Democratic Socialist Republic of Sri Lanka

Ex-Post Evaluation of Japanese Technical Cooperation Project "The Project for Agriculture and Rural Development for Rehabilitation and Reconstruction through Community Approach in Trincomalee District"

External Evaluator: Tomoko Tamura, Kaihatsu Management Consulting, Inc. 0. Summary

This project was implemented with the objective of establishing a development model of rural and agriculture rehabilitation with a participatory approach in Trincomalee District in Sri Lanka.

Assistance for rehabilitation and to the agriculture sector was an important task in the policy of the country at the time of project planning; the need of assistance for the Eastern Province, which lagged behind in development due to the influence of conflict was high; and assistance for rehabilitation was an important area in the strategy of Japanese assistance to Sri Lanka. Therefore, relevance of the project is high.

The project objective, "To establish a model for agricultural and rural development projects for community rehabilitation and reconstruction in Trincomalee District" was largely achieved by the end of the project; therefore effectiveness of the project is high. In terms of the overall objective of the project, sub-models on production technologies in the paddy, other field crops (OFC), dairy farming and other sectors were disseminated by being integrated into the programmes of the provincial government. However, effectiveness and replicability of the TRINCAP¹ total package, which is an integrated development model based on the formulation of CAP², had not been tested during the project period and was not disseminated thereafter, either. There are some issues with the continuation and expansion of project activities in the target villages. Therefore, effectiveness and impact is concluded as fair.

Efficiency of the project is high, as the project cost and period were as planned. Some improvement is needed in terms of institutional aspects of the counterpart organizations, and further enhancement is recommended for the technical and financial aspects. Therefore, sustainability of the project is fair.

In light of the above, the project is evaluated to be satisfactory.

¹ TRINCAP is the acronym used to refer to this project.

 $^{^2}$ Community Action Plan. A planning methodology with community participation aims to develop an action plan by the community for solving their problems. The Ministry of Housing Development introduced this methodology first time in Sri Lanka in 1980s.

1. Project Description



Project Location



Training for farmers at the model farm for paddy technology in a target village (January 2009)

1.1 Background

From the early 1980s, there was a conflict in Sri Lanka between the government and the LTTE³, the opposition force which sought separation and independence. The north and east of the country was particularly affected due to the conflict. As a result of the conflict and Tsunami



Figure 1 Location of the target villages of the project

catastrophe in 2004, infrastructure of the area was significantly damaged, and productive activity stagnated.

A ceasefire agreement was signed between the government and the LTTE in February 2002, and after that there was no fighting for some time. The Sri Lankan government and the international community were actively involved in assistance to the conflict-affected areas, as they considered that providing a peace dividend to the local community would help the peace process.

Sixty per cent of the population of Trincomalee district, the economic center of the Eastern Province,⁴ worked in the agriculture, forestry and fishery sectors. However, agricultural production stagnated as rural infrastructure, such as irrigation and internal

³ The Liberation Tigers of Tamil Eelam.

⁴ The Eastern Province consists of three districts, Trincomalee, Batticaloa and Ampara.

roads, was severely damaged as a result of the conflict. In these circumstances, the government of Sri Lanka requested the Japan International Cooperation Agency (JICA) to implement a technical cooperation project to improve the infrastructure and agriculture productivity of the rural areas of the district. This project commenced in October 2005 after JICA had dispatched a study team for project formation. Six *grama niladhari* divisions⁵ in three divisional secretary's divisions in the district were selected as the target area of the project.

As soon as the project commenced, clashes between the LTTE and the defense forces of the government occurred around the target area of the project, and the fighting started again. Public security around the target area of the project worsened rapidly after that,⁶ and the JICA experts had to leave Trincomalee District for around seven months. Public security improved, and the JICA experts returned to Trincomalee in January 2007. However, the project activities were carried out in very unstable security conditions with a lot of restrictions on travelling and transport.⁷

Overall Goal		The model developed will be extended in Trincomalee District through which it will contribute to the activation of rural areas					
		in the region.					
Project Objective		To establish a model for the agricultural and rural development					
		project for community rehabilitation and reconstruction in					
		Trincomalee District.					
	Output 1	Community-based organizations (CBOs) are strengthened.					
	Output 2	Rural infrastructures are improved through Community					
		Managed Rehabilitation (CMR ⁸).					
Outputs	Output 3	Technologies for agriculture and livestock are enhanced.					
	Outrout 1	Technologies for income generation other than agriculture and					
	Output 4	livestock are enhanced.					
	Output 5	Frontline government services on agriculture and rura					

1.2 Project Outline

⁵ Grama niladhari division is the smallest administration unit of Sri Lanka. Trincomalee District has 11 Divisional Secretary's divisions and 230 grama niladhari divisions.
⁶ There are compared for the standard sta

⁶ There are some factors leading to instability in Trincomalee District as all three main communities (Sinhala, Tamil and Muslim) live there, and Trincomalee harbor is a strategic point for the government defense forces.

⁷ The government defense forces took control of the LTTE-controlled area by force in May 2009. This was only six months before the end of the cooperation period of the project. Public security in the target area of the project improved rapidly after that.

⁸ There is a system in Sri Lanka through which a CBO can undertake public works of a limited size without having to go through a process of tender. This aims to develop the capacity of CBOs. It is called a community contract, and is often called "community managed rehabilitation" for works implemented in conflict-affected areas.

	development are strengthened.			
	[Japanese Side]			
	1. Experts: 9 persons			
	• Long-term: 6 persons • Short-term: 3 persons			
	2. Trainees received: 6 persons for counterpart training in			
Terrente	Japan			
Inputs	3. Equipment: JPY 20 million			
	[Sri Lankan Side]			
	1. Counterparts: 58 in total			
	2. Land, facilities and project office			
	3. Local cost and counterpart salary			
Total cost	JPY 484 million			
Period of Cooperation	October 2005 – October 2009; 4 years			
Implementing Agency	Ministry of Economic Development			
Cooperation Agency in	Nippon Koei			
Japan				
	Major related projects implemented in the target area during			
	the project implementation were as follows:			
	UNDP: Transition Recovery Programme			
	• World Bank : North East Coastal Community Development			
	Project (NECCDEP)			
	Major projects utilizing outputs of the project are as follows:			
	• Follow-up cooperation for the Project for Agriculture and			
	Rural Development for Rehabilitation and Reconstruction			
	through Community Approach in Trincomalee District of			
Related Projects	JICA			
	• Dairy farmers, milk factory and livestock societies support			
	project by Peace Winds Japan			
	• Agriculture Rehabilitation Support in the Eastern Province			
	by JEN			
	• USAID : Connecting Regional Economies (CORE) project			
	• UNDP : Early Recovery Programme			
	• Project for Training of Frontline Officers in Community			
	Development in Conflict-Affected Areas in Sri Lanka by			
	JICA			

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement of Overall Goal (including other impacts)

It was evaluated that the overall goal would be achieved because: 1) the stakeholders of the project believed it would be possible to increase their harvest and income by applying the technology introduced by the project; 2) the production technology and other outputs introduce by the project were expected to be disseminated to surrounding villages; 3) the stakeholders recognized that the approach and strategy of the project was appropriate and effective; 4) a development model was established and related documents and technical manuals were being developed; and 5) the district secretary agreed to allocate budget for dissemination of the method of the project.

1.3.2 Achievement of Project Objective

It was evaluated that there was a high prospect that the project would achieve its objective because between three and seven kinds of technology introduced by the project to a village had already expanded to surrounding villages; income of 78 per cent of the core farmers⁹ had increased by more than 10 per cent; all the people interviewed in the terminal evaluation, including the members of the joint coordination committee of the project¹⁰ and other stakeholders, had mentioned the effectiveness of the TRINCAP total package, and several textbooks summarizing the experience of the project were being prepared.

1.3.3 Recommendations

(1) Dissemination of the TRINCAP total package¹¹

- Establishment of mechanism for dissemination of the model Organize divisional level implementation teams and provincial and district level coordination and monitoring team.
- Facilitation for development of CAP

Development of CAPs at the target villages for dissemination by divisional level implementation teams, including identification of necessary funding, machinery and materials, and personnel for implementation of development projects.

⁹ Two hundred and twenty-five farming families, who had a good motivation to introduce new technologies, were identified as "core farmers" in the project after discussions with community and agriculture instructors. The core farmers were prioritized for technical training. They conducted demonstrations of the new cultivation technologies introduced by the project at the model farms, and played a role in transferring the technologies to neighboring farming families.

