Annex - H

Operation Guidelines for the Pilot Project
Monitoring Team under the JICA Study

Annex H: Operation Guidelines for the Pilot Project Monitoring Team Under the JICA Study

Pursuant to the Scope of Work (S/W) for the Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins on the Democratic Republic of Timor-Leste, agreed upon between the Government of Timor-Leste (GOTL) represented by the Ministry of Agriculture and Fisheries (MAF) and the Japan International Cooperation Agency (JICA) represented by JICA Timor-Leste Office on August 19, 2005, and the official letter issued by the State Secretary for Agriculture and Arboriculture on the "Formation of the Pilot Project Maonitoring Team under the JICA-funded Study for Community-based Integrated Watershed Management for Laclo and Comoro River Basins" on October 11, 2007, this operation guidelines is hereby issued.

Chapter 1 Background Information

Section 1 Scope of Work for the Study

The Scope of Work (S/W) for the Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins in the Democratic Republic of Timor-Leste (the Study) was agreed upon between the Government of Timor-Leste (GOTL) represented by Ministry of Agriculture and Fisheries (MAF) and Japan International Cooperation Agency (JICA) represented by JICA Timor-Leste Office on August 19, 2005.

Section 2 JICA Study

In accordance with the scope of work, the JICA Study Team (the Study Team) has been conducting its study since November 2005. The main aim of the phase 1 study is to draft a watershed management plan for the Laclo and Comoro watersheds, while the phase 2 study aims at implementing the pilot project. The general work schedule of the study is as follows:

Phase 1 (Nov 2005 – Dec 2007):

1st Field Work: Nov 2005 & Feb 2006)
2nd Field Work: Jan – Mar 2007
3rd Field Work: Aug – Nov 2007
Home Work: Dog 2007

Home Work Dec 2007

Phase 2 (Jan 2007 – Sep 2009)

 4th Field Work:
 Jan – Mar 2008

 5th Field Work:
 May 2008 – Mar 2009

 6th Field Work:
 May 2009 – Dec 2009

Jan – Mar 2010: Final Report Preparation

Section 3 Draft Management Plan

At the end of the 2nd Field Work, the Study Team drafted a watershed management plan for the Comoro and Laclo watersheds. The draft watershed management plan was composed of eight (8) management/supporting programs and 30 sub-programs.

Section 4 Pilot Project

The Study plans to implement several types of pilot projects in accordance with the S/W, which is a scheme to put part of the programs/sub-programs proposed in the draft watershed management plan to trial to verify the applicability of the watershed management plan to the Study Area. Towards

this end, four (4) villages in the Study Area or two (2) villages in each watershed were selected as target villages for pilot projects.

Section 5 Arrangements for Implementation of Pilot Projects

An implementation program for the pilot project is to be prepared in December 2007. As specified in the S/W for the Study, the pilot project shall be jointly implemented by the MAF and the Study Team in the partnership with local NGOs. Direct expenses and costs necessary for implementation will be shouldered by the JICA Study Team, while the administration costs of pilot project monitoring team (PPMT), which is expected to be the main body in monitoring the implementation of the pilot project, will be born and arranged by MAF.

Chapter 2 Objectives, Coverage and Definition of Terms

Section 6 Objectives

This Operation Guidelines are aimed at providing the fundamental information of the Study, guidelines and procedures in the operations of the PPMT, and responsibilities and roles that the PPMT has to take. Its specific objectives are to:

- a) prescribe the implementation structure of the PPMT to become more responsive to pilot project activities;
- b) guide MAF in understanding the roles and responsibilities of the PPMT in the implementation of the pilot project; and
- c) assist the PPMT to fulfill its tasks and duties needed to ensure effective project management of the pilot project.

Section 7 Coverage of the Guidelines

The guidelines are to be used exclusively for the pilot projects implemented under the JICA-Funded Study, titled "the Study for Community-Based Integrated Watershed Management in Laclo and Comoro River Basins".

Section 8 Definition of Terms

For the purpose of the guidelines, the following terms and phrases are defined.

- 8.1 **Baseline Survey and Determination of Pilot Projects** refers to a set of field surveys and discussions with communities in the target villages, which consists of household interview survey ("Baseline survey"), Rapid Rural Appraisal (RRA) survey, and discussions with villagers to determine the possible/potential pilot projects at the respective target villages. The surveys are to be carried out by local NGOs from August to November 2007.
- 8.2 **Communities** refers to the members of the target sucos/aldeias who will participate in the implementation of the pilot project.
- 8.3 **Community Organization/Group Formation -** refers to the process of binding communities or people into an organization or a group and continuously capacitating them to become a self-sufficient and self-reliant body to manage their resources in their locality or implement a community-based development project.
- 8.4 **Contractor/s** refers to a/ local NGO/s that the JICA Study Team would contract out for the work to implement the pilot project with communities of the target sucos/aldeias.
- 8.5 **Forest Resources** refers to the soil and all elements found on it, above and below the ground in areas covered with forests

- 8.6 **Local Staff** refers to a local consultant/assistance hired by the JICA Study Team who co-work with the Study Team and support the PPMT while the Team is out of Timor-Leste.
- 8.7 **Monitoring/Supervision** refers to regular activities that oversee the progress, activities, effects made by the implementation of the pilot project to ensure proper execution of the project and to achieve desired project outputs.
- 8.8 **Pilot Project** refers to a small scale project to be implemented in the course of the Study for Community-Based Integrated Watershed Management for Laclo and Comoro River Basin, which funded by the Japan International Cooperation Agency (JICA).
- 8.9 **Pilot Project Monitoring Team** refers to a group/team of MAF that is established under the direct supervision of the National Director of National Directorate of Coffee and Forestry (NDCF) to manage, monitor and supervise the implementation of the pilot project.
- 8.10 **Socialization/Orientation** refers to activities that introduce and explain the background of the study, the purpose of the project, the process of project implementation to local communities in the target village so that local communities can prepare themselves for the project.
- 8.11 **Target village** refers to a village where the pilot project will be implemented.

