, the beneficiaries took part in monitoring of the progress of the construction. As a result, the needs of the beneficiaries were reflected in the process of housing construction and they are very much satisfied with the quality of the houses and facilities of the JSFV.
<p>(3) Efficiency The efficiency of the project is MODERATE from the following standpoints:</p> <ul style="list-style-type: none"> ➤ Inexperience in community work and disputes among the beneficiaries delayed the implementation of the planned activities, in the initial stage. ➤ The frequent changes in the beneficiaries' list and deterioration of the security situation had made the JPT and the RDS difficult to implement planned activities in time. ➤ Meanwhile, the JPT identified several positive outputs of the activities implemented, such as: i) the monthly RDS committee meetings were held with the initiative of the chairman of the RDS, ii) the minutes of the meetings are maintained by the secretary, iii) a series of Progress Review Meetings were held on O&M of the JSFV, iv) the committee members of the RDS had kept cordial relationships with the government officers, and in a position to obtain assistance and support from them, v) the representatives of the community actively participated in workshops and training courses on O&M of the rural water supply system and v) the committee members of the RDS played an important role in the beneficiaries' meetings, and assisted JPT in the household survey conducted in 2006.
<p>(4) Impact At first, the JPT observed dependency among the committee members of the RDS. They were often demanding and unorganized at the time of the meetings with the Team. However, later on, a sense of responsibility and awareness were created among them, which are the POSITIVE impacts of the project, for example:</p> <ul style="list-style-type: none"> ➤ In the events such as beneficiaries' meetings, workshops, surveys and trainings, the RDS undertook the responsibility of coordination and facilitation. ➤ They showed interest and confidence to negotiate with government organizations, political authorities and NGOs to obtain assistance for the planned activities to develop JSFV. ➤ The RDS Water Supply Division was established and the members are willing to undertake O&M of the water supply system. ➤ The Women's Bank programme became very popular and active among the female beneficiaries.
<p>(4) Sustainability The sustainability of the project is relatively HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The board members of the RDS have established cordial relationships and communication with the relevant government officers. ➤ The awareness of being community leaders was created among the board members of RDS. ➤ The financial capacity of the RDS was not strengthened, yet membership fee, authorization by gazette notification, etc. should be arranged.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning to planning; N/A</p> <p>(2) Factors concerning to the implementation process</p> <ul style="list-style-type: none"> ➤ A sense of responsibility and awareness were created among the leaders of the RDS.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning to planning</p> <ul style="list-style-type: none"> ➤ One of the objectives of the project is to create a sustainable system for O&M. However, due to the delay of the construction, the JPT had to postpone introducing the activities to achieve the objective. <p>(2) Factors concerning to the implementation process</p> <ul style="list-style-type: none"> ➤ Due to the high demand of the experienced social worker after the tsunami, the NFPO (local partner of the JPT) could not find capable staff to work in Pottuvil. The staff dispatched to the area did not have enough experience and capacity to facilitate the beneficiaries effectively. The frequent change of the local staff in charge of the area was also a negative factor for sustainability. ➤ The frequent changes in the beneficiaries' list and deterioration of the security situation had made the JPT and the RDS difficult to implement planned activities in time.
<p>4. Conclusion The RDS played an important role to present the needs and opinion of the beneficiaries. It facilitated the communication and decision making process among the beneficiaries.</p>

Source: JICA Project Team

Table 5.1.6 Evaluation of Skill Development Training (Iqbal Nagar)

Livelihood Improvement Pilot Project
<p>1. Summary Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The project aimed at restoration of the livelihood, which is one of the objectives of the GOSL on tsunami reconstruction and development. ➤ People affected by the tsunami expected livelihood improvement assistance and contents of the project were created with community participatory approach.
<p>(2) Effectiveness The effectiveness of the project is MODERATE from the following standpoints, However, the effectiveness was affected by external factors:</p> <ul style="list-style-type: none"> • The trainees in tailoring and small business are improving their livelihoods by using OJT equipment. • Poultry was unsuccessful due to lack of cooperation of the veterinary surgeon in the area. • The trainees in carpentry, masonry and house-wiring could not utilize the training and OJT equipment effectively, due to limited employment and business opportunities in the area.
<p>(3) Efficiency The effectiveness of the project is RELATIVELY HIGH from the following standpoints</p> <ul style="list-style-type: none"> ➤ Commencement of the loan repayment for the OJT equipment was delayed due to uncertain security condition and displacement of the beneficiaries. It was started only in early 2007. ➤ The RDS is keen on the block making project, however the progress of production is far behind the schedule. ➤ Activities of the Women's Bank Tamil groups were suspended in 2006, due to displacement and unstable security situation. However, it was re-started in 2007. ➤ Women's Bank activities supported the mechanism of provision of the OJT equipment, and facilitated repayment of the loan efficiently.
<p>(4) Impact The following POSITIVE impacts were observed:</p> <ul style="list-style-type: none"> ➤ The construction site provided the beneficiaries with an ideal working place, as it was close to their living place. Average 20-30 beneficiaries were working in the site daily. ➤ The JPT observed that the confidence and sense of independence were created among the members.
<p>(5) Sustainability The sustainability of the project is RELATIVELY HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The repayment of the loan for the OJT equipment started only by the Muslim beneficiaries, but not by the Tamil beneficiaries. ➤ The unstable security situation and displacement of the Tamil beneficiaries are the factors to make the sustainability of the project uncertain.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning planning: N/A</p> <p>(2) Factors concerning the implementation process</p> <ul style="list-style-type: none"> ➤ Cooperation and unity of the two RDSs facilitated the smooth implementation process. ➤ Women's Bank Muslim groups are utilizing revolving fund and provided new loans to their members.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning planning Demand analyses of the jobs, selection of the trainees, duration and level of the training, examination of the feasibility and dialogue with the relevant authorities, were not done sufficiently in the initial planning stage of the skill development training.</p> <p>(2) Factors concerning the implementation process Deteriorated security situation and displacement of the large number of the Tamil beneficiaries made the JPT and the RDS difficult to implement planned activities in time.</p>
<p>4. Conclusion Implementation of the pilot projects provided most of the beneficiaries with the opportunities to start their livelihood activities, although some works only as part timers or assistants. External reasons, such as uncertain security situation and displacement were the causes of the limited outputs of the project.</p>