¹⁰ The Joint Coordination Committee was the meeting hosted by the implementing agency of the project to monitor progress of the project; it had a role in deciding the plan and strategy of the project.

¹¹ There is no clear definition of the TRINCAP total package in the report of the terminal evaluation. However, from the content of the report it is understood that that the TRINCAP total package should be an integrated development model, which starts with development of CAP and implements activities of several sectors, such as paddy, OFC, animal husbandry and CMR, according to needs (see Figure 2).

• Fund allocation for implementation of CAPs

Utilization of the budget of *Gama Neguma*¹² and allocation of necessary funds, machinery and materials, and personnel for implementation of the development projects in the CAPs.

(2) Utilization of TRINCAP sub-models (sector-wise models on paddy, OFC, poultry and others)

• Documentation of manuals for TRINCAP sub-models, and utilization of the sub-models by introducing them to the donor agencies and the on-going programmes.



Source: illustration done by the external evaluator for the ex-post evaluation based on the ex-ante evaluation report of the project

Figure 2 TRINCAP model proposed at the terminal evaluation (Total package and sub-models)

1.3.4. Definition of "model" in the project

This project was implemented with the objective of establishing a model for rehabilitation of agricultural rural villages. As a part of the ex post evaluation study, the external evaluator tried to clarify what kind of model the project aimed to establish and disseminate in the project. It was found that the definition of "model" used by the experts and counterparts of the project was not consistent throughout the project period.

¹² Gama Neguma is a village development programme implemented by the Ministry of Economic Development all over the country. "Gama" means village and "Neguma" means improvement or uplifting. Improvement of small-scale rural infrastructure and income generation are the main activities of the programme.

In the ex-ante evaluation of the project, the stakeholders used "establish a model" to mean to achieve outputs that would be a role model for other projects, by rehabilitating infrastructure and providing training for agriculture management through a participatory development approach. There was a discussion about the definition of model at the time of the mid-term evaluation of the project. The phrase "TRINCAP model" was used in the terminal evaluation as mentioned above, and it was recommended that the TRINCAP total package and the TRINCAP sub-models should be disseminated. It was also found that the TRINCAP model was re-defined as "a set of good practices for reference" at the completion of the project, according to the minutes of the meeting at that time. Many of the stakeholders of the project in the counterpart organizations recognized "dissemination of the TRINCAP model" as utilization of the sub-models at the time of the ex-post evaluation of the project.

2. Outline of the Evaluation Study

2.1 External Evaluator

Tomoko Tamura, Kaihatsu Management Consulting Inc.

2.2 Duration of Evaluation Study

Duration of the Study:	November 2012 - September 2013
Duration of the Field Study:	February 13 - March 9, 2013, May 12 - May 18, 2013

3. Results of the Evaluation (Overall Rating: B^{13})

3.1 Relevance (Rating: 3^{14})

3.1.1 Relevance with the Development Plan of Sri Lanka

As mentioned earlier, a ceasefire agreement was signed in Sri Lanka in February 2002, and there was no fighting for some time after that. The Sri Lankan government developed the "National Framework for Relief, Rehabilitation and Reconciliation" in June 2002. The Framework considered the most important task to be projects for rehabilitation and reconstruction of the conflict-affected areas, and ethnic reconciliation through these projects. This project was believed to contribute to the above-mentioned task at the time of project planning.

The conflict started again as soon as the project commenced. However, rehabilitation and stabilization of the conflict-affected area - including Trincomalee District, the target area of the project - was still an important task for the government. Redevelopment of the Northern and Eastern Provinces was still an important task in *Mahinda Chintana*

¹³ A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

¹⁴ ③: High, ② Fair, ① Low

(2006-2016), which was formulated in 2006. This was the medium- and long-term national development plan of the country at the time of completion and the ex-post evaluation of the project.

In this way, rehabilitation and reconstruction of the conflict-affected area was an important policy matter at the time of planning, implementation and ex-post evaluation of the project.

Therefore, the objective of the project has high relevance with the development plan of the country.

3.1.2 Relevance with the Development Needs of Sri Lanka

Agricultural production, the main revenue source of the people in the area, had stagnated in the Eastern Province at the time of planning the project, because necessary infrastructure had been damaged, including irrigation facilities and farm roads. Improving agriculture productivity and activating rural villages was a priority need for rehabilitation and reconstruction of the conflict-affected area.

The Eastern Province had fallen further behind the development of the country at the time of the project completion. Before the conflict, the contribution of the province to Gross Domestic Product (GDP) had been 14 per cent; this had reduced to 5.8 per cent at the time of completion of the project in 2009.¹⁵ Primary industries, including agriculture, were an important sector, in which 28–39 per cent of the population of the province was engaged (2009¹⁶). However, in 2008 the sector's contribution to GDP was only 22 per cent. The low productivity of the sector had led to its percentage contribution to GDP being lower than the percentage of population engaged in the sector. This indicates a need to improve productivity, including through increasing the harvest and reducing costs, which the project aimed to achieve.

As mentioned above, the need for assistance to the Eastern Province was high, as at both the time of planning and completion of the project it was behind the development of the country due to the influence of the conflict. Increasing agricultural productivity was particularly important, as a large percentage of the population was engaged in this sector. Therefore, relevance of the project in terms of development needs is high.

3.1.3 Relevance with Japan's ODA Policy

The Country Assistance Policy of Sri Lanka (2004) of the Ministry of Foreign Affairs of Japan, at the time of project planning, stated that the economic cooperation of Japan to

¹⁵ Eastern Development Plan, 2012-2016, Volume I, p.14.

¹⁶ The percentages of population engaged in the primary industry sector were 37.5, 27.5 and 39.2 in Trincomalee, Batticaloa and Ampara Districts respectively, according to the statistics of the Eastern Provincial Council.

the country should aim at the establishment of peace and to implement projects on rehabilitation and assistance based on the medium- and long-term development plan. The Country Assistance Strategy of JICA (2004) also stated that the priority tasks were assistance to the northern and eastern areas of the country and to the agriculture sector.

As mentioned above, the establishment of peace and assistance for rehabilitation in the northern and eastern areas of the country, and to the agriculture sector, were important tasks in Japanese assistance to Sri Lanka. Therefore, the project had high relevance with Japanese cooperation policies.

This project has been highly relevant with Sri Lanka's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.

3.2 Effectiveness and Impact¹⁷ (Rating: ②)

3.2.1 Effectiveness

3.2.1.1 Project Outputs

The following five items were identified as the outputs of the project, which are necessary to achieve the project objective. Outputs 4 and 5 were added at the time of the mid-term evaluation.¹⁸

1) Output 1

Output 1 was "Community-based organizations (CBOs) are strengthened". Indicators for the output were: registered members increased by 5 per cent in 60 per cent of the CBOs participating in the project; more than 30 CAPs implemented; minutes of the meetings prepared for 60 per cent of the meetings conducted by CBOs; and financial books and/or inventory sheets maintained in 80 per cent of the CBOs participating in the project.

The project carried out training programmes, including those on leadership development, finance and accounting, management and administration for implementation of CAPs, for the 17 CBOs in the target area. The CBOs became more active as a result of these training programmes and implementation of CMRs. It was found that all the above-mentioned indicators were fulfilled and Output 1 had been achieved at the end of the project.

2) Output 2

Output 2 was "Rural infrastructure is improved through CMR". The indicators of the

¹⁷ Sub-rating for Effectiveness is to be put with consideration of Impact.

¹⁸ Output 4 was added as the related activities had already started, and Output 5 was added as it was needed to achieve the overall goal of the project.

output were: the project rehabilitated more than 80 per cent of the infrastructure proposed to be rehabilitated by the CAPs; all the infrastructure rehabilitated by the project was utilized by the community; operation and maintenance plan was prepared for all the rehabilitated infrastructure.

Nineteen infrastructure activities in the target villages, including internal roads, irrigation facilities and community halls, were proposed for construction or to be rehabilitated in the CAPs. Sixteen infrastructure were constructed or planned to be rehabilitated by the project, and the other three were supposed to be done with funding from other donor organizations. Prior to implementation of the construction and rehabilitation of the



Construction of a water supply system by CMR. The community members provided labour free of charge for excavation and backfilling of pipe laying (Veloor village in June 2009)

infrastructure by the CBOs through the CMR scheme, the project provided training programmes to the community on contract and construction management, and financial and administration management of the construction. All sixteen infrastructure activities were completed and utilized by the community at the end of the project as planned. Operation and maintenance plans were also formulated, and the community members started maintenance work according to the plans. In this manner, all the three indicators were fulfilled and Output 2 was achieved.