Chapter 3 Pilot Project

Section 9 Objectives of the Pilot Project

The objectives of the pilot project are to:

- a) verify whether or not the programs/sub-programs proposed in the draft watershed management plan are valid to the watersheds;
- b) clarify site specific matters to which due attention should be given in the implementation of the watershed management plan so that the watershed management plan as well as watershed management guidelines could be more effective and realistic; and
- c) help the counterparts enhance their capacity to manage, monitor, and supervise the implementation of the pilot projects by involving them in actual watershed management activities in the field.

Specifically, the pilot project aims at:

- a) organizing farmers' groups/village working groups that would specifically work for the pilot projects in the target villages;
- developing the capacity of the farmers' groups/village working groups to implement either natural resource management activity or agriculture-based livelihood development activity; and
- c) raising environmental awareness of rural households in the target villages including those not directly involved in the pilot projects.

Section 10 Target Villages for the Pilot Project

The target villages for the pilot projects are as follows:

In Comoro watershed:

- 1) Suco Samalete (Railaco sub-district in Ermera)
- 2) Suco Tohu Meta (Laulara sub-district in Aileu)

In Laclo watershed

- 3) Suco Faturasa (Remexio sub-district in Aileu)
- 4) Suco Batara (Laclubar sub-district in Manatuto)

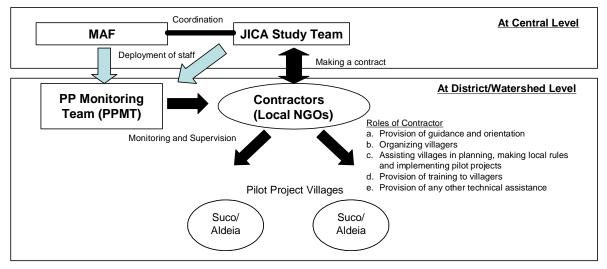
Section 11 Scope of the Pilot Project

- 11.1 It is desirable that all the programs/sub-programs proposed in the watershed management plan be put to trial as a pilot project. However, the Study needs to focuses the pilot project on some of the following themes due to time and financial constraints.
 - a) Land use planning
 - b) Sustainable land management
 - c) Forest management and reforestation
 - d) Increase of agricultural production
 - e) Improvement of rural livelihoods
 - f) Public awareness raising
- 11.2 The pilot projects that will be implemented on a village level will generally take the following steps:
 - a) Preparatory work (Socialization, Orientation, Selection of beneficiaries)
 - b) Community organization/Group formation
 - c) Participatory planning
 - d) Training/Capacity building
 - e) Implementation
- 11.3 The pilot projects will be implemented for about 20 months from January 2008 to September 2009. A part of the preparatory work is expected to be carried out between August and November 2007 as "Baseline survey and Determination of Pilot Projects", which are to be contracted out to local NGOs.

Chapter 4 Organizational Structure, Administration, Functions and Responsibilities of the PPMT

Section 12 Overall Institutional Framework for Implementation

The overall institutional framework for implementation of the pilot project is as follows:



12.1 At field level, groups of local communities in the target villages for pilot project are to be the main implementers of the project, while a contractor (local NGO) that would be hired by the

Study Team will be responsible for implementation of the pilot project as a main supporter. The pilot project monitoring team (PPMT) together with the JICA Study Team (Local staff and Japanese members) should take the responsibility for monitoring and supervision of field implementation.

12.2 MAF, represented by NDCF, is responsible for overall management of the pilot project. MAF should deploy its staff to the PPMT and help the PPMT technically and administratively so that the team can deal with issues/difficulties that the field implementers might face. The Study Team is also directly involved in monitoring the progress and trouble-shooting any issues in the field.

Section 13 Organizational Structure of the PPMT

The organizational structure of the Pilot Project Monitoring Team (PPMT) is composed of the following members, namely:

- a) PPMT Officer;
- b) Forest Management officer/s;
- c) Agriculture officer/s; and
- d) District Coordinators.

Section 14 Administrative Supervision of the PPMT

The PPMT is to be under the direct supervision of the National Director of the National Directorate of Coffee and Forestry (NDCF). The National Director of NDCF should coordinate with the National Director of the National Directorate of Agriculture and Horticulture (NDAH) and the MAF Regional/District offices concerned in the supervision of the PPMT.

Section 15 Functions and Responsibilities of the PPMT

The functions and responsibilities of the team are to:

- 15.1 Coordinate, supervise and monitor pilot project activities implemented by the contractors (local NGOs) and communities;
- 15.2 Ensure effective implementation and management of the pilot project;
- 15.3 Provide technical assistance to the contractors (local NGOs) and communities on the following subjects:
 - a) Forest management;
 - b) Reforestation;
 - c) Land conservation;
 - d) Agroforestry and upland farming practices
 - e) Crop production;
 - f) Livestock management (Animal husbandry);
 - g) Government policies; and
 - h) Other concerns that will enable local communities to enhance their capability in implementing the pilot project.
- 15.4 Closely communicate with and report to the JICA Study Team about any findings, issues, and concerns that would hamper project implementation;
- 15.5 Document the processes of the project, accomplishments and impacts made, and lessons learned from the project;

- 15.6 Prepare and submit monthly progress reports to the National Director of NDCF and the JICA Study Team; and
- 15.7 Perform other functions necessary for improving overall management of the pilot project.

Section 16 Functions and Responsibilities of the PPMT Members

- 16.1 PPMT officer is the head of the PPMT and has the responsibility to directly report to the National Director of NDCF. Any issues and findings shall be reported to him/her by other members of the team so that he/she could have prompt action to resolve such issues or seek assistance from the National Director of NDCF or JICA Study Team. PPMT officer shall closely coordinate with the JICA Study Team in monitoring the pilot project and resolving any issues in the implementation.
- 16.2 The members from NDCF and NDAH shall cover technical matters relating to the respective fields. In case they find the field implementers facing any difficulties in their responsible fields they shall assist the implementers to resolve such issues.
- 16.3 The member from the district MAF offices concerned shall function as field coordinator who will monitor the day-to-day activities undertaken by the field implementers. They shall closely coordinate with the PPMT officer as well as the other technical members.