Source: JICA Project Team

Table 5.1.7 Evaluation of Skill Development Training (Hijra Nagar)

Livelihood Improvement Pilot Project
<p>1. Summary Evaluation</p> <p>(1) Relevancy</p> <p>The relevancy of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The project aimed at restoration of the livelihood, which is one of the objectives of the GOSL on tsunami reconstruction and development. ➤ Tsunami affected people expected livelihood improvement assistance and contents of the project were formed with community participatory approach.
<p>(2) Effectiveness</p> <p>The effectiveness of the project is MODERATE from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The performance of the trainees on tailoring is remarkable. Their livelihood is improving by utilizing the skills and the equipment they had obtained through the project. They earn Rs 2,500-5,000 per month and obtain sufficient orders to make them engaged in the business full time. ➤ Trainees on rice processing engage in the business, however cannot obtain benefit, as it does not create much additional value. ➤ Most of the trainees on mason and house wiring engage in the businesses as part timers, while engage mainly in agriculture and fishery. ➤ Most of the trainees on carpentry engage in work as assistant carpenters. ➤ The trainees on animal husbandry (poultry) are not in a position to start the business, as the PHI of the area was in an opinion that there will not be sufficient space for them in JSFV to keep the animals. ➤ Although community participation to the construction work of JSFV was considered as an important activity on livelihood development, it was not realized due to differences in demand and supply on labor force, unstable security situation, etc.
<p>(3) Efficiency</p> <p>The efficiency of the project is RELATIVELY HIGH as most of the training and provision of the equipment were carried out as scheduled; while some were delayed or did not realized; for example:</p> <ul style="list-style-type: none"> • Expected outcome were not observed in time for the training of the carpentry, as the provision of the equipment was delayed. • Women's bank programme was actively carried out. Most of the beneficiaries of the OJT equipment are repaying the loan as scheduled. • Women's Bank activities positively supported the mechanism of provision of the OJT equipment, and facilitated the repayment of the loan effectively. • The revolving fund of the Women's Bank is utilized efficiently. It provided 109 new loans to fulfill the needs of the members.
<p>(4) Impact</p> <p>The following POSITIVE impact were observed:</p> <ul style="list-style-type: none"> ➤ Trainees in tailoring, rice processing and carpentry are improving their livelihoods by utilizing OJT equipments. ➤ The Women's Bank programme become very popular among the female beneficiaries. JPT observed that the confidence and sense of independence were created among the members.
<p>(5) Sustainability</p> <p>The sustainability of the project is HIGH as the financial capacity of the Women's' Bank and FCS is being enhanced as:</p> <ul style="list-style-type: none"> ➤ Most of the beneficiaries of the skill development training are repaying the loan for the OJT equipment as scheduled. ➤ The revolving fund of the Women's Bank, developed by the group savings and repayment of the loan, enhanced the sustainability of the project. The number of beneficiaries is expected to be increased by utilizing the fund, in future.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning planning</p> <ul style="list-style-type: none"> ➤ The collaboration of the skill development training and micro-finance scheme of the Women's Bank encouraged the beneficiaries to be responsible and enhance the sustainability of the project. <p>(2) Factors concerning the implementation process: NA</p>
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning planning</p> <ul style="list-style-type: none"> ➤ At the beginning, the RDS did not have sufficient management capacity to coordinate skill development training, which have created confusion in the project. For example, the JPT found that several families have more than one beneficiary of the skill training courses, which would create problem on loan recovery. ➤ Demand analyses of the jobs, selection of the trainees, duration and level of the training, examination of the feasibility and dialogue with the relevant authorities, were not done sufficiently in the initial planning stage of the skill development training. <p>(2) Factors concerning the implementation process</p> <ul style="list-style-type: none"> ➤ Due to the high demand and limited supply of the social workers for tsunami rehabilitation projects, the JPT could not find experienced staff to work for Hijra Nagar. ➤ The frequent changes in the beneficiaries' list and deterioration of the security situation in the latter half of the year 2006 had made the JPT difficult to implement planned activities in time.
<p>4. Conclusion</p> <p>Implementation of the pilot projects provided most of the beneficiaries with the opportunities to start their livelihood activities, although some works only as part timers or assistants. External reasons, such as frequent changes of the beneficiaries list, uncertain security situation were the causes of the limited outputs of the project.</p>

Source: JICA Project Team

Table 5.1.8 Evaluation on Agricultural Support Pilot Project (Iqbal Nagar)