3) Output 3

Output 3 was "Technologies for agriculture and livestock are enhanced". The indicators for the output were: 60 per cent of the core farmers increased paddy production by 10 per cent; 60 per cent of the core farmers continued utilizing the technology introduced by the project for more than two cultivation seasons; and 40 per cent of the core farmers had increased access to market information. It was found at the end of the project that 66 per cent of the core farmers had increased their



Field training on row seeding method (Thampalakamam village in November 2008)

production of paddy by more than 10 per cent; and 62 per cent of the core farmers utilized technology introduced by the project for more than two cultivation seasons. Technology

introduced included seed paddy production, parachute method,¹⁹ row seeding method,²⁰ small-scale fruit gardening, home gardening, production of potatoes and pineapples, rearing of improved varieties of cattle, goat rearing and poultry. The core farmers participated in the training programme, including market inspections arranged by the project, and 58 per cent of them gained increased access to market information.²¹ In this manner, all the indicators were fulfilled and Output 3 had been achieved.

4) Output 4

Output 4 was "Technologies for income generation other than agriculture and livestock are enhanced". The indicators for the output were: 60 per cent of the core farmers continued the income generating activities introduced and assisted by the project after they received training, in areas other than agriculture and livestock; and 10 per cent of these core farmers sell the products of the income generating activities. It was found that all 71 core farmers who underwent the training programmes on income generating activities continued with these activities, and 52 farmers, 73 per cent of the total, sold the products.²² Therefore, Output 4 had been achieved.

5) Output 5

Output 5 was "Frontline government services on agriculture and rural development are strengthened". The indicators for the output were: the number of farmers who utilized the Agriculture Service Centers and services of veterinary surgeons was increased by 10%; 40 per cent of field extension officers utilized the agriculture and livestock technologies introduced by the project into their activities; and meetings initiated by frontline officers²³ were conducted regularly. The number of farmers who utilized the Agriculture Service Center in Nilaveli and veterinary surgeon's office in Morawera, for which buildings were constructed by the project, increased by more than 10 per cent at the end of the project. The number of training sessions conducted at the veterinary surgeon's office increased substantially from eight in 2007 to thirty-three in 2008. Excluding the newly-recruited officers, twenty of the twenty-two frontline officers (91 per cent) who worked in the target area of the project were utilizing the technologies on agriculture and

¹⁹ A method of cultivating paddy seedlings on plastic trays and transplanting them by throwing. It is called parachute method because the paddy seedlings fall down to the paddy field like parachutes when they are thrown.

²⁰ Cultivation method of planting seed paddy in rows using a hand push machine (see picture).

²¹ Farmers engaged in cultivation of OFC and goat rearing were not yet in a position to sell the products in markets as they were still at an early stage of production.

 $^{^{22}}$ Groups engaged in dressmaking were not yet in a position to sell the products in markets but only satisfied the needs of their family members.

²³ The government officers working in the field to provide advice for farmers, including agriculture instructors, livestock development officers and divisional officers of the Agrarian Service Development were called "frontline officers" in the project.

livestock introduced by the project.

It was proposed in the mid-term evaluation of the project that the meetings initiated by frontline officers should be held around once every two months with participation of frontline officers, project staff and senior management to review the process and methodology of the project, problems and best practice of the project. The meetings were held six times but were not continued after that. The main reason for discontinuation was because the frontline officers were busy as they were in charge of a large area; some of them had to cover several areas due to vacancies in some officer positions at that time. From this, it can be considered that Output 5 was partly attained.

3.2.1.2 Achievement of Project Objective

Project Objective was "To establish a model for the agricultural and rural development project for community rehabilitation and reconstruction in Trincomalee district". The results of the study on the level of achievement of the project objective in accordance with the indicators is given below.

1) Indicator 1

The first indicator for the project objective was "Five technologies were transferred from the core farmers to five surrounding farmers in each target grama niladhari division (150 households). It was expected that any five out of the seven technologies introduced by the project - CAP, CMR, paddy, OFC, dairy farming, poultry and income generating activities – would be disseminated. It was found that the technologies introduced by the project had spread to 311 households at the end of the project. This was more than expected. However, the number of technologies that had spread was different from village to village, and each of these households did not practice all five technologies due to geographical and climatic conditions and availability of land and other resources. The technologies that spread most were those on paddy, OFC, home gardening, small-scale fruit gardening, dairy farming, cane craft and dressmaking.

2) Indicator 2

The second indicator was "Income of 60 per cent of the core farmers (250 households) were increased by 10 per cent". It was found that the income of seventy core farmers out of ninety randomly selected core farmers (78 per cent) had increased by more than 10 per cent at the end of the project. This means that the indicator had been satisfied. There were some core farmers whose income had not increased. This was because their yield had not increased mainly due to natural disaster, such as flooding.

3) Indicator 3

The third indicator was "60 per cent of the members of the Joint Coordination Committee at four levels appreciated the approach and methodologies of the project to activate communities in Trincomalee District". The members in four levels meant those working for province, district, divisional secretary's divisions and *grama niladhari* divisions. It was found at the interview conducted in the terminal evaluation of the project that more than 60 per cent of the members of the Joint Coordination Committee and all the other stakeholders mentioned the effectiveness of the TRINCAP model. Development partners in the World Bank and Asian Development Bank also recognized the effectiveness of the TRINCAP models. From these facts, it can be said that the third indicator had been achieved.

However, as mentioned later, replicability and effectiveness of the TRINCAP total package was not tested in the field at the time of the terminal evaluation. It seems that the stakeholders of the project stated in interviews that "the model was effective" just to appreciate the good outcome of the project.

Replicability and effectiveness of the TRINCAP total package was to be tested at the time of dissemination after the project. The result of this test is explained in the section on Impact of this report.

4) Indicator 4

The fourth indicator was "Reference materials on the approach and methodologies established by the project were documented". The experience of the project was summarized and documented in eight books by the JICA experts. These books were called "TRINCAP textbooks" and distributed among the relevant government institutions, the World Bank, the



Summary of experience of the project

Asian Development Bank, United Nations Development Programme (UNDP) and non-government organizations (NGOs). They were introduced in the seminar held by the project just before the project ended.²⁴

In this way, this project has largely achieved its objectives and five outputs; therefore its effectiveness is high.

²⁴ The seminar was held for government stakeholders in the Ministry of Economic Development, Northern and Eastern Provincial Councils and other institutions, staff of JICA office, donor agencies and NGOs to share the experience of the project. There were a total of eighty participants.

3.2.2 Impact

3.2.2.1. Result of dissemination of the models

The Overall Goal of the project was "The development model will be extended in Trincomalee District through which it will contribute to the activation of rural areas in the region". As mentioned above, in the terminal evaluation the experience of the project was called the "TRINCAP model", and it was proposed to disseminate the model to other areas. The activities in the following table were carried out by mainly on the initiative of the Eastern Provincial Council with the assistance of JICA.

Phases	Main activities	Input from JICA	Note
Phase 1	Frontline officers,	Two people were employed	Models were
Conducted in nine	including agriculture	for model dissemination by	modified or
villages in the	instructors working in	utilizing administration	adjusted for
Divisional	the project target area,	costs of a JICA individual	dissemination.
Secretary's Divisions	demonstrated models	expert, who was working	
of the project's target	in the non-target	in the area as an advisor	
area in Trincomalee	villages.	for the rehabilitation and	
District (November	They did validation	development programme.	
2009 – October 2010)	and modification of	The budget for	
	the models.	coordination allocated to	
	The TRINCAP	the expert was utilized in	
	textbooks were	the distribution of the	
	translated into local	textbooks.	
	languages and		
	distributed to		
	stakeholders.		
Phase 2	Dissemination of the	Same as above	Activities for
Conducted in seven	sub-models* was		human resource
villages in four	conducted out of the		development had
Divisional	project's target area		to be conducted
Secretary's Divisions	by government		intensively as it
outside of the	officers and		was the first
project's target area	agriculture instructors		dissemination out
(November 2010 –			of the project's
July 2011)			target area.
Phase 3	Several sub-models	Two local consultants were	Dissemination of
Conducted in	were introduced to the	dispatched by utilizing a	sub-models was
Batticaloa and	target areas for	Follow-up Cooperation	not conducted in
Ampara Districts in	dissemination in	scheme of JICA. The	Ampara District
the Eastern Province	Batticaloa District,	machinery necessary for	within the period
(August 2011- March	which were selected	implementation of the	of the Follow-up
2012)	after field visits and	paddy sub-model was	Cooperation.
	training programmes	provided to the Batticaloa	
	were conducted.	branch of the Ministry of	
		Agriculture of the Eastern	
		Provincial Council.	