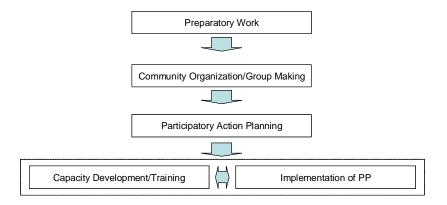
Section 17 Technical Assistance from the JICA Study Team

- 17.1 The JICA Study Team assists the PPMT in the monitoring and supervision of the implementation of the pilot project closely. The local staff of the JICA Study Team works with the PPMT and directly assists the PPMT Officer as well as other members of the PPMT in the field monitoring and report making.
- 17.2 The local staff also functions as liaison between the PPMT and the JICA Study Team while the Japanese Specialist is out of the country, so that the PPMT can share any issues or difficulties with the Japanese Specialists of the Study Team and get technical advice through the local staff f the Study Team.
- 17.3 The Japanese Specialist of the Study Team participates in the monthly and quarterly monitoring activities of the PPMT. The PPMT is to be coached in the field monitoring, conflict solution and report making by the Specialists.

Chapter 5 Flow of Pilot Project Implementation

Section 18 Flow of Pilot Project Implementation

Detailed scope of work for the pilot project is to be given in the Implementation Program of the Pilot Project, which will be prepared in December 2007. In general, the following steps will be taken in the implementation of the pilot project:



Section 19 Preparatory Stage

In the preparatory stage, the following are the major activities to be undertaken.

- a) Socialization with the target sucos/aldeia
- b) Introduction of the Study and pilot project
- b) Consultation with communities about their willingness
- c) Situation analysis in a participatory manner (using PRA/RRA tools)
- d) Conceptualization and familiarization of the pilot project

The above-mentioned preparatory works have been conducted by local NGOs as "The Baseline Survey and Determination of the Pilot Project" from August to November 2007.

Section 20 Community Organization/Group Formation

After conceptualizing the concept and outline of the pilot project, beneficiaries of the target villagers will be organized into a group. A type or size of beneficiaries' group to be organized varies by the type of pilot project. A pilot project that requires the participation of all members of suco or aldeia, such as "Participatory Land Use Planning Sub-program" and "Forest Management Program", will organize a working group composed of delegates from sub-villages (Aldeias) or selected members who have a strong sense of responsibility, while those related to the programs that do not necessarily require the participation of the whole community, such as Community-Based Seed Extension Sub-program and Upland Farming Technology Promotion Program, will select beneficiaries and organize them into a beneficiaries' group.

In either case, a series of guidance/orientation should be given to the members of the group. A simple internal rule governing the activities of the group should also be developed by the members with the assistance of the contractors (local NGOs).

Section 21 Participatory Planning

In this stage, a group of beneficiaries or a working group will develop an action plan for the implementation of pilot project with the assistance of the contractors (local NGOs). The action plan should include, but not limited to, the following:

- a) Activities/Works;
- b) Size/Location (if applicable);
- c) Purpose of work;
- d) Responsible persons/groups;
- e) Timeframe;
- f) Necessary input/materials; and

g) Necessary support/assistance.

The contractors (local NGOs) shall also assist local communities in identifying training courses necessary for implementing the pilot project. The contractors (local NGOs) shall come up with a training program/capacity development plan based on the list of training courses identified by local communities.

Section 22 Implementation of Pilot Project

In accordance with the action plan prepared in participatory planning, NGO will implement the pilot project in coordination with the local communities. The pilot project is composed of two components, namely, i) training/capacity development of communities and ii) assistance in the implementation by communities.

22.1 Training/Capacity Development of Communities

In accordance with the training program/capacity development plan, NGOs will organize training courses for members of the group. Training courses should vary by the type of pilot project. Lists of major training courses to be done for some of the possible pilot projects are given in **Appendix-1**

22.1 Implementation by Communities

A group of beneficiaries/a working group will implement the pilot project according to the action plan prepared in the participatory planning stage. The contractors (local NGOs) shall assist a group of beneficiaries / a working group in carrying out its day-to-day activities, while enhancing the capacity of members of the group. During the implementation of the pilot project, the contractors (local NGOs) shall report the progress of the work to the PPMT and the JICA Study Team in writing on monthly and quarterly bases. The contents of both reports are specified in Chapter 7.

Chapter 6 Monitoring Works

Section 23 Progress Control

23.1 Weekly Progress Monitoring

The PPMT shall monitor the day-to-day activities done by the field implementers. The district coordinators (the members from the district MAF offices) together with the local staff of the JICA Study Team shall visit the target village at least <u>once a week</u> and spend in the villages at least <u>one (1) day</u> to monitor the progress of the works. During his/her visit to the target village, the district coordinators shall:

- a) have a dialogue with field workers of the contractors (local NGOs) and community members to grasp the activities and accomplishments made during the last week;
- b) conduct field inspection of the major physical works, especially those which may affect the overall work schedule, such as development of demonstration plot;
- c) determine any issues/difficulties/problems that the field implementers are facing in the implementation of pilot project; and
- d) prepare a travel report in accordance with the given format (Sample Form-1), which should include the date, place, persons met, progress of the work (activities and accomplishments made by the implementers), findings (issues found), necessary action to be taken by the PPMT and the JICA Study Team.

23.2 Monthly Progress Monitoring

The PPMT officer together with other members of the PPMT as well as the JICA Study Team shall visit the target village <u>once a month</u> and spend in the villages at least <u>one (1) day</u> to monitor the progress and have a dialogue with the field implementers. The aims of the PPMT's monthly monitoring are to:

- a) confirm actual progress of the works in the field;
- b) determine any issues/difficulties that the field implementers are facing or may face in the implementation of the pilot project;
- c) provide necessary assistance that could contribute to the smooth operations of the pilot project; and
- d) prepare and submit a monthly monitoring report to the National Director of NDCF and the Study Team, using the given format (Sample Form-2).

23.3 Quarterly Meeting with Local NGOs

The PPMT together with the JICA Study Team shall have a meeting with the contractors (local NGOs) every three (3) months to discuss:

- a) progress of the works;
- b) issues and problems to be solved;
- c) recommendable actions to be taken;
- d) necessary arrangements and/or adjustment required; and
- e) recommendable work schedule acceptable to all stakeholders concerned.