<p>1. Summary of Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints.</p> <ul style="list-style-type: none"> ➤ Tsunami disaster affected not only fishery sector but also agriculture sector and thus the farmers requested to restart agriculture activities. ➤ Through the pilot project, farmers' groups were formed and management trainings for the formed groups were held. These activities contributed to the strengthening of CBOs after resettlement to JSFV.
<p>(2) Effectiveness The effectiveness of the project is RELATIVELY HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The beneficiaries utilized the inputs, re-started farming activities and obtained satisfactory income. • However, the Tamil beneficiaries could not improve their livelihood continuously, due to the deteriorated security situation and displacement.
<p>(3) Efficiency The efficiency of the project is RELATIVELY HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ Farmers' group were formed and registered. Awareness workshop and management trainings for the group leaders were conducted. The agricultural items were distributed and utilized. Therefore, the timing and quantity of the inputs were appropriate. ➤ The beneficiaries enhanced their livelihood in early 2006. For example, the JPT observed that Tamil beneficiaries, who engaged in onion cultivation by obtaining assistance from the project and others, started farming in December 2005, and obtained a profit of Rs. 50,000 in March 2006. In May, he started the next cultivation by utilizing the profit. • In late 2006, Tamil beneficiaries were not in a position to continue the farming activities, due to the deterioration of the security situation and displacement. They started cultivation in a small scale in 2007.
<p>(4) Impact The following POSITIVE IMPACT was identified.</p> <ul style="list-style-type: none"> ➤ Farmers who had never formed any group understood the importance of establishment of farmers' group. Muslim FO is continuously functioning.
<p>(5) Sustainability The sustainability of the project is MODERATE from the following standpoints:</p> <ul style="list-style-type: none"> ➤ Payment of the loan for the inputs has not been done as scheduled. ➤ Tamil FO suspended its function, due to the displacement of the members.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning to Planning</p> <ul style="list-style-type: none"> ➤ There was no farmers' organization in this area because most of beneficiary farmers were onion cultivators, who used their individual agro wells to irrigate for onion cultivation. Establishment of farmers' organizations and strengthening of the management capacity encouraged them to re-start farming, <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Registration of farmers' organizations was completed under cooperation of Department of Agrarian Development (DAD), while normal registration process takes more than 3 months. Opening of bank account and collection of membership fee proceeded earlier than usual schedule. ➤ Agriculture inputs by some NGOs also accelerated the restarting of farmers' activities.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning to Planning : N/A/</p> <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Through it accelerated the restarting of farmers activities, the NGO's input caused disturbance to establish the revolving system since these inputs were granted to the farmers without any repayment conditions. ➤ Absence of close monitoring by JPT in late 2006 was one of the causes of poor performance of loan repayment.
<p>4. Conclusion External conditions, such as unstable security situation and displacement, have negatively affected the degree of achievement of outcomes of the project, although the inputs were delivered timely and the beneficiaries re-started farming activities. The close monitoring should have enhanced the performance of loan recovery.</p>

Source: JICA Project Team

Table 5.1.9 Evaluation on Fishery Support Pilot Project (Iqbal Nagar)

<p>1. Summary of Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints.</p> <ul style="list-style-type: none"> ➤ The Tsunami Recovery Assistance in Sri Lanka puts an emphasis on supporting fisheries sector. The MFAR strategic paper also prioritizes tsunami rehabilitation activities. ➤ Target fishers of the pilot project are eager to restart fishing activities. <p>(2) Effectiveness The effectiveness of the project is concluded to be MODERATE from the following standpoints:</p> <ul style="list-style-type: none"> ➤ The objectives of the programme were achieved only partly. The beneficiaries are in a position 'to restart fishing activities', however, could not "enhance livelihood" due to the frequent fishing ban and restrictions in the area. ➤ The function of the Tamil FCS was suspended due to the displacement of the beneficiaries. <p>(3) Efficiency Most of the outputs of activities did not created expected outcomes, due to the external reasons, although timing and quantity of the input was appropriate. Therefore, the efficiency of the project is MODERATE.</p> <ul style="list-style-type: none"> ➤ Only around the half of the beneficiaries of the gill nets are utilizing them. The rest of the beneficiaries had either lost them or moved to India or killed. ➤ FCS collected only 1st and 2nd payments for gill nets. The repaid money has not been utilized as revolving fund. ➤ Tamil FO is not functioning. <p>(4) Impact The following POSITIVE impact of the pilot project was identified. Members of the FCS re-started fishing, and their income level became as same as that of before the tsunami, in spite of the difficulties of fishing bans and restrictions.</p> <p>(5) Sustainability The FCS which was not active before tsunami has activated and initiated activities within a short period. Though there are some challenges, especially, the security situation, participant rate of members in monthly meetings; bringing up the collection rate of shares and membership fees; and ensuring continuous support from FI, the sustainability of the Muslim FCS and the impact of the gill nets are considered to be relatively HIGH. The Tamil FCS is not functioning at the moment, however, has a possibility to be re-established once the security situation become positive.</p>
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning to Planning; Non</p> <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Various donors and NGOs have provided fishing equipments to fishers in Velloor area including 44 FRP boats that enabled fishers to restart the fishing activities at early stage. ➤ There is one CDO (Cooperative Development Officer) assigned to Kuchichaveli Division who has contributed a lot for the project through providing information on cooperative management.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning to Planning</p> <ul style="list-style-type: none"> ➤ Due to a lack of appropriate information on land, time was required to find out land availability. ➤ Due to limited available land, construction of fish landing site was not realized. ➤ Target fishers, once wished to have a landing site by JSFV, have changed their mind. As they gradually started fishing at their original landing site, they decided not to move to a newly proposed landing site. <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Due to lack of human resources of DFEO, there was very little technical support from FI on FCS activities. ➤ Some NGOs provided supports not to the FCS but a group of fishers residing in temporary camps. Fishers in these camps, not wanting to share the donated goods with FCS members in other camps, caused some dispute within FCS. ➤ Fishers were often unable to go fishing due to the restriction set forth by the Navy.
<p>4. Conclusion External conditions, such as fishing ban and displacement of the beneficiaries, have negatively affected the degree of achievement of outcomes of the pilot project, although the input was delivered timely and the beneficiaries were ready to engage in fishing actively. The Muslim FCS performed well, although they had several problems.</p>

Source: JICA Project Team

Table 5.1.10 Evaluation on Fishery Support Pilot Project (Hijra Nagar)