 Table 1
 Status of dissemination of the TRINCAP models after the completion of the project

Note: Models for specific sectors, such as paddy, OFC and dairy farm, are called "TRINCAP sub-models", to differentiate them from the integrated model as a package.

Source: JICA

Generally, in the process of developing a model, it is necessary: first, to summarize the methodology adopted or experience gained in the activities carried out in a particular area; second, to test the replicability and effectiveness of the methodology, or the summary of experience, by adopting the same in a different area or environment; and then to identify any issues arising from this test and thereafter make any necessary modifications to the methodology or the summary of experience.

It does not seem that the stakeholders of the terminal evaluation had recognized the need for testing and improvement. However, the effectiveness and replicability of the TRINCAP total package was tested in the activities in Phase 1 of the dissemination, mentioned in the above table.

Through the process of this test, it was found that implementation of the TRINCAP total package was difficult given the existing administrative structure and budget allocation of the Sri Lankan government (this will be discussed in detail later). Therefore, after Phase 1, it was encouraged to utilize available local resources as much as possible, and it was understood that it was not always necessary to disseminate the total package, but sub-models or a part of sub-models could be disseminated with modifications or adjustment. This change of direction was facilitated by the JICA individual expert supervising Phase 1, as a result of discussions with staff of the Eastern Provincial Council and frontline officers.

Phase 2 was the first dissemination of the models in non-project areas. It was planned that the dissemination would be conducted by frontline officers who had not been involved in the project much. Therefore, several study tours to target villages of the project were organized for them, so that they would have an opportunity to share the experience and achievements of the project. The sub-models on paddy, OFC, dairy farming and others were disseminated. Phase 3 was dissemination to different districts. Human resource development was conducted intensively at first. JICA only assisted the activities of Phase 3 for 3 months. There was no visible outcome of Phase 3 within that period. The Ministry of Agriculture of the Eastern Provincial Council continued the activities.²⁵

3.2.2.2. Factors that affected the dissemination of the TRINCAP total package

The replicability and effectiveness of the TRINCAP total package, which is an integrated development model, was not tested during the project period. It was found to be difficult to disseminate, as mentioned above, as there were several factors that affected

²⁵ It was confirmed with the Ministry of Agriculture of the Eastern Provincial Council at the time of the expost evaluation, that agriculture instructors of the districts had followed up the agriculture technologies introduced in Phase 3. It seems that the sub-models on paddy and OFC were utilized in Batticaloa and Ampara Districts respectively, and the sub-model on dairy farming was utilized in both districts.

its dissemination, including availability of budget, time constraints (because one officer is in-charge of around 1,500 families), shortage of equipment and lack of coordination among the various government institutions. The following are details of these factors.

Firstly, the fact that the budget of the implementation agencies was very small compared with the input of the project caused a problem. The project spent a total of JPY 128 million in four years for the implementation of development activities in the six target villages, including training, purchasing of materials and machinery, and implementation of CMRs. This excludes the personnel and travelling costs of the Japanese experts, salaries of local project staff and the cost of training in Japan. It was found that around JPY 5 million was invested in a target village per year.²⁶

The budget allocated for the Eastern Provincial Council for implementation of development programmes in the villages of the province on agriculture and livestock sectors was LKR 77 million in 2010. If we simply divide the budget by the number of villages in the province, this means that only around LKR 110,000 was invested in a village for that year. This is around JPY 70,000, using the exchange rate in 2010. From these figures, we can understand that the project made an extremely intensive investment, and that it was difficult for government organizations to implement a similar amount of investment for dissemination. It was also difficult for government institutions, such as ministries and departments, to allocate the necessary budget in a flexible way for activities identified as necessary by the community members as a result of CAPs. Government institutions have to propose the budget required in the previous year, and spend their allocation according to an annual plan that has been approved by their higher authority. These issues on budget allocation were some of the problems with dissemination of the total package.

The TRINCAP total package starts with implementation of a CAP workshop. The CAP workshop conducted in the project was a comprehensive one, in which government officers and residents got together and had discussions for three to five days in a village. There was active participation and discussions among them at that time. This was partly because the residents and government officers firmly expected that the activities they proposed in the workshop would be implemented in due course, as the project had a budget for activities in the village. The project provided lunch for the participants to facilitate the participation. However, after the project it was found that implementation of such a comprehensive CAP workshop was difficult: farmers and the government officers did not have adequate incentive to hold and participate in a three to five day workshop in a village when they were occupied with other routine work, and when they did not have

²⁶ The figure was calculated by the external evaluator based on the figures in the terminal evaluation report of the project.

firm expectations and facilitation as mentioned above.

Another factor that affected planning of CAPs was lack of coordination among the various government institution due to the segmentarized and vertical government administrative structure. The process of planning a comprehensive CAP needs the government officers who are in charge of agriculture, animal husbandry, irrigation, agrarian service, rural development, and village administration to participate in a CAP workshop in a village, to discuss the current situation and problems with the villagers, and thereafter analyze the problem from a professional viewpoint, propose solutions and develop action plans with the participation of and discussion with the villagers.

However, the government administration structure of Sri Lanka is segmented, and there is sometimes little horizontal communication between the different institutions.²⁷ The project staff coordinated communication between the government institutions and invited them to CAP workshops during the project. However, it was found that there was no suitable government institution to take a leadership role in holding a CAP workshop and to coordinate between the relevant government institutions. The terminal evaluation recommended that the Divisional Secretary's offices should take a leadership role in holding a CAP workshop; however this did not work well, because the offices had neither a clear mandate to coordinate these segmented government institutions nor the experience to do it.²⁸

It seems that there were some problems with the experience and ability on participatory approaches of frontline officers. According to staff and others in JICA involved in Phases 1 and 2 of dissemination, frontline officers in the sectors of agriculture, animal husbandry, agrarian development service, and others, are all technical officers and have specialized knowledge and experience of the technology of the sector they are in charge of. However, they do not have much experience in participatory approaches and facilitation and have limited ability to carry out effective facilitation work in a CAP workshop, generating opinions of villagers, analyzing problems and proposing solutions, while appreciating the sense of ownership of the villagers.

²⁷ For example, there are several government organizations in the sector of agriculture, such as agriculture, animal production and health, irrigation and agrarian services. Out of these, agriculture and animal production and health belong to the provincial council, and irrigation and agrarian services belong to both the central government and provincial council.

²⁸ The "divisional level implementation team" and "monitoring team", comprising officers working for government organizations belonging to the province and district, were formed and had meetings periodically in accordance with the recommendation in the terminal evaluation of the project. However, the divisional level implementation team was not able to function as it was recommended and expected in the Terminal Evaluation due to the above-mentioned reasons, and it became unworkable. The monitoring team had the same members as the existing periodic progress review meetings conducted by province and district. Some felt that it was inefficient to hold a meeting just to monitor the dissemination of the models; therefore, the monitoring of dissemination was conducted as one of the items for discussion in the periodic meetings of the province and district. This was continued until Phase 3 of the dissemination.

3.2.2.3. Dissemination of the TRINCAP sub-models

It was found in the ex-post evaluation that the TRINCAP sub-models were utilized actively in various ways as follows:

(1) Dissemination of TRINCAP sub-models by integrating with on-going programmes of the Eastern Provincial Council

The senior management of the Ministry of Agriculture of the Eastern Provincial Council was actively engaged in dissemination of the TRINCAP sub-models as a part of agriculture technology dissemination conducted by agriculture instructors, who are the frontline officers of the ministry. The ministry conducted practical training on the TRINCAP sub-models in various training programmes for agriculture instructors. They planned to purchase and distribute necessary materials and equipment for implementation of the sub-models in 2013, and the necessary cost for that has been added to the annual budget.

The Department of Animal Production and Health of the ministry had been conducting a programme called "Dairy Farm Village" since 2011.²⁹ As a result of getting ideas from the TRINCAP sub-model on dairy farming the Department was conducting the programme in the Eastern Province, introducing improved varieties of cows, providing training on intensive cattle rearing in a cattle shed, encouraging formation of production societies and collection and sales of milk by the societies. Thirty production societies have been formed, which are now collecting and selling milk in Trincomalee District.