23.4 Annual Evaluation and Action Planning

The contractors (local NGOs) will organize an annual evaluation workshop with the beneficiaries' group in February/March 2008 to help them to evaluate their activities undertaken and formulate a revised action plan for the next year. The PPMT and the JICA Study Team should attend the annual evaluation workshop and monitor whether the pilot project will be implemented and completed within the given period of time.

Section 24 Quality Control

During the monitoring activities described in the preceding section, the PPMT together with the JICA Study Team shall provide technical assistance to the field implementers to maintain the quality of the works.

Section 25 Coordination with Other Relevant Organizations

The PPMT shall coordinate with the district and sub-district offices concerned when conducting the field monitoring work. In addition, the PPMT might have to coordinate with other government organizations, such as:

- a) National Directorate of Water Supply and Sanitation;
- b) National Directorate of Livestock;
- c) National Directorate of Fisheries
- d) National Directorate of Agribusiness; and
- e) Directorate of Research and Extension.

Chapter 7 Reporting

Section 26 Documentation and Report Preparation

26.1 Weekly Monitoring Report

The district coordinator of the PPMT with the assistance of the local staff of the Study Team shall prepare a weekly monitoring report every week using the given format (**Sample Form-1**) covering the following:

- a) Activities undertaken last week
- b) Activities planned next week
- c) Issues and concerns
- d) Necessary actions (recommendations)

The report shall be submitted to the PPMT officer and furnish it copy to the JICA Study Team before the weekend.

26.2 Monthly Monitoring Report

The PPMT with the assistance of the Study Team shall prepare a monthly monitoring report every month using a simplified format (<u>Sample Form-2</u>), which covers, but not limited to, the following:

- a) Activities planned
- b) Physical progress (Activities undertaken and major achievements)
- c) Issues/Concerns
- d) Action needed
- e) Activities scheduled in the next month
- d) Financial Status Report

The report shall be submitted to the MAF through the JICA Study Team and the National Director of NDCF not later than 10th of the following month.

26.3 Quarterly Monitoring Report

Every three months the PPMT together with the JICA Study Team shall further prepare the quarterly monitoring report to submit it to the MAF and JICA. The quarterly report shall include:

- a) Activities planned in this quarter;
- b) Methodology;
- c) Physical progress (Activities undertaken and major achievements);
- d) Issues/Concerns:
- e) Action needed;
- f) Activities scheduled in the next quarter;
- g) Financial Status Report;
- h) Training materials used; and
- i) Pictures.

26.4 Annual Evaluation Report

As a result of the annual evaluation meeting stated in Section 22 (4), the PPMT and the JICA Study Team shall prepare an annual evaluation report in the end of the year. The annual evaluation report shall include:

- a) Activities planned in this year
- b) Methodology;
- c) Physical progress (Activities undertaken and major achievements);
- d) Issues/Concerns;
- e) Action taken;
- f) Lessons learned
- g) Action plan for the next year;
- h) Financial Status Report;
- i) Training materials used; and
- j) Pictures.

Section 27 Record Keeping and Filing

Any incoming and outgoing documents shall be kept in order. A systematic and simplified filing method should be adopted.

Chapter 7 Administrative Support for the Operations of PPMT

Section 28 Equipment Support

In order to facilitate execution of PPMT activities, the PPMT shall be provided with necessary equipment and facilities listed below.

- a) Office space (1 office for the team)
- b) A set of Computer with printer (1 set each for the team)
- c) 2 units of motor bike (2 units each for the team)
- d) Generator (1 unit each for the team)

Section 29 Management of the Equipment

All the equipment provided to the PPMT shall be properly booked as government properties and managed effectively to optimize their use in monitoring. If any equipment gets malfunctioned, the PPMT shall coordinate with the NDCF to secure funds necessary for repair.

Section 30 Budget for the PPMT Operations

The MAF through the NDCF shall provide funds necessary for the operations of the PPMT. The PPMT officer shall prepare an annual work and financial plan and submit it to the NDCF before the directorate prepares an annual budget plan, so that the NDCF could incorporate it into the MAF's annual budget plan.

Sample Form-1: Weekly Progress Report

d Outputs	Remarks
	Remarks
a Outputs	Remarks
endations to PPI	MI/JICA Study Team)
	endations to PP

Sample Form-2: Monthly Progress Report

Month:
Name of village:
Date of Visit:
Members involved in monitoring:

1. Activities undertaken during this Month

1. Activities undertaken during this work				
Activities	Activities undertaken during this Month	Level of Achievement	Remarks	
Output 1 (This will be given by a Logical Framework of the Project.)				
Activity 1.1				
Activity 1.2				
Activity 1.3				
Activity 1.4				
Output 2 (This will be given by a Logical Framework	rk of the Project.)			
Activity 2.1				
Activity 2.2				
Activity 2.3				
Activity 2.4				
Output 3 (This will be given by a Logical Framework	rk of the Project.)			
Activity 3.1				
Activity 3.2				
Activity 3.3				
Activity 3.4				
Output 4 (This will be given by a Logical Framework of the Project.)				
Activity 4.1				
Activity 4.2				
Activity 4.3				
Activity 4.4				

í	4	
	1	
۱	_	

Activities	Activities undertaken during this Month	Level of Achievement	Remarks
Output 5 (This will be given by a Logical Framewo	rk of the Project.)		
Activity 5.1			
Activity 5.2			
Activity 5.3			
Activity 5.4			

2. Any Problems and Concerns

Problems and Concerns	Recommended Measures
1	
2	
3	
4	
5	

3. Activities scheduled in the next month

Activities	Target level of achievement	Remarks
Output 1 (This will be given by a Logical Framework of the Project.)		
Activity 1.1		
Activity 1.2		
Activity 1.3		
Activity 1.4		
Output 2 (This will be given by a Logical Framework of the Project.)		
Activity 2.1		