Fisheries Pilot Project (Hijra Nagar)
<p>1. Summary of Evaluation</p> <p>(1) Relevancy The relevancy of the project is HIGH from the following standpoints.</p> <ul style="list-style-type: none"> ➤ The Tsunami Recovery Assistance in Sri Lanka puts an emphasis on supporting fisheries sector. The MFAR strategic paper also prioritizes tsunami rehabilitation activities. ➤ Japan's Country Assistance Programme for Sri Lanka also emphasizes about the importance of development on farming and fishing villages. ➤ Target fishers of the pilot project are eager to restart fishing activities.
<p>(2) Effectiveness The objective of the project, 'to restart fishing activities for enhancing their livelihood' will be achieved, though achieving the outputs would be behind the schedule. The effectiveness of the project is, therefore, relatively HIGH.</p> <ul style="list-style-type: none"> ➤ All the members of the FCS have re-started fishing. ➤ Lockers and fish handling shed are utilized every day during the season. ➤ Beneficiaries of the cast nets started fishing, and gaining substantial income. For example, the cast nets provide a beneficiary with Rs. 600-1200 of profit per day. ➤ All the beneficiaries of the cast nets continue fishing by buying new cast nets by themselves, once the nets provided by the Project were worn out. • Provision of the material for a beach seine net has not created impact, yet.
<p>(3) Efficiency Most of the inputs created expected results, although there were some delays. Timing and quantity of the input is appropriate. The delay caused mainly due to external reasons, as explained in 4.3.3. Therefore, the efficiency is concluded to be HIGH. The degree of achievement of the outputs is as follows:</p> <ul style="list-style-type: none"> ➤ All the beneficiaries of the cast nets started fishing, utilizing the nets every day, gain income. 19 out of 20 beneficiaries completed repayment of the leasing fee. ➤ In late 2006, some of the beneficiaries of the lockers started fishing by rented boats, start utilizing the lockers. As of the end of 2007, all the 14 lockers are utilized during the fishing season. Payment of the leasing fee has not been started. ➤ The fish handling shed is utilized by the members of the FCS. ➤ Provision of the material for a beach seine net has not created expected outputs yet, due to the changes of the external conditions. At the moment, they are planning to buy a second-hand canoe by their own fund to re-start fishing in future. ➤ FCS members are carrying out monthly meetings, maintaining minutes, and collecting fees of cast nets, which provide them funds to be utilized self-help activities.
<p>(4) Impact Once the outputs of the Project are realized and effectiveness continues, the livelihood improvement of tsunami affected fisher folks through rebuilding their fishing environment is likely to be achieved. The following POSITIVE impacts of the pilot project are identified.</p> <ul style="list-style-type: none"> ➤ Active fishing operation did not only enhance the livelihood of fishers in FCS, but it also enhanced the livelihoods of non-fishers engaging in fishing related businesses through an increase of fish transaction. ➤ FCS increased its capacity to discuss, negotiate and find ways to solve problems. For example, FCS negotiated with the Dept. of Fisheries on exchange of the FRP boats and wooden canoe and it is planning to buy a second-hand canoe by their own fund.
<p>(5) Sustainability The sustainability of the project is HIGH from the following standpoints:</p> <ul style="list-style-type: none"> ➤ As mentioned above, FCS is expanding its capacity in management and finance. ➤ The recovery of the leasing fee of the nets was completed. ➤ The FCS plans to buy second-hand canoe for beach-seine fishing with its own fund. If these are realized, the impact of the pilot projects will be expanded.
<p>2. Factors promoting sustainability and impact</p> <p>(1) Factors concerning to Planning None</p> <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Assurances from other donors/ NGOs to Hidayafuram FCS accelerated fishers to restart the fishing activities. Sewa Lanka, for example, provided 50 cast nets and bicycles.
<p>3. Factors inhibiting sustainability and impact</p> <p>(1) Factors concerning to Planning</p> <ul style="list-style-type: none"> ➤ Reliable data of fisheries condition of the area before tsunami is lacking. ➤ Fishers moving to JSFV are from several different villages. Therefore, fishers from outside the Hidayafuram village were encouraged to join Hidayafuram FCS, and this has caused some confusion among fishers at the initial stage. <p>(2) Factors concerning to the Implementation Process</p> <ul style="list-style-type: none"> ➤ Due to lack of human resources under ACCD, there was very little support on cooperative management from CDO on FCS activities. ➤ As indicated in the incident where a FI in Pottuvil Division was arrested for corruption, the distribution and reallocation of fishing gears were not fairly carried out in Pottuvil area, and this has caused internal disputes among members. ➤ Donation of cast nets by an NGO further complicated the introduction of revolving fund of the pilot project. ➤ The impact of the provision of lockers, fish handling shed and material of beach-seine net was negatively affected by the problem caused by inappropriate coordination of the Dept. of Fisheries on the Japanese Non Project Grant Aid.
<p>4. Conclusion Since majority of target group are employed fishers (hired fishers), the project planned to create job opportunity by starting FCS business. All fishers are expected to restart their fishing activities in near future. FCS restarted its activities through the experience of organizational dynamics, and it intends to continue the project activities. With the support from other NGOs (e.g. Sewa Lanka), the project objective was achieved though there has been a delay.</p>

Source: JICA Project Team

5.2 Lessons Learned

5.2.1 JSFVs Construction and CBO Formulation

(1) Coordination with Japanese Government Aid Policy

According to the Japanese grant aid policy, houses developed by Japanese aid in JSFV should be owned by the public and not by individuals. GOSL, TAFREN and MOHC, brought up arguments to this policy based on the national policy and on the fact that the permanent houses developed by other donors and NGOs can be transferred to individual beneficiaries. GOSL later understood Japanese aid policy, after discussions were held between both governments, considering that JSFV is comprehensive aid including not only housing units but also infrastructure development and livelihood restoration support. (basic policy on transfer of the ownership set by RADA recently is that the houses constructed for the tsunami victims are kept under the ownership of the government for 10 years before the transfer.)

Lessons Learned

Regarding the aid policy, explanation and discussion in advance was necessary to make GOSL understand the Japanese policy for JSFV.