However, the progress of dissemination of other sub-models was slow due to various reasons. CMR has only been conducted once - for rehabilitation of irrigation canals in Thampalakamam village, a target village of the project, using funds from UNDP. The Irrigation Department stated that they are willing to adopt the CMR system in donor-funded projects in future; however, it is difficult for them to adopt the system in routine work as it needs more funding and time, and a system to support farmer organizations (FOs). The farming families who conducted poultry or goat rearing during the project now feel it is difficult to continue with them, due to changes in the market and production environment after the end of the conflict, as mentioned later. The Department of Animal Production and Health has not conducted a large-scale programme for dissemination of these sub-models.

²⁹ The Dairy Development Project, conducted by the Ministry of Animal Husbandry and Rural Development, is encouraging dairy farming all over the country with the aim tripling the production of milk and milk products between 2009 and 2015 in order to achieve self-sufficiency in milk products by 2016. The Dairy Farm Village is part of the above-mentioned project.

(2) Utilization of TRINCAP textbooks

During the project the JICA expert team compiled the TRINCAP textbooks, which are the reference books on sub-models. After the project, they were translated into local languages (Tamil and Sinhala) by the Ministry of Agriculture of the Eastern Provincial Council, and distributed to each sub-office. According to the ministry, officers refer to the textbooks during their routine work, and they are also utilized during training programmes. The ministry reprinted the textbooks using funding from the USAID/CORE agriculture programme, which was implemented in the Eastern Province with financial assistance of USAID.

(3) Utilization of TRINCAP formats in training in accounting for FOs

According to a frontline officer of the Department of Agrarian Service Development, accounting formats for FOs, which were developed and introduced by the project, have been utilized. The formats are the necessary documents for FOs to keep their accounts. They mentioned that the formats are easy to use, and they did not have such convenient formats earlier. The officers of the department are encouraging FOs to use the formats developed by the project, by introducing them at the time of financial training for FOs and during monitoring visits to the organizations.

(4) Utilization of the outcomes of the project in the training programme for frontline officers

The "Project for Training of Frontline Officers in Community Development in Conflict Affected Areas in Sri Lanka" is being implemented by JICA Sri Lanka office for a period of three years from April 2013. The Ministry of Economic Development is the counterpart organization of the project. The participants in the training courses of the project will visit the target villages of the TRINCAP project. Preparation work is being carried out at the moment. The objective of the visits is for participants to learn participatory approaches and the outcome of the introduction of agricultural technologies through the experience and achievement of the villages.

(5) Utilization by international organizations and NGOs working in Trincomalee District

During the project, international organizations and NGOs working in the district were provided with an opportunity to share the experience and achievements of the project by visiting the target villages and participating in seminars held by the project. As a result, international organizations, such as USAID, and Japanese NGOs, such as Peace Winds and JEN, utilized project sub-models after the project.³⁰

³⁰ UNDP conducted rehabilitation of irrigation canals and promotion of OFC cultivation with construction

(6) Change of awareness of the government officers about participatory approaches

It was found that officers of the Eastern Provincial Council had learned about participatory approaches from the project, and changed their attitude. The senior management of the council often mentioned during interviews that, "we never know their needs until we ask farmers", and "top-down planning does not work". The Agriculture Department mentioned that they used to adopt a top-down approach to choose the kind of technologies to be introduced and the model farmers for field demonstrations; however they now select the kind of technologies to be introduced in accordance with the needs of the farmers following discussions with them, and select model farmers together with them. The Director of the Department of Animal Husbandry earlier used to propose a plan and targets to the staff members; now, staff members propose the plan and targets. The Director mentioned that he understood from the project that staff members have a greater sense of responsibility for achieving targets when they have proposed them themselves.

It was found through the process of dissemination that there were several issues with regard to the dissemination of the sub-models. These included: there was not enough incentive for the farmers to adopt the new technologies due to the low price of paddy; there was not enough agriculture machinery and tools to introduce the new technologies; there were not enough water sources for the farmers to implement cultivation of OFC in an integrated way; there was a limited budget in the department to introduce the improved variety of cattle; and the newly appointed government officers did not know much about the sub-models. The Ministry of Agriculture of the Eastern Province plans to promote dissemination of the sub-models in future, while dealing with these issues.

3.2.2.4. Current status of the outputs and the activities in the target area of the project

The current status of the outputs and the activities in the target area of the project was studied in the ex-post evaluation. As Table 2 shows, the status varies. In summary, out of the forty activities, sixteen were expanded or developed, nine stayed the same, and fifteen were scaled down or had disappeared.

With paddy cultivation, the technologies, such as application of organic manure, production of seed paddy and post-harvest technologies, were continuously utilized in many villages. The parachute method was not practiced in any of the target villages, and the row seeding method was only practiced in one village. The villagers explained that, "we stopped practicing the method as we could not increase the yield due toas a result of

of agro-wells in the target villages of the project. USAID and Peace Winds Japan utilized the sub-model on dairy farming, and JEN utilized sub-models on OFC.

flooding, even though we used it taking much time and effort", and "We are using the traditional method again even though we learned the new methods are effective, as the present agriculture inspector does not visit our village". It seems that more conscientious instruction and incentive are needed for the farmers to change the traditional methodology of throwing seed paddy, which has been practiced for generations.³¹

The technology on OFC cultivation had spread from the core farmers to the surrounding farmers in some villages. There were some families whose income had increased, and they were now able to produce OFC throughout the year systematically. There are some farmers who had won district or provincial awards, or had been entrusted to supply coconut plants to the Department of Agriculture. Production of a new variety of papaw, which had been introduced by the project, was expanded to a commercial scale. The neighboring farmers are getting advice from the core farmers who were successfully practicing what they had learned from the project. It was found that some core farmers, whose production was good, were facing new challenges of post-harvesting or marketing.

Dairy farming has expanded through being integrated into the "Dairy Farm Village" programme of the Department of Animal Production and Health, as mentioned earlier. Some of the women engaged in dairy farming mentioned that the sale of milk helps the family economy a lot as it gives them daily income, while paddy cultivation only gives them income twice a year.

Most of the farming families had given up poultry for broiler production. During the conflict, there was limited marketing and distribution of chicken in the district. Therefore, the farming families were able to sell their product to nearby markets or shops. However after the end of the war large-scale private companies selling broiler chicken expanded their business to the district, and the farming families found it difficult to sell their products, because they could not offer their product at a fixed price and cheaper than the products of these large-scale companies.

Changes in the living environment also affected poultry production. After the end of the war, people who had been displaced to India and other places came back to the villages and the population of the villages increased. The people who had earlier settled in the villages had started agricultural production on a large scale. Many of those who were engaged in goat rearing and poultry had to stop these activities, because there was a possibility of goats eating agricultural products in nearby houses, and the smell from poultry might affect neighboring houses.

Some of the families who were engaged in income-generating activities, such as cane

³¹ According to the Ministry of Agriculture of the Eastern Provincial Council, these technologies are labour intensive; farming families with more than four acres of paddy land do not have much incentive to introduce the technologies, as the technologies are not cost effective for them.

craft and dressmaking, continued with production and sales. It seems that these activities expanded to some extent as some of them visited other villages and gave training. In some villages, the villagers are only engaged in these activities for their home consumption and do not sell or obtain income.

Table 2Status of implementation and continuation of the main activitiesintroduced by the project

(as of March 2013)

Divisional Secretary's Divisions	Grama Niladhari Divisions	Villages	Paddy	OFC	Dairy farming	Poultry (broiler)	Goat rearing	Income generation (cane craft/ dress making)
Panikettiyawe	Panikettiyawewa	Ethabandiwewa	\rightarrow	7	7	\rightarrow		7
Manaura	Nochchikulam	Mylakudawewa		7	7			У
Morawewa		Miriswewa/ Rothawewa		7	7		7	7
		Nochchikulam	\rightarrow	\rightarrow	7		\rightarrow	
	Mullipothopo	Mullipothana	7	7	7	\rightarrow	7	
Thampala	Mullipothana	Saliyapura	7	7	7	7	7	7
kamam	Thampalakamam south	Thampalakamam	7	7	\rightarrow	У	7	7
Kuahahavali	Nilaveli	Nilaveli		7	7	\rightarrow	7	У
Ruchchavell	Veloor	Veloor						У

 \wedge : Expanded or developed, \rightarrow : As it was, \vee : Scaled down or disappeared Source: Documented by the external evaluator based on interviews with beneficiaries, discussions with CBOs and reports of the projects.