Activities	Target level of achievement	Remarks
Activity 2.2		
Activity 2.3		
Activity 2.4		
Output 3 (This will be given by a Logical Framework of the Project.)		
Activity 3.1		
Activity 3.2		
Activity 3.3		
Activity 3.4		
Output 4 (This will be given by a Logical Framework of the Project.)		
Activity 4.1		
Activity 4.2		
Activity 4.3		
Activity 4.4		
Output 5 (This will be given by a Logical Framework of the Project.)		
Activity 5.1		
Activity 5.2		
Activity 5.3		
Activity 5.4		

Attachments:

- a. Pictures taken during monitoring work
- b. A list of persons interviewed
- c. Weekly monitoring reports in this Month

Signature:	
Name:	

Annex - I Results of Evaluation of the Pilot Projects

Table of Contents

Annex I : Results of Evaluation of the Pilot Projects

I.1		Objectives and Scope of the Pilot Projects	I-1-1
I.1.1	Objectiv	ves of the Pilot Projects	I-1-1
I.1.2	Scope o	f the Pilot Projects	I-1-1
	I.1.2.1	Timeframe	I-1-1
	I.1.2.2	Pilot Project Sucos	I-1-1
	I.1.2.3	Types of Pilot Project	I-1-1
	I.1.2.4	Institutional Framework for Implementation of the Pilot Projects	I-1-1
1.2		Outlines and Major Activities of the Pilot Projects	I-2-1
I.3		Accomplishments made by the Sub-programs	I-3-1
I.3.1	Suco To	phumeta	I-3-1
	I.3.1.1	Tree Planting Promotion Sub-program	I-3-1
	I.3.1.2	Home Garden Sub-program	I-3-3
I.3.2	Suco Sa	amalete	I-3-5
	I.3.2.1	Tree Planting Promotion Sub-program	I-3-5
	I.3.2.2	Coffee Plantation Rehabilitation Sub-program	I-3-8
I.3.3	Suco Fa	nturasa	I-3-10
	I.3.3.1	Participatory Land Use Planning Sub-program	I-3-10
	I.3.3.2	Community-Based Seed Extension Sub-program	I-3-13
	I.3.3.3	Grazing Control with Protein Banks and Waste Pasture Rehabilitation	
	5	Sub-program	I-3-15
I.3.4	Suco Ba	atara	I-3-16
	I.3.4.1	Sustainable Upland Farming Promotion Sub-program	I-3-18
	I.3.4.2	Income Generating / Cost Saving Sub-program	I-3-20
I.3.5	Public A	Awareness Campaign Sub-program	I-3-21
I.4		Evaluation of the Sub-programs	I-4-1
I.4.1	Suco To	ohumeta	I-4-1
	I.4.1.1	Tree Planting Promotion Sub-program	I-4-1
	I.4.1.2	Home Garden Sub-program	I-4-2
I.4.2	Suco Sa	nmalete	I-4-3
	I.4.2.1	Tree Planting Promotion Sub-program	I-4-3
	I.4.2.2	Coffee Plantation Rehabilitation Sub-program	I-4-5
I.4.3	Suco Fa	nturasa	I-4-6
	I.4.3.1	Participatory Land Use Planning Sub-program	I-4-6
	I.4.3.2	Community-Based Seed Extension Sub-program	I-4-7
	I.4.3.3	Grazing Control with Protein Banks and Waste Pasture Rehabilitation	
	5	Sub-program	I-4-8
I.4.4	Suco Ba	atara	I-4-9
	I.4.4.1	Sustainable Upland Farming Promotion Sub-program	I-4-9

	4.2 Income Generating / Cost Saving Sub-program	I-4-11 I-4-12
I.5	Lessons Learned and Good Practices	I-5-1
I.5.1 Les	sons Learned	I-5-1
I.5.2 Go	od Practices	I-5-3
I.5.3 Cri	tical Issues for Each Sub-program	I-5-4
	<u>List of Tables and Figure</u>	
Table I.3.1	Species planted and the estimated survival the planted seedlings in the respective plantations under TPP-SP in Suco Tohumeta	
Table I.3.2	Species planted and the estimated survival the planted seedlings in the respective plantations under TPP-SP in Suco Samalete	
Figure I.3.1	Locations of the Plantations under TPP-SP in Suco Tohumeta	
Figure I.3.2	Locations of the Plantations under TPP-SP in Suco Samalete	

List of Appendix

Appendix I.3-1 Accomplishments made by the Sub-programs of the Pilot Projects

Appendix I.4-1 Results of Evaluation of the Sub-programs of the Pilot Projects

I.1 Objectives and Scope of the Pilot Projects

I.1.1 Objectives of the Pilot Projects

The main objective of the pilot projects is to verify whether or not the sub-programs proposed in the draft watershed management plan are applicable to the target watersheds and also effective in watershed management through the trial implementation of the proposed sub-programs. The implementation of the pilot projects is also aimed to enhance the capacities of the relevant stakeholders, such as the PPMT members (or NDF/MAF), local NGOs, and local communities, to implement the watershed management plan in the future.

I.1.2 Scope of the Pilot Projects

I.1.2.1 Timeframe

The pilot project has been implemented for about 21 months from January 2008 to September 2009.

I.1.2.2 Pilot Project Sucos

Four (4) sucos in the Study Area or two (2) sucos from each watershed were selected for the pilot projects in consultation with MAF.

Comoro watershed

- i) Suco Tohumeta, Laurala Sub-district (Aileu)
- ii) Suco Samalete, Railaco Sub-district (Ermera)

Laclo watershed

- iii) Suco Faturasa, Remexio Sub-district (Aileu)
- iv) Suco Batara, Laclubar Sub-district (Manatuto)

I.1.2.3 Types of Pilot Project

After a series of discussions with local communities in the pilot project sucos, the following nine (9) sub-programs or eight (8) different types of sub-programs were selected as the pilot projects at the respective sucos.