Permanent housing development project in Konesapury, which is being jointly developed by NGOs for housing construction and Japanese grant aid for infrastructure/facilities development, is one of advantageous countermeasure to avoid the argument regarding the transfer to individual.

(2) Land Acquisition for Permanent Houses

Although the land for JSFV site proposed by GOSL is legally public land, private owners claimed their ownership based on the unclear statutory situation during the conflict period. This dispute was unveiled when the bush clearance work of JSFV started.

Sri Lankan Government had responsibility of land acquisition for JSFV in accordance to the Guideline for Tsunami Relief and Rehabilitation. However, available public lands were limited and problematic due to the distance to the beach (for fishermen), difficulty of land reclamation, and water resource.

In Iqbal Nagar JSFV, Muslim demonstrators, insisting their ownership of the proposed land, appeared from adjoining area when the construction work commenced. In the course of discussions between JPT/NHDA/GA/DS and demonstrators with the assistance of a Member of Parliament (MP), location of the JSFV site was shifted slightly to the northern direction to avoid the conflict.

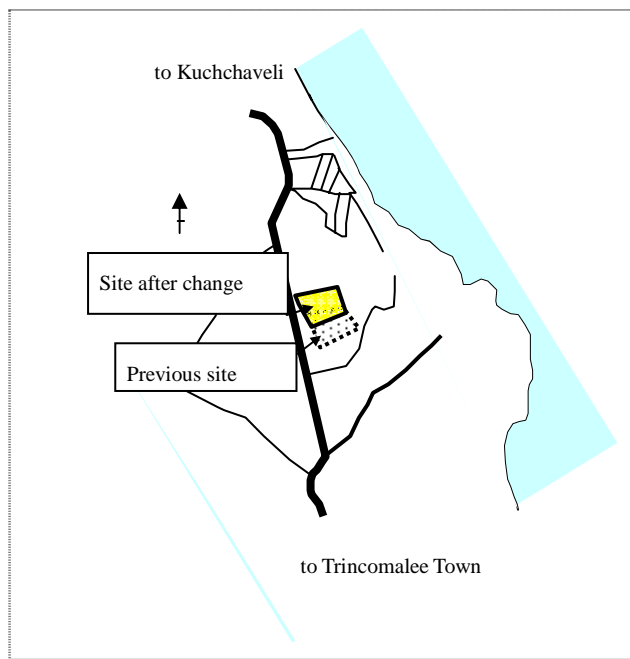


Figure 5.1.1 Change of Iqbal Nagar Site Location

In Hijra Nagar, adjoining Tamil villagers claimed that proposed land for JSFV belonged to Tamil and thus they do not accept the development of Muslim's permanent houses. Through the discussion and cooperation of NHDA Kalmunai office, it was agreed that the JSFV was accepted under the conditions of 1) some tsunami affected Tamil families will also relocate to JSFV, 2) southern part of the land should be allocated to the adjoining Tamil village as shown below.

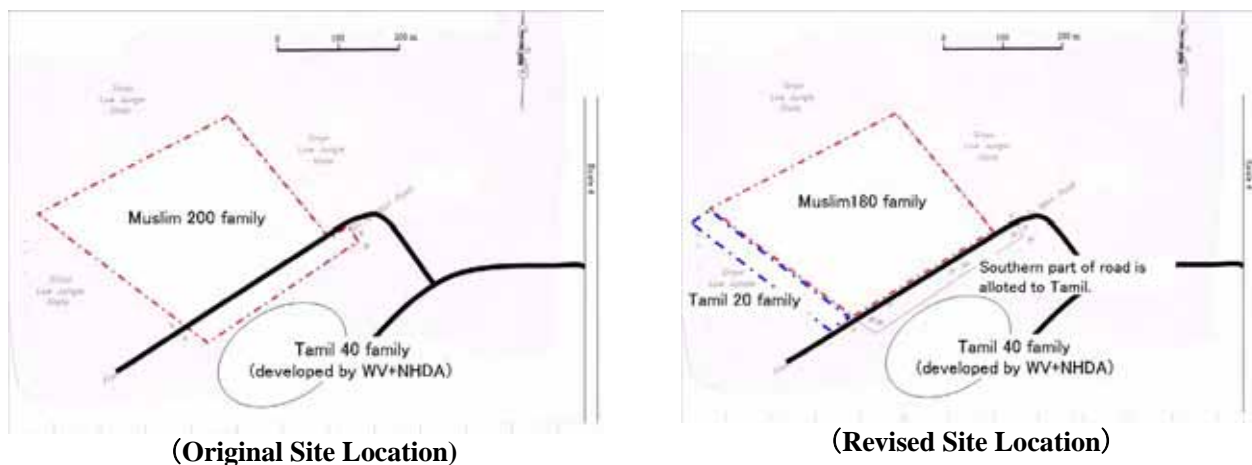


Figure 5.1.2 Change of Hijra Nagar Site Location

The local government is well acquainted with the community situation, the collaboration of which contributed to solve the land disputes.

Lessons Learned

- (1) Although GOSL is fully responsible for the land preparation required for the permanent housing development, close cooperation between donors/NGOs and GOSL is necessary to settle the sensitive land ownership issues.
- (2) Through consultation with local government and the community alternative land is also to be investigated for securing an appropriate site.
- (3) Land ownership problems will be unveiled, if there is any, when the construction works commenced. This is mainly due to Sri Lanka's lax land ownership and its management where claims are commonly made for any construction works in crown lands. It is recommended that preliminary construction work such as bush clearance should be done to detect the land ownership problems at planning or in earlier development stage, even after official approval procedures (e.g. IEE, EIA or Environmental Clearance) are duly completed.
- (4) It is noted that the capable local mediator is the key to settle the land ownership dispute successfully. An influential MP (Member of Parliament) in the community contributed to the settlement of the land ownership dispute at Iqbal Nagar site.
- (5) Collaboration with local government authorities, who are well acquainted with the community situation, will contribute to solve the land disputes.