As Table 3 shows, the status of utilization of the major infrastructure constructed by CMR was good in most of the villages. The villagers carried out cleaning and repairs periodically. However, the community halls of Mylakudawewa and Miriswewa could not be used for meetings, as they had been used by the Department of Agrarian Service Development as grain stores and had not been cleaned up yet.

Table 3Status of utilization and maintenance of the major infrastructure
constructed or rehabilitated by CMR

(as of March 2013)

Divisional	Grama		Infrustructure	Stat	Status of utilization			Status of maintenance		
Divisions Divisions	Villages	constructed or rehabilitated by CMR	Utilized well	Utilized	Not utilized much	Very good	Good	Poor		
	Panikotiyaw		Community hall	1				1		
		Ethabandiwewa	Storage of agriculture							
	ewa		machineries		~			~		
Morawawa			Community hall			1			1	
ivioi awewa	Nochobi	Mylakudawewa	Storage of agriculture			(
	kulam		machineries			~			~	
	Kulam	Miriswewa	Community hall			1			1	
		Nochchikulam	Agriculture road	1				1		
		Mullipothana	Irrigation channels	1				1		
		www.	Internal road	1				1		
	Mullipothana		Community hall	1			1			
	Mullipoularia	Salivanura	Internal road	1			1			
		Saliyapura	Storage of agriculture		/					
Thompolo			machineries		v			~		
kamam			Office of the Farmer							
Kalham			Organization with rooms					1		
	Thampalaka		for paddy storage and	~			~			
	mam South	Thampalakamam	shop							
	man Sour		Agriculture road	1				1		
			Storage of agriculture		,					
			machineries		×			· ·		
Kuchcha	Nilaveli	Nilaveli	Drainage system	1				1		
Voli	Veloor	Adambodai	Internal road	1				1		
VCII	Velooi	Audiniboudi	Water supply system		1			1		
Total			10	4	3	3	11	3		

Source: Documented by the external evaluator based on interviews with the beneficiaries, discussions with CBOs and reports of the projects.

Table 4 shows the results of the study conducted for the eleven CBOs that undertook CMRs, in terms of status of activities, holding of meetings, collection of membership fees and, maintenance of accounting books. There was one CBO that was good in all four criteria. There were two that were poor in all four criteria. Others had a mixed result, which can be considered as moderate. It can be assumed that the CBOs became inactive mainly because they had less funds and assistance for their activities once the activities of the project had finished.

Divisional			CROS	Status of the CBOs				
Secretary's Divisions	Grama Niladhari Divisions	Villages	implemented CMR	Status of activity	Holding of meetings	members hip fee collection	Book keeping	
	Paniketiyawewa	Ethabandiwowa	WRDS	А	А	A	В	
	Fallikeuyawewa		FO	В	С	В	В	
Morawewa	Nochchi kulam	Mylakudawewa	FO	С	С	Α	В	
		Miriswewa	WRDS	С	С	С	С	
		Nochchikulam	FO	A	С	A	A	
	Mullipothana	Mullipothana	FO	A	В	В	В	
Thompolo			RDS	С	С	С	С	
kamam		Saliyapura	RDS	A	В	Α	A	
Kamam	Thampala kamam South	Thampalakamam	FO	А	А	А	А	
Kuchcha voli	Nilaveli	Nilaveli	RDS	A	В	В	В	
Kuchcha veil	Valoor	Adambodai	RDS	С	С	С	В	

Table 4 Status of CBOs undertaking CMR

(as of March 2013)

Notes : Status of activity: A: Active B: Moderate C: Inactive

Holding of meetings: A: Often B: Sometimes C: Almost no meetings

Membership fee collection: A : Collected from almost all the members

B : Collected from a part of the members C: Not collected

WRDS: Women's Rural Development Society, FO: Farmer Organization, RDS: Rural Development Society Source: Documented by the external evaluator based on interviews with the beneficiaries, discussions with CBOs and reports of the projects.

As Table 5 shows, the agricultural machinery provided to the CBOs of the target villages was not utilized well as a result of a change in the market environment and inadequate maintenance. The FOs utilized the tractors for around two years. However after that they did not use them because they could not afford the cost of repairs, which become more necessary as the machinery got older; or only utilized them for the activities of their organizations, without renting them out to farmers, because they found the process of renting them out was too troublesome. It was expected that the farmers in the villages would be able to reduce their production cost by obtaining the tractors at a low rental rate from the FOs. However, the rental business by FOs did not last long effectively, as they did not have enough experience in complicated business management, such as collecting fees from farmers after renting out the machinery to them.

Table 5 Status of utilization of the agricultural machinery provided to the CBOs

(as of March 2013)

CBOs responsible for maintenance	Machinery	Status of utilization	Notes
	Four wheel tractor and a trailer	С	Shortage of funds for repairs
Iviyiakudawewa FO	Tsunami harvesting machine*	С	Became unpopular
Ethobondiwowo EQ	Two wheel tractor	В	Utilized for activities of the FO only
Ethabandiwewa FO	Paddy cleaning set	С	Lost interest
Miriswewa FO	Two wheel tractor	В	Utilized for activities of the FO only
Nochchikulam FO	Paddy cleaning set	С	Lost interest
	Four wheel tractor and a trailer	В	Utilized for activities of the FO only
mampalakamam FO	Tsunami harvesting machine*	С	Became unpopular
	Combine harvester	С	Too many breakdowns. Shortage of fund for repairs. Cheaper to hire from private agents.
Saliyapura RDA	Two wheel tractor	В	Utilized for activities of the FO only
	Paddy cleaning set	A	Utilized and sometimes rent out to other villages.

Notes : A: Utilized well B: Utilized sometimes C: Almost not utilized

- The harvester called "Tsunami harvesting machine" was introduced just after the earthquake in the Indian Ocean off Sumatra. It was popular at that time but became less popular when the combine harvester was introduced to the area after the end of the conflict. Farmers have to cut the paddy by hand and then put it into the Tsunami harvesting machine, while the combine harvester cuts and threshes paddy automatically.

Source: Documented by the external evaluator based on interviews with the beneficiaries, discussion with CBOs and reports of the projects.

3.2.2.5 Achievement of Overall Goal

There were two indicators for the overall goal of the project. One was "Number of communities which formulated CAPs", and the other was, "Economic statistics of Trincomalee District, such as agriculture production and household income".

1) Indicator 1

The first indicator was "Number of communities which formulated CAPs". A total of eight CAP workshops were conducted in villages other than the project target villages. The workshops were conducted in three villages during the project period and CAPs were formulated as a result. The project team conducted these workshops so that dissemination of the model would be promoted after the project. After that, CAPs were formulated in five villages during the dissemination process. CAPs were not formulated in any of the villages thereafter due to the various problems as mentioned earlier.

2) Indicator 2

The second indicator was, "Economic statistics of Trincomalee District, such as agricultural production and household income". According to statistics on agricultural production in recent years, production in the area has increased. The yield increased a lot in 2011; however it reduced in 2010 and 2012 due to flooding and drought.

Until 2008, both areas of production and yield were increasing for OFC, such as maize, red onions, cowpeas, groundnuts, green gram, black gram, chilies, and vegetables. However, there is no further increase after that. The Ministry of Agriculture explained that the yields were not stable because of large-scale flooding in 2010, a change in market needs and the availability of seeds and plants. There is a possibility that the statistics might not be kept properly.

The latest Household Income and Expenditure Survey (2009/2010),³² which is conducted periodically by the Department of Census and Statistics, was used to study socio-economic statistics. It was found that the average income of a household in Trincomalee District was LKR 24,291, which was the fourth lowest among the 22 districts in the country.³³ The Poverty Headcount Index of the district was 11.7 per cent, which was ranked sixth highest. It is not known whether these figures on income and poverty were improving, as the district was not studied in the survey before 2009 due to the lack of public security.

In summary, it was found that the sub-models were disseminated and the textbooks were utilized; however the total package was not disseminated and there are several issues with regard to the continuation and expansion of project activities in the target villages of the project. There were a limited number of CAPs formulated, and agricultural production in the district did not continue to increase. From the above-mentioned factors, with regard to the achievement of the overall goal and dissemination of the models, it can be concluded that the overall goal was not achieved at this moment.

3.2.2.6 Other Impacts

At the time of discussion with farmers in the ex-post evaluation, they mentioned that "It was very encouraging for us to have a great assistance by the project, which was implemented during the period that public security of the area had deteriorated and we had limited assistance from external organizations. It is something we will never forget throughout our lifetime. We were motivated by the project and appreciated it very much". It seems that the fact that the project area had unstable public security and did not have much access to external assistance, and that the project was continued even in such an unstable environment, also helped the beneficiaries psychologically.