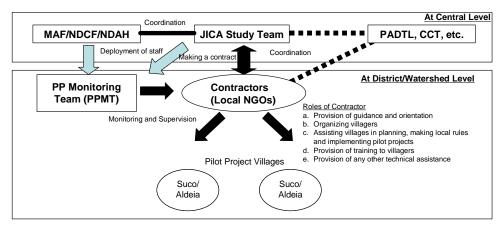
Pilot Projects to be implemented at the Pilot Project Sucos

The trojecte to be implemented at the troject edge		
Target suco	Sub-program (SP)	
Samalete	Tree Plantation Promotion SP (TPP-SP)	
	Coffee Plantation Rehabilitation SP (CPR-SP)	
Tohumeta	Tree Plantation Promotion SP (TPP-SP)	
	Home Garden SP (HG-SP)	
Faturasa	Participatory Land Use Planning SP (PLUP-SP)	
	Grazing Control with Protein Banks and Waste Pasture Rehabilitation SP (GCPBWPR-SP)	
	Community-Based Seed Extension SP (CBSE-SP)	
Batara	Sustainable Upland Farming Promotion SP (SUFP-SP)	
	Income Generating / Cost Saving SP (IG/CS-SP)	

In addition to the above-listed sub-programs, the Study Team has implemented Public Awareness Campaign Sub-program by itself at Suco Samalete.

I.1.2.4 Institutional Framework for Implementation of the Pilot Projects

The institutional framework for implementation of the pilot project is illustrated below.



Institutional Framework for Implementation of the Pilot Projects

The NGOs were responsible for the implementation of the nine (9) sub-programs at the pilot project villages. The organization of the beneficiaries' groups, conducts of hands-on training, day-to-day coaching, and meetings with local communities were the major works of the NGOs. The main role of NDF or PPMT was the monitoring of the pilot project activities. The following table gives the roles and responsibilities of the major stakeholders of the pilot projects.

Roles and Responsibilities of the Stakeholders in Pilot Project Implementation

Organizations	Roles and Responsibilities
a) MAF/NDF	Executing agency
b) Local NGOs	Implementation of the pilot project
c) Pilot Project Monitoring Team (PPMT)	Monitoring and management of the pilot project
d) Local Communities in the target villages	Beneficiaries and co-implementers
e) NDAH and other directions under MAF	Coordinating Agencies
f) JICA Study Team	Overall management and supervision of the pilot project
g) Other NGOs, PADTL, CCT, etc.	Possible supporting organizations

I. 2 Outlines and Major Activities of the Pilot Projects

The following table gives the outlines and major activities of the sub-programs implemented as the pilot projects.

Outlines and Major Activities of the Sub-programs

a. Tree Planting Promotion Sub-program @ Tohumeta

Project purpose	Major Outputs	Major Activities
The areas planted	1. The capacity of	- Selection of core members and other participating members
with new	participating members	- Organization of the beneficiaries' groups
seedlings expand	to produce and plant	- Exposure visit
in Suco	seedlings is enhanced.	- Participatory planning
	2. Local agreement	- Installation of water systems and development of nurseries
	effective in managing	- Hands-on training on seedling production mainly for core
	and protecting	members
	seedlings/trees is	- Hands on training on tree planting
	implemented and	- Assistance in planting seedling by regular members
	maintained by the	- Development of the village regulations and organization of Tara
	village.	Bandu ceremony
		- Participatory annual evaluation and planning
		- Follow-up hands-on training
		- Monitoring survey of plantations

b. Home Garden Sub-program @ Tohumeta

Project purpose Major Outputs Major Activities	
Living conditions of households who participate in the sub-program is improved. 1. The capacity of participating members to produce vegetables is enhanced. 1. The capacity of participating members to produce vegetables is enhanced. 1. The capacity of participating members to produce vegetables is enhanced. 2. Exposure visit participatory planning Identification and development of the Hands-on training on vegetable produce the Hands-on training on vegetable produce participatory annual evaluation and planting Assistance in procurement of vegetables is enhanced. 3. Exposure visit participatory planning and development of the Hands-on training on vegetable produce participatory annual evaluation and planting and planting produce produce vegetables is enhanced.	demonstration plots action regetable production lanning

c. Tree Planting Promotion Sub-program @ Samalete

c. Tree Francing Fromotion Sub-program & Samalete		
Project purpose	Major Outputs	Major Activities
The areas planted	1. The capacity of	- Selection of core members and other participating members
with new	participating members	- Organization of the beneficiaries' groups
seedlings expand	to produce and plant	- Exposure visit
in Suco	seedlings is enhanced.	- Participatory planning
	2. Local agreement	- Installation of water systems and development of nurseries
	effective in	- Assistance in seedling production by core members
	management and	- Hands-on training on tree planting
	protection of	- Development of the village regulations and organization of Tara
	seedlings/trees is	Bandu ceremony
	implemented and	- Assistance in planting seedlings by regular members
	maintained by the	- Participatory annual evaluation and planning
	village.	- Follow-up hands-on training
		- Monitoring survey of plantations

d. Coffee Plantation Rehabilitation Sub-program @ Samalete

Project purpose	Major Outputs	Major Activities
The areas of	1. The capacities of	- Selection of core members and other participating members
rehabilitated	participating members	- Organization of the beneficiaries' groups
coffee plantation	to rehabilitate aged	- Exposure visit
expand in Suco.	coffee plantations and	- Participatory planning
	to improve productive	- Identification and development of the demonstration plots
	coffee plantations are	- Hands-on training on improvement of coffee plantations
	enhanced.	- Technical and material assistance in improving coffee plantations
		- Participatory annual evaluation and planning
		- Follow-up hands-on training

e. Participatory Land Use Planning Sub-program @ Faturasa

ci i di dicipatoi,	Dana Cot Hamming Day	F- 8
Project purpose	Major Outputs	Major Activities
Pilot Project Suco	1. A future land use map	- Selection of the members of the working group
can manage and	and local regulations	- Organization of the working group
use natural	on natural resource	- Participatory planning
resources within	management are	- Meetings with the working group to prepare a future land use map
its territory in a	developed	and village regulations
proper manner.	2. Local regulations will	- Organization of Tara Bandu ceremony
	be implemented with	- Assistance in the implementation and monitoring of the village
	Tara Bandu.	regulations
		- Participatory annual evaluation and planning
		- Assistance in fencing the selected grazing land to separate
		free-grazing animals from farmlands