(3) Ethnic Dispute (Consensus building for reunion in JSFV)

Tamil and Muslim are planned to live together in Iqbal Nagar JSFV. Considering the situation that both Tamil and Muslim families lived in Veloor village before the tsunami and planned to resettle in JSFV together, JPT did not anticipate any dispute between two groups. However, Muslim complained against re-unity with Tamil group in JSFV.

Their claim was made based on; 1) Iqbal Nagar is the region promised to Muslim and 2) mutual trust and understanding between two groups were reduced after spending months separately in temporary camp or residence since the tsunami.

In order to regain the ethnic harmony in Iqbal Nagar JSFV, two-day workshop was held in Kandy, inviting 20 representatives from both groups under the support of JPT and GOSL. Through discussions in the workshop the agreement for re-unity and close cooperation was made.



Ms. Jerna Bibi, a Muslim woman, expressed how negative she had been for the unification prior to the workshop because of a rumor she had heard in Trincomalee that Muslim were being targeted to be expelled away from Trincomalee. At the end of the workshop she was extremely positive of the outcome and was appealing to all to be united towards making the JSFV a great success.

Photo 5.1.1 Kandy Workshop

Lessons Learned

We have to understand that ethnic dispute could easily be aggravated because refugees are forced to live under unstable living conditions and tend to be suspicious about sensitive ethnic issues after experiencing such a large scale of disaster. Much attention should be paid in order to prevent the escalation of ethnic dispute.

(4) Complaints from Neighboring Communities

Benefit divide (difference of expected benefit between inside JSFV and outside) is to be carefully taken into account for the planning. Communities adjoining JSFV may oppose the development of JSFV. Due consideration in livelihood improvement, social facility development, etc. was paid to the neighboring communities.

Lessons Learned

Benefit of JSFV development should be shared with neighboring communities in order to acquire the understanding in locality and to implement the project smoothly.

(5) Planning/Design/EIA/Construction Works of JSFV

1) Beneficiary Selection

JSFV beneficiaries were selected by GOSL in accordance with the procedure defined and by RADA (formerly TARFEN). However, actual selection was carried out by local GN and DS, where transparency is not always granted and, as a result, some unqualified beneficiaries were included.

Moreover, beneficiary selections for Hijra Nagar took a long time and Konesapury were not yet finalized due to modification to a buffer zone made in October and abolition of the policy together with its replacement by Coastal Zone Management Plan (CZMP) in December 2005. (Iqbal Nagar beneficiaries list is already confirmed and for Hijra Nagar it was eventually finalized at the beginning of October 2007.)

Lessons Learned

Transparency in the beneficiary selection procedure by the local government should be practically guaranteed. For that purpose, appropriate measures such as the list disclosure to the public by GOSL, systematic participation of international NGOs and donors in examining beneficiaries list after the selection should be done.

2) Environmental Clearance

Policy and implementation guideline of TAFREN stated that environmental clearance study (including IEE and/or EIA) is the responsibility of the GOSL. However, environmental clearance studies for Iqbal Nagar and Hijra Nagar JSFV were carried out by JPT. In case of Konesapury site, no action for environmental clearance study was taken by relevant NGOs or GOSL, therefore JPT assisted GOSL (UDA) to arrange clearance prior to the commencement of the construction work in reply to the complain from an environmental NGO accusing that execution of an environmental study is necessary.

The JPT, in doing the environmental clearance study, prepared the preparation of Basic Information Questionnaire (BIQ) with the accompanying documents, following the simplified procedure the GOSL set for urgent tsunami recovery projects. The JPT also considered “zero option (not doing any development project)” as an alternative,

though it was discarded in light of emergency situation required for tsunami recovery-related works.

Lessons Learned

In order to accomplish a permanent housing development project effectively and timely, donors and NGOs should provide extensive support and assistance, particularly for solving the problems related to environmental clearance.

3) Insufficient External Infrastructure

Although the external infrastructure development for the permanent housing, e.g. external water main pipeline to the project site, is the responsibility of GOSL and being carried out to some extent by GOSL, it is reported that development of some external infrastructure is not realized and resettlement of beneficiaries is delayed.

Lessons Learned

NGOs/donors should make sure the extent of the support from GOSL regarding the external infrastructure development. Problems of the external infrastructure come out very often during implementation of the housing projects of NGOs. In case of the JSFV, all required external infrastructure is included in the original plan.

4) Participation in Planning and Design

Beneficiaries' participation into development plan and design of JSFV contributed to smooth implementation. In In-JSFV, beneficiaries closely discussed with JPT and GOSL concerning the housing design and facilities to be developed in JSFV. Moreover, beneficiaries were employed by the contractor as the semi-skilled and unskilled labor for the construction of houses and facilities,

Lessons Learned

Beneficiaries' participation into planning and design of the resettlement houses development should be accelerated to make the project implementation smoothly. Operation and maintenance works will be efficiently and smoothly carried out because of the ownership created

5) Frequent Modification of Plan/Design

Time for planning and design works is quite limited to finalize the definite plan and design. Modification of plan and amendment of design happen occasionally, even though the resettlement of tsunami refugees is urgent tasks. Pre-conditions for planning and design such as number of beneficiaries, location of resettlement site often changed.

Lessons Learned

Explanation and discussion on the plan and design with beneficiaries should be made fully and the modification and amendment should be agreed by them.

Engineering survey should be carried out in parallel with the construction works and design amendment will be necessary based on the results of engineering survey.

Communication and collaboration with donors and NGOs active in the neighboring area is necessary for successful engineering works such as confirmation of water source.

6) Inflating Cost and Supervision

Materials and labor cost rose rapidly when recovery projects of disaster progressed. Construction cost of one house of JSFV went up to Rs. 1.2 million from the normal price of Rs. 0.5 million.