The project selected the target villages and allocated project staff with due consideration of a balance among the three ethnic groups. There was no negative impact

 ³² Household Income and Expenditure Survey, 2009/2010, Department of Census and Statistics, Sri Lanka.
 ³³ There are 25 districts in Sri Lanka; however, Kilinochchi, Mannar and Mullativu Districts were not

included in the 2009 survey due to the status of public security.

during or after the project in terms of ethnic relations.

The project objective was achieved by the end of the project, and the effectiveness is high. As for the overall goal of the project, dissemination and expansion of the sub-models is appreciated; however, dissemination of the total package was not realized, and there are some issues with regard to the continuation of project activities in the target villages.

This project has somewhat achieved its objectives, therefore its effectiveness and impact is fair.

3.3 Efficiency (Rating : ③)

3.3.1 Inputs

The following table shows the planned and actual inputs of the project. There is no particular problem in this regard, as the actual inputs were almost as planned.

Inputs	Plan	Actual
(1) Experts	• Long-term: Five areas: chief advisor, community development, agriculture, agriculture infrastructure	As planned
	• Short-term: 2-3 persons	
(2) Trainees received	One to two per year on agriculture extension, agriculture technology, agriculture infrastructure development and others.	Almost as planned (6 in total)
(3) Third-country Training Programs	None	As planned (none)
(4) Equipment	Vehicles, agriculture machinery, seeds, fertilizer, office equipment and others	As planned
Total Project Cost	JPY 490 million	JPY 484 million
Total Local Cost	JPY 80 million	LKR 23 million (around JPY 18 million with the exchange rate at the time of project completion) excluding salary of the counterparts.

Table 6Plan and actual input of the project

3.3.1.1 Elements of Inputs

Six long-term JICA experts with five specializations - chief advisor, rural development, agriculture, agriculture infrastructure development and project coordination - were engaged in the project for a total of 150 man-months. Three short-term JICA experts with three specializations - project planning, project evaluation and farm household economy - were engaged in the project for a total of six man-months. Six Sri Lankan counterpart officers participated in the training in Japan on Japanese agriculture, animal husbandry technology dissemination policy and irrigation system administration. Provision of materials and machinery, such as vehicles, agriculture machinery, seeds, fertilizers and office equipment, were made as planned.

3.3.1.2 Project Cost

The project cost on the Japanese side was planned as around JPY 490 million. It was actually JPY 484 million and lower than planned (98 per cent).

3.3.1.3 Period of Cooperation

The period of cooperation was planned as four years from October 2005 to October 2009 and was actually four years as planned (100 per cent).

3.3.1.4. Important Assumptions of the project

In the English version of the Project Design Matrix (PDM) of the project, one of the pre-conditions was "The ceasefire agreement is continued and security is kept", and one of the important assumptions to achieve outputs of the project was "The project area is secure and government staff and experts can continue the technologies extension work". This pre-condition and important assumption were kept in the PDM even after the mid-term evaluation of the project, which was conducted after the ceasefire agreement was abandoned, public security became much worse and the Japanese experts temporary evacuated from the project area. The framework of the project should have been reconsidered to meet the current situation if the pre-conditions and the important assumptions were apparently not applicable. However, there was no such attempt for this project in the mid-term evaluation or in the terminal evaluation. According to the staff of JICA involved in the project during project implementation, the project was continued without modifying the initially set objective, as the Japanese Embassy in Sri Lanka had encouraged the project to be continued by appreciating it as one of Japanese assistance in the conflict-affected area, there were high expectations among the stakeholders in Sri Lanka towards the project, and the motivation of the JICA project team was high.

As mentioned above, both project cost and period of cooperation were as planned; therefore efficiency of the project is high.

3.4 Sustainability (Rating : 2)

3.4.1 Related Policy towards the Project

The project adopted participatory approaches to activate rural villages. The current development policy of the Eastern Provincial Council, *Eastern Development Plan 2006-2016*, was developed with the aim of realizing reconstruction of infrastructure and community development. One of its objectives is to implement an appropriate model of community development. The central government and the provincial council are implementing projects that give a weight to community participation.³⁴ In an interview, the additional secretary of the Ministry of Economic Development expressed his opinion that community participation is inevitable, especially in the agriculture sector. In this way, development with a community participation approach is considered as important in the policies of the Sri Lankan government, and it is a positive factor to disseminate the approach of the project.

3.4.2 Institutional and Operational Aspects of the Implementing Agency

As mentioned earlier, the "divisional level monitoring team", which was recommended in the terminal evaluation, was formed for dissemination of the TRINCAP total package; however this did not function. The "coordination and monitoring team" was integrated into the existing regular meetings of the province and the department, and continued until Phase 3 of the dissemination, which was supported by JICA. At present, monitoring of the TRINCAP sub-models are conducted in progress meetings of the province and department, as the implementation of the sub-models was integrated into the existing programmes of the organizations.

As mentioned earlier, the effects of the project are planned to continue to be expanded in the future, also, by integrating the sub-models into existing programmes of the ministries and the departments. Therefore, the external evaluator studied the allocation of frontline officers of the target villages, especially those who are in charge of agricultural extension. It was found that the cadre of frontline officers was getting filled after the end of the war; however there were still several vacancies and double duties.

Officers of the Agrarian Service Development explained that Trincomalee and Batticaloa districts do not have agriculture production research assistants, which have been allocated to every Agrarian Service Center in other districts, and that is one of the reasons for insufficient follow-up to the farmers on technical extension. The additional

³⁴ Gama Neguma, Devi Naguma, Dairy Farm Village, for example.

secretary of the Ministry of Economic Development explained that they plan to recruit the above-mentioned assistants for the Northern and Eastern Provinces, and will complete the allocation of assistants by the end of 2013.

It was observed during the field visits of the ex-post evaluation that the agriculture instructors were providing advice to the villagers with sympathetic attitude. It was also observed that a trustworthy relationship had been built up between the two parties. On the other hand, some farmers mentioned that they are practicing the same old method of cultivation as the agriculture instructor rarely visits their village.

As mentioned earlier, there are several administrative issues for participatory planning and implementation of programmes. These include: there are various government institutions in the agriculture sector that are segmented and vertical, and find it difficult to collaborate with each other; there is no appropriate institution to take a leadership role in participatory planning, such as a CAP workshop: and the budget system is not flexible enough to allocate funds for proposals from the villagers.

3.4.3 Technical Aspects of the Implementing Agency

The technologies introduced by the project are the ones that the government of Sri Lanka is also promoting. Therefore they are not difficult for the frontline officers to learn.³⁵ Senior management of the Ministry of Agriculture of the Eastern Province mentioned that there is no major problem with the technical level of the officers at present. However, the ministry is implementing in-service training for the officers, as there are some newly-appointed officers and there needs to be continuous effort for them to learn agriculture technologies, including the sub-models, and improve skills on agricultural extension (see the following tables). There is some training with relation to the dissemination of technologies introduced by the project. In-service training programmes for the officers were conducted in the donor-funded programme earlier. However, the provincial government has obtained its own budget for the training in recent years. The external evaluator studied the training programme from 2012, and found that almost all the frontline officers had had an opportunity to participate in a training programme during the year.

³⁵ For example, the Ministry of Agriculture in the Eastern Province and the central government have been promoting both the parachute method and the row seeding method in recent years. The project also introduced these technologies, which had been promoted by the government but shown little progress as the extension of technologies and demonstration of the outcomes had not been conducted effectively.

Title of the training programme	Participants (numbers)	Period
OFC expansion programme	Agriculture instructors (3)	3 days
Paddy yield increasing	Agriculture instructors (32), subject-matter	5 days x 3
package	officers (1)	times
Integrated pest control in	Agriculture instructors (32)	3 months
vegetables		
Cultivation under net house	Agriculture instructors (5)	3 days x 2
		times
Micro irrigation system	Agriculture instructors (32), subject-matter	1 day
(organized by a private sector	officers (5), agriculture officers (3)	
organization)		

Table 7Training conducted for the staff of Department of Agriculture of
Trincomalee, Eastern Province in 2012

Source: Ministry of Agriculture, Eastern Provincial Council

Table 8Training conducted for the staff of Department of Animal Production of
Trincomalee, Eastern Province in 2012

Title of the training	training Participants (numbers)		
Seminar on information technology	Provincial director (1), veterinary surgeons (22)	1 day	
Artificial insemination training programme for newly recruited veterinary surgeons	Veterinary surgeons (20)	4 days	
Production programme	Veterinary surgeons (15)	2 days	
Promotional day for grass growing	Senior management of the Ministry of Agriculture of the province, provincial director, veterinary surgeons (100 in total)	1 day	
Meeting of veterinary surgeons and livestock development officers	Provincial director, veterinary surgeons, livestock development officers (50 in total)	1 day	

Source: Ministry of Agriculture, Eastern Provincial Council

3.4.4 Financial Aspects of the Implementing Agency

Table 9 shows the programme budget of the Ministry of Agriculture of the Eastern Province for training programmes and purchasing of equipment and materials for demonstration to farmers. It is appreciated that the budget has been increased year by year, with consideration of increasing prices and expansion of the programme. However, the budget for 2013 was LKR 17.9 million; it was found that only LKR 190 was allocated for each household when the total amount was simply divided by the number of agriculture households in the province in 2009, i.e. 94,000.