f. Community-Based Seed Extension Sub-program @ Faturasa

	1. Community-Dasca Seed Extension Sub-program & Laturasa	
Project purpose	Major Outputs	Major Activities
Local	1. The capacity of	- Selection of core members and other participating members
communities in	participating members	- Organization of the beneficiaries' groups
suco can secure	to produce upland	- Exposure visit
seeds (improved	staple crops is	- Participatory planning
and local) of	enhanced.	- Identification and development of the demonstration plots
upland staple		- Hands-on training on soil conservation measures and improved
crops for the next		farming practices using the improved seeds
cropping		- Assistance in management of the demonstration plots
		- Construction of check dams
		- Installation of corm mills and establishment of guidelines on the
		use of corn mill
		- Participatory annual evaluation and planning
		- Follow-up hands-on training

g. Grazing Control with Protein Bank and Waste Pasture Rehabilitation Sub-program @ Faturasa

g. Grazing Con	ti oi with i fottin bank ai	id Waste Lasture Kenabintation Sub-program & Paturasa
Project purpose	Major Outputs	Major Activities
A model of	1. The capacities of	- Selection of core members and other participating members
controlling	participating members	- Organization of the working groups
Chlomoraena and	to control Chlomoraena	- Exposure visit
reducing free	and to develop protein	- Participatory planning
animal grazing is	banks are enhance.	- Identification and development of the demonstration plots
developed in Suco	2. Awareness of	- Hands-on training on establishment of protein banks
	prevention of wildfire	- Hands-on training on biological control of Chlomoraena
	is enhanced among	- Assistance in management of the demonstration plots
	local communities.	- Raising of awareness of the protection of the demonstration plots
		from wildfire
		- Participatory annual evaluation and planning
		- Follow-up hands-on training

h. Sustainable Upland Farming Promotion Sub-program @ Batara

n. Sustamable epiane i arming i romotion sub program e batara		
Project purpose	Major Outputs	Major Activities
A model of	1. The capacity of	- Selection of core members and other participating members
sustainable	participating members	- Organization of the beneficiaries' groups
upland farming is	to introduce sustainable	- Exposure visit
developed in	upland farming	- Participatory planning
suco.	techniques is enhanced.	- Identification and development of the demonstration plots
		- Hands-on training on soil conservation measures
		- Assistance in management of the demonstration plots
		- Participatory annual evaluation and planning
		- Follow-up hands-on training

i. Income Generating / Cost Saving Sub-program @ Batara

ii income den	cracing, cost baring bub	program c Butturu
Project purpose	Major Outputs	Major Activities
The women's	1. The capacity of	- Selection of core members and other participating members
groups can earn	participating women to	- Organization of the beneficiaries' groups (women's groups)
cash income and	operate the income	- Exposure visit
save expenditures	generating / cost saving	- Participatory planning
by operations of	activities is enhanced.	- Identification and development of the demonstration plots for
the introduced	2. The income generating	vegetable farming

Project purpose	Major Outputs	Major Activities
income	/ cost saving activities	- Hands-on training on income generating/cost saving activities (i.e.,
generating / cost	can generate cash	vegetable farming, tais making, food processing, and use of
saving activities.	income for the groups.	sewing machine) and financial management
	3. The income generating	- Market survey
	/ cost saving activities	- Assistance in management of the introduced income
	can reduce cash	generating/cost saving activities
	expenditures of the	- Participatory annual evaluation and planning
	members.	- Follow-up hands-on training

j. Public Awareness Campaign Sub-program

J		
Project purpose	Major Outputs	Major Activities
The awareness of	1. The importance of	- Identification of the target groups
sustainable	natural resource	- Conduct of awareness survey
natural resource	management is	- Preparation of a work plan in a participatory manner
management is	understood by local	- Development of the PAC materials (1)
enhanced among	communities.	- Organization of PAC sessions with participation of the target
local communities		groups
in suco.		- Development of the PAC materials (2)

I.3 Accomplishments made by the Sub-programs

Each and every sub-program made the substantial achievements thanks to the efforts made by the NGOs as well as the members of the beneficiaries' groups of the pilot project sucos. Details of the accomplishments are given in **Attachment I.3-1.** Some highlights are outlined in the following sections.

I.3.1 Suco Tohumeta

I.3.1.1 Tree Planting Promotion Sub-program

(1) Group Organization

Three (3) beneficiaries' groups were formed with registration of 111 members in February 2008. The number of the members was reduced to 54 after the review of the members' willingness in March 2009.

(2) Exposure visit

The NGO took 31 members of the groups to the nursery managed by PARDTL and MAF at Quinta Portugal in Aileu. The members deepened the understanding of the sub-program activities from the observation of the existing nursery.

(3) Training on Seedling Production and Seedlings Produced by the Groups

Each beneficiaries' group developed one community nursery with the assistance from the NGO in March 2008. A series of training courses on seedling production were organized at the demonstration plots in 2008. The members, particularly core members, of the groups were able to learn the techniques on seedling production, but the numbers of participants in the training courses were not necessarily high as compared to the total members of the groups.

Training Courses on Seedling Production

Training courses	Number of participants (Participation level)					
	Aldeia I	Aldeia II	Aldeia III	Total		
Training on land preparation for nursery	22	25	13	60		
Training on seedbed making	28	21	13	62		
Training on roofing nursery	22	22	19	63		
Training on fence making	17	13	8	38		
Training on sowing seeds	4	8	6	18		
Training on soil filling into poly bags	4	13	6	23		
Training on watering	6	11	6	23		
Total	103	113	71	287		

Source: Halarae Foundation

Each group was responsible for the daily maintenance of seedlings in its nursery. In 2008, the groups produced 18,117 seedlings in total.

Seedlings produced in 2008

(Unit: Seedlings)

Seedlings	Aldeia 1 (xx HHs)	Aldeia 1 (xx HHs)	Aldeia 1 (xx HHs)	Total (111 HHs)
Caliandra	682	982	982	2,646
L19	622	603	782	2,007
Clove	1,056	2,195	1,075	4,326
Teak	781	803	780	2,364
Sandalwood	442	318	272	1,032
Mahogany	1,257	2,083	1,524	4,819
Coconut	232	184	129	545
Breadfruit <2	41	41	29	111

Seedlings	Aldeia 1 (xx HHs)	Aldeia 1 (xx HHs)	Aldeia 1 (xx HHs)	Total (111 HHs)
Rambutan <2	82	82	58	222
Total	5,195	7,291	5,631	18,117

Source: Halarae Foundation

In 2009, the groups have raised a total of 9,718 seedlings as of October 2009.