Construction works were suspended several times due to security reasons caused by ethnic conflict in Sri Lanka. Implementation schedule was changed to May 2007 from original target of October 2006 and from amended target of December 2006 and February 2007.

Local contractor employed beneficiaries (Tamil and Muslim) as the watchmen for construction materials in order to accelerate beneficiaries' participation at IN-JSFV. When the police arrested watchmen for suspect of burglary, relations between Tamil and Muslim were aggravated.

Lessons Learned

Cost estimation should be done taking into account the unexpected price escalation and based on the latest information and data.

Construction plan is to be prepared flexibly to correspond with any modifications and changes, particularly in the security sensitive area.

It is understood that even the local contractor cannot handle the security problems caused by ethnic conflict.

(6) CBO Formation

Rural Development Society (RDS), which is the formal CBO for development and OM of JSFV, was formed with the assistance of JPT and GOSL and is working effectively in the JSFV development and livelihood improvement pilot projects. However, the following problems still remain.

- 1) Reshuffle of RDS representatives in HN occurred three times in three months from December 2005 due to the change of beneficiaries list caused by the buffer zone modification and internal dispute among RDS members. This RDS confusion causes the reluctant participation of HN-RDS in the construction works as described in Chapter 4.

In 2006, as a result of continuous facilitation of the JPT, the attitude of the RDS committee members of HN changed. Especially, experience of the RDS committee members participating in the leadership training and the workshops with the government officers, experience in organizing monthly meetings and beneficiaries' meetings, etc. brought them self-confidence and made them understand the value of working as community leaders. Consequently, the RDS committee members were unchanged since February 2006, and played an important role to make the resettlement programme participatory, as explained in Table 5.1.5.

Both in Iqbal Nagar and Hijra Nagar, the RDS played crucial role in monitoring the construction of the JSFV. As a result, the beneficiaries are very much satisfied with the houses and facility of the JSFV.

- 2) In case of Konesapury, where three NGOs are collaborating for permanent housing development with JPT. An integrated CBO should be established by integrating each group of beneficiaries of NGOs.

Lessons Learned

CBO formation is fundamental for the successful development of a new community. CBO is also crucial to make the resettlement programme participatory. With assistance from DORDS (Department of RDS) community empowerment and community harmony will be enforced effectively.

Even after the CBO is formulated, it is not easy and takes time to establish a functioning CBO. Continuous facilitation is essential to nurse the leaders of the CBO with experience and confidence, especially when the leaders are inexperienced in community work and less united.

(7) Resettlement Preparation

Legal procedure

Housing and land registration of developed JSFV will be necessary. Even though the legal procedure is responsible for the GOSL, misunderstanding by the local government happened and JPT was asked to follow the registration procedure on behalf of the beneficiaries.

Operation and Maintenance of JSFV

Responsible organization for the operation and maintenance works of infrastructure and community facilities in JSFV should be decided by public/community agreement. JPT initiated the discussion for attaining agreement between community and public organization such as Pradeshya Sabha (PS), Water Board, etc. Moreover, discussions between governmental organizations were initiated by JPT at both the central and local level.

The discussions continued until immediately before the resettlement. Several matters agreed previously were revised at the final stage when detailed information became available. Electricity was assumed to be provided free of charge for the street lights, but later it was proved not be free due to the recent change of CEB policy on street lights.

Lessons Learned

Communication among the central and local governments should be accelerated in terms of the legal procedure of housing and land registration.

Considering the importance of appropriate operation/maintenance of developed facility/infrastructure, demarcation of responsibility of the government organization and CBO should be clearly defined prior to the implementation of JSFV. Assistance for the discussions even among governmental organizations was necessary.

It is necessary to continue the discussions on O&M until immediately before the resettlement as detailed information on O&M becomes available only at the final stage.

5.2.2 Night Soil Treatment Facilities

(1) Problems in Planning/Design/Environmental Clearance Works

In relation to the provision of gully sackers by Japanese grant aid, the development of night soil treatment facilities was planned to accommodate and treat the night soil generated from the refugee camps and temporary houses. JPT studied possibility of treatment plant development in districts that received gully sackers, and Batticaloa and Hambantota districts were selected as the pilot project sites of the first night soil treatment plant in Sri Lanka.

In the study, following problems were identified by JPT.

- 1) Land acquisition for the treatment plant seemed difficult due to the scarceness of public land. Proposal for the plant site was frequently changed and finally deciding on a location consumed much time.
- 2) Responsible organization in charge for the planning, design and environmental clearance works was not clearly determined even though NWSDB was finally assigned as the counterpart organization. (JPT discussed with local government such as township council at the beginning of the study)
- 3) A development manual of the night soil treatment plant was prepared by JPT and transferred to NWSDB to replicate the plant in case waste water problems occur in the district cities of Sri Lanka.

Lessons Learned

From the planning stage, a central government agency should be selected as a responsible organization of the night soil treatment plant, because of the necessity of coordination and difficulty in environmental and technical aspects.

Replication of the plant in other district should be accelerated by the GOSL using the manual and on the basis of the experience of Batticaloa and Hambantota.

(2) Construction Work Suspension

The construction works of the night soil treatment plants in Batticaloa and Hambantota commenced in January 2006 and December 2005 respectively. However, the construction was suspended partly due to the environmental problem (Hambantota) and partly due to the seasonal heavy rain and security reason (Batticaloa). In Hambantota, further engineering investigation is planned to confirm an appropriate site.

Lessons Learned

As in the case of JSFV, NSTF went through simplified environmental assessment procedure for tsunami recovery projects without considering zero option in light of urgency. However, referring the Hambantota NTSF case, EIA, at least IEE, is indispensable in case of the environmentally annoying facility even in the urgent situation after a disaster. It is also important to strengthen awareness activities prior to implementing these facilities.