The ministry used to provide agriculture machinery and tools or cattle to the farmers free or charge. However, the ministry changed this principle in recent years, and now asks farmers to share the cost in order to generate a sense of ownership of the farmers for what had been provided. It is important to utilize the budget effectively by adopting the above-mentioned cost-sharing method, and also to strengthen partnership with private companies in future.

As mentioned earlier, it is planned to use funding from other donor-assisted programmes to implement CMR. The external evaluator observed an example of this during the ex-post evaluation.³⁶

Items / years	2010	2011	2012	2013
Agriculture				
Training	0.8	0	4.0	1.7
Purchasing of materials and machinery	9.1	1.5	5.1	8.2
Sub total	9.9	1.5	9.1	9.9
Animal husbandry				
Training	0	0.5	3.0	4.0
Purchasing of materials and machinery	0	0.5	1.0	4.0
Sub total	0	1.0	4.0	8.0
Total	9.9	2.5	13.1	17.9

Table 9Budget allocation of the Eastern Provincial Council for training and
purchasing of materials and machinery for farmers

(Unit : LKR million)

Source: Ministry of Agriculture, Eastern Provincial Council

Some problems have been observed in the institutional aspects of the counterpart agencies, and there needs to be further improvement in technical and financial aspects; therefore, sustainability of the project effects is fair.

³⁶ It is a common practice in Sri Lanka to implement development of medium- and large-scale infrastructure projects using funds of donor agencies, and conducting operation and maintenance of the infrastructure using funds of the government. Some government officers mentioned that it may not be efficient to utilize CMR in government-funded projects on small-scale infrastructure and operation and maintenance, given the need for government institutions to implement training of the farmers and to conduct supervision and monitoring for implementation of the civil works.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

This project was implemented with the objective of establishing a development model of rural and agriculture rehabilitation with a participatory approach in Trincomalee District in Sri Lanka.

Assistance for rehabilitation and to the agriculture sector was an important task in the policy of the country at the time of project planning; the need of assistance for the Eastern Province, which lagged behind in development due to the influence of conflict was high; and assistance for rehabilitation was an important area in the strategy of Japanese assistance to Sri Lanka. Therefore, relevance of the project is high.

The project objective, "To establish a model for agricultural and rural development projects for community rehabilitation and reconstruction in Trincomalee District" was largely achieved by the end of the project; therefore effectiveness of the project is high. In terms of the overall objective of the project, sub-models on production technologies in the paddy, OFC, dairy farming and other sectors were disseminated by being integrated into the programmes of the provincial government. However, effectiveness and replicability of the TRINCAP total package, which is an integrated development model based on the formulation of CAP, had not been tested during the project period and was not disseminated thereafter, either. There are some issues with the continuation and expansion of project activities in the target villages. Therefore, effectiveness and impact is concluded as fair.

Efficiency of the project is high, as the project cost and period were as planned. Some improvement is needed in terms of institutional aspects of the counterpart organizations, and further enhancement is recommended for the technical and financial aspects. Therefore, sustainability of the project is fair.

In light of the above, the project is evaluated to be satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

(1) Participatory planning, which was an important approach of the project, is not promoted systematically at present as a result of limited dissemination of the TRINCAP total package - although understanding of participatory planning among senior management officers has been enhanced. It may be difficult to conduct the three-day CAP workshops that were implemented in the project. However, there is a good possibility of implementing participatory planning through modifying present practices. For example, it is worth seriously considering enhancing the participation of the community in planning and implementation process of formulation of various plans presently conducted, such as seasonal plans formulated by the agriculture instructors. This could be done by keeping records of needs assessment, sharing formulated plans with the community, and getting the community to monitor progress of the plan. It may be a good idea to monitor the progress of the community participatory approach as mentioned above in existing meetings, such as the divisional agriculture coordination committees and seasonal meetings conducted in villages.

- (2) The possibility of disseminating TRINCAP sub-models was tested, and issues were identified in the follow-up assistance of JICA for dissemination of the models of the project. At present, the Eastern Provincial Council and other related organizations disseminate the sub-models by integrating them into existing programmes. It is recommended that they review the results of the above-mentioned testing, set clear targets and establish a more effective system for dissemination of the sub-models.
- (3) It was found that the some farmers of the target villages did not continue new production technologies introduced by the project even though they recognized their effectiveness. The frontline officers need to motivate farmers by conducting periodic visits to them, and to implement continuous monitoring and follow-up in order to further disseminate and establish the technologies introduced by the project.
- (4) Several agricultural machines that were provided to CBOs by the project are not utilized at present. It is necessary for the relevant organizations, such as the Department of Agriculture Service Development, to conduct appropriate follow-up on this. For example, they can discuss with the relevant CBOs and assist them in solving issues on maintenance and finance. The department may undertake to utilize the machinery for training programmes if the CBOs do not intend to utilize them in future.

4.2.2 Recommendations to JICA

It is recommended that the topics of the importance of participatory planning and continuous monitoring and follow-up for farmers by the frontline officers, mentioned in the above (1) and (3), are taken up in JICA's Project for Training of Frontline Officers in Community Development in Conflict Affected Areas in Sri Lanka, which is currently being implemented by the JICA Sri Lanka office. It is also recommended to monitor counterpart organizations' efforts to solve the institutional and administrative issues on implementation of participatory planning and continuous monitoring and follow-up by the officers, for example, by utilization of existing meetings and plans, because capacity building alone will not succeed.

4.3 Lessons Learned

(1) The following factors should be considered at the time of planning technical

cooperation projects with the objective of establishing models and dissemination of pilot activities:

- A process of testing the effectiveness and replicability of the models and improvement of the models is needed when developing the models. This should be conducted after summarizing the methodologies and approach implemented in a particular area, by introducing the same methodologies and approach in a different area or environment. It is not realistic to conclude that the outcome of project activities is an "effective model", and to develop a plan for its dissemination, without going through the above-mentioned process of testing. In Phase 1 of the dissemination of the model implemented after the project, a lot of technical work was necessary, including testing, modification and improvement of the models, coordinating the related government organizations, setting up a suitable environment for dissemination and human resource development. The assistance of JICA played an important role in this technical work as the Eastern Province did not have experience of dissemination programmes. It should be duly noted at the time of planning that the process of testing, modification and improvement of the models should be included in the project period, when a project which has an objective of establishing and disseminating the outcome of the project as a model.
- It is important, in a project aiming at establishing and dissemination of a model, to decide project design and the size of input with due consideration of the kind of model and by whom it should be disseminated. For example, if the model is intended to be disseminated by counterpart government organizations, a model with high replicability should be established, with due consideration of the administration system, organization, human resources, technical level and budget of the organizations. If the model is intended to be disseminated with the assistance of donor agencies and NGOs, a suitable model should be established by analyzing the future direction of their assistance.
- (2) The project was implemented in an area where there were various restrictions on activities and movement as a result of deterioration in public security and in the environment. This meant that the pre-condition and important assumptions of the project, such as "The ceasefire agreement is continued and security is kept" and "The project area is secure and government staff and experts can continue the technologies extension work" were not applicable. The outcomes and objective of the project were largely achieved as a result of enormous efforts by stakeholders of the project and achievement of the overall goal of the project after the completion of the project, partly because the size of the input of the project had to be large due to the

above-mentioned unstable environment. It was fortunate that no one related to the project was affected by bomb blasts or armed conflict. However, such an incident could have occurred in the critical situation during that period. In a project implemented in a conflict-affected area, the framework of the project should be reviewed and modified flexibly after making appropriate analysis and taking decisions in time. This should take due consideration of changes in public security, and any collapse of pre-conditions and important assumptions.