5.2.3 Pilot Project

(1) Skills Training

As mentioned earlier, the performance of the participants in the skill training differs from its subjects and external environment, such as employment opportunities and required skill levels. However, it was proved that the skill levels of the trainees were not sufficient to work as skilled labor due to the short duration of the courses. In some

cases, the participants are too young to work as professionals. The delay in implementing training and provision of the OJT equipment was also one of the causes of making the appearance of outputs delayed. In Iqbal Nagar, deteriorated security situation negatively affected the beneficiaries' opportunity to enjoy full benefit of the training. In Hijra Nagar, limited capacity of the RDS in coordinating the training caused confusion among the beneficiaries.

Lessons Learned

Even though it was a part of emergency assistance, more detailed demand analysis, sufficient duration and level of the training, careful selection of the trainees, examination of the feasibility and dialogue with the relevant authorities is crucial to making the skill development training successful.

Skills development training should be commenced after the facilitators such as RDS and local staff of the Project developed their skills for coordination and management.

(2) Participation in Construction of JSFV

Beneficiaries of IN-JSFV participated into construction works as labor, though, problems concerning employment conditions, construction materials burglary, etc. occurred at the beginning. The problems were gradually resolved by continuous discussions between the RDS and the contractor. In 2006, 20-30 beneficiaries worked daily in the construction sites as assistants and manual labors. In this way, the construction site brought the beneficiaries employment opportunities and income. However, the expectation of the JPT to make the trainees work as skilled labours was not achieved.

In Hijra Nagar, community participation in the construction of the JSFV was not realized due to the reasons such as work opportunity in adjoining areas, payment conditions unprofitable to the beneficiaries, and distance from home to the site, etc. Insufficient capacity of the RDS-HN and internal disputes at the time of coordinating the work participation was another reason.

Lessons Learned

For the acceleration of beneficiaries' participation into construction works of JSFV, coordination between CBO and contractors is necessary for smooth employment.

Much attention should be paid to regional economic condition including employment opportunities, employment and payment conditions of the other construction sites in the planning of beneficiaries' participation into JSFV construction works.

Willingness of the beneficiaries concerning the participation into construction works should be duly evaluated and respected.

(3) Collaboration with the Micro Credit Scheme

Employment of Women's Bank handling micro credit in Sri Lanka contributed to the pilot project. Monitoring and guidance by the members of the Bank raised sustainability of the project even after the termination of this pilot project.

Lessons Learned

Local organization through with satisfactory performance such as Women's Bank should be employed for the success of livelihood improvement. The Women's Bank programme contributed to making the project successful, not only as it introduced the mechanism to support provision of the OJT equipment on a loan basis, but it also was helpful in introducing saving habits and maintaining discipline among the beneficiaries.

(4) Agriculture Support

Absence of close coordination among the donor agencies, NGOs and GOSL negatively affected the viability of the project. For example, water pumps were donated to the farmers by a NGO, in duplicate, where water pumps were provided by this pilot project. This kind of unplanned supply of equipment reduced the sense of responsibility of the beneficiaries on loan repayment of the pilot project.

Muslim FO should have had a better performance on loan recovery, if the continuous monitoring was carried out.

Lessons Learned

Close communication and coordination among donors, NGOs and GOSL is essential to avoid duplication of the agricultural input supply and maximize the effects of the assistance.

Continuous monitoring is crucial to encourage the performance of the beneficiaries in loan payment.

(5) Fishery Support

In IN-JSFV, plan for redevelopment of engine gear locker and landing facility was cancelled in line with buffer zone reduction to 50m from 200m.

Assistance of NGOs without coordination caused problems such as 1) over-supply of fishing boats, 2) difficulty in restarting of fishing activities due to unfamiliar tools and net without training.

In Hijra Nagar, provision of the lockers, fish handling shed and material for a beach seine net did not produce expected outputs in the initial stage, as the FRP boats and wooden canoe donated by the Department of Fishery, were not in usable conditions. However, in late 2006, the beneficiaries gradually solved some of the problems, and started using the lockers and the shed and repaying the leasing fee. This is a positive result of capacity building of the FCS.

Lessons Learned

Flexible planning is necessary for facility improvement corresponding to the change of disaster management policy.

Insufficient collaboration with other assistance schemes could be a risk factor in making the impacts of the project uncertain. Integrated assistance should be a way to avoid the risk.

(6) Security for Project Accomplishment

Security has been one of the most important problems in implementing this Project. Frequent violence and conflict have been forcing JPT to stop field investigations and meetings with beneficiaries and other related donors.

A pilot project was planned to be implemented in Kalmunai to introduce disaster management through the enhancement of community awareness on disaster. Another pilot project was also planned in Kalmunai for promoting a memorial park of the tsunami both for Tamil and Moslem. Both pilot projects intended to enhance community empowerment and to verify its effectiveness for rehabilitation and reconstruction. But, actual implementation of the two was postponed due to the difficult security problems in the area.

Implementation of the JSFVs has also been affected by this security situation. Originally, JSFVs were planned to be constructed by October 2006. It was then extended to February 2007 and further to May 2007. This unexpected delay of construction brought amplified anxiety of the beneficiaries and further delay in preparation of resettlement.

Lessons Learned

Plans and schedules for field investigations are to be made flexible with sufficient allowance for contingency if the site is located in or adjacent to difficult security areas.

For selecting the site for pilot projects, careful consideration of the security situation is to be made as well as in depth analysis on possible adverse effect on the community and community people (such as impact on ethnic problem).

For realizing early completion of the project like JSFVs, the process for implementation is to be shortened as much as possible. In this Project, plan and design were made very quickly within two months, while tendering required five months (in case of Iqbal Nagar). If special arrangements were made to shorten the tendering process, construction of JSFVs would have been completed before the security situation worsened.