Seedlings produced in 2009 (as of October 09)

Seedlings	Aldeia 1 (20 HHs)	Aldeia II (17 HHs)	Aldeia III (17 HHs)	Total (54 HHs)
Longan	150	182	127	459
Clove	287	500	390	1,177
Petai	150	151	162	463
Rambutan	193	141	210	544
Mahogany	1,310	935	1,000	3,245
Teak	850	1,080	1,000	2,930
L 19	300	300	300	900
Total	3,240	3,289	3,189	9,718

(Unit: Seedlings)

Source: Halarae Foundation

(4) Training on Planting Seedlings and Seedlings planted

In addition to the training courses on seedling production, the NGO has organized six (6) hands-on training courses on tree planting so that the regular members could plant seedlings in their own plots in a proper manner.

Training Courses on Planting Seedlings

Training courses	Number of participants (Participation level)				
	Aldeia I	Aldeia II	Aldeia III	Total	
Training on hole digging for coconut seedling	10	7	5	22	
Training on sticking (measuring the plots) and hole digging	23	18	18	59	
Training on filling soils into planting holes	23	23	24	70	
Training on transportation and planting of seedlings	17	20	17	54	
Training on weeding and mulching	9	13	6	28	
Training on maintenance of demonstration plots	10	3	7	20	
Total	92	84	77	253	

Source: Halarae Foundation

A total of 16,646 seedlings were distributed to 111 members and planted in 138 plots in 2008/2009. As of August 2009, 15,124 seedlings or about 91 % of the planted seedlings were confirmed alive by the monitoring survey conducted by the NGO.

Seedlings confirmed alive in the plantations developed from Nov 08 to Feb 09

(Unit: Seedlings)

Seedlings	Aldeia1		Alde	eia 2	Aldei	a Ai 3
	Seedlings planted	Seedlings alive	Seedlings planted	Seedlings alive	Seedlings planted	Seedlings alive
No. of plots	48 p	lots	46 p	olots	44 p	lots
Caliandra	660	629	845	826	859	835
L19	601	584	622	611	612	591
Clove	1,045	834	2,140	1,913	1,051	881
Teak	665	649	688	635	711	701
Sandalwood	360	193	199	150	248	142
Mahogany	1,230	1,125	1,993	1,838	1,290	1,196
Coconut	192	189	175	169	129	125
Breadfruit <2	40	37	41	36	30	30
Rambutan <2	80	56	82	75	58	54
Total	4,873	4,296	6,785	6,271	4,988	4,557
Survival rate	88.2	2 %	92.4	4 %	91.4	1 %

Source: JICA Study Team (2009)

Figure I.3.1 shows the locations of the plantations developed by the members and **Table I.3.1** gives species planted and the estimated survival of the planted seedlings in the respective plantations.

(5) Development of Village Regulations and Tara Bandu Ceremony

In order to protect the planted seedlings from wildfire and stray animals, suco Tohumeta formulated the village regulations with the assistance from the NGO in November 2008. Five (5) meetings among the suco council and three consultation meetings were organized for the preparation of the village regulations.

In order to make the village regulations effective, Tara Bandu ceremony was held with the participation of more than 100 people including the representatives of MAF, sub-district administrative office, and the village leaders of the neighboring sucos on December 5, 2008. In the ceremony, the village leaders announced the village regulations as the village by-laws that anyone in the village should observe.

(6) Development of Capacities of Local Communities

The questionnaire survey conducted by the Study Team in August/September 2009 revealed that the members judged themselves to be capable of applying almost all the techniques on tree planting.

Level of Understanding and Application of the Techniques among the Members

=010.0.0.0.0.0	20101 01 Gilder Startaing and Application of the Tooming and alleing the members							
Level of understanding of the techniques	Compost making	Land preparation	Nursery establish.	Soil prep and soil filling	Seed preparation	Sawing seeds in seed beds	Trans- planting	
Level of understanding (1-5) <1	3.7	3.6	3.5 (n=11)	4.1	3.2	3.8	4.2	
Level of application (1-3) <2	2.3	2.1	2.1	2.4	2.0	2.1	2.5	
Level of application of the techniques	Watering & weeding	Designing	Hole digging	Planting of seedlings	Weeding	Shading	Conventi- onal irrigation	
Level of understanding (1-5) <1	3.7	3.1	4.2	4.1	3.6	3.0	3.2	
Level of application		1						

Note: The number of samples is 20, unless specified with "n.".

Source: JICA Study Team (2009)

(7) Effectiveness of the Village Regulations

According to community members of suco Tohumeta, the incidence of wildfire and cases of illegal activities (e.g., illegal cutting, seal of farm products) as well as cases of violence in the village have been reduced since Tara Bandu ceremony. However, the suco council has had only two (2) monitoring meetings so far, the village leader should frequently monitor the implementation of the regulations to make the regulations more effective and sustainable.

I.3.1.2 Home Garden Sub-program

(1) Group Organization

Three (3) beneficiaries' groups were formed with registration of 89 members in February 2008. The number of the members was revised to 42 after the review of the members' willingness in March 2009.

<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.

<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

(2) Exposure visit

The NGO took 19 members of the groups to suco Lequitura and suco Sarin in Aileu, which the USAID project supported in the production and marketing of vegetables. The members were able to observe the improved vegetable farming techniques and realized that they still needed to improve their practices in the vegetable farming.

(3) Training on Vegetable Production

Each beneficiaries' group developed one demonstration plot with the assistance from the NGO in April 2008. From April 2008 to August 2009, the NGO has organized eight (8) training courses on vegetable production at the demonstration plots. Like in the case of TPP-SP, the numbers of the participants in the training courses were not always high as shown below.

Training Courses on Seedling Production

Training courses	Numbe	Number of participants (Participation level)			
	Aldeia I	Aldeia II	Aldeia III	Total	
Compost making	9	11	11	29	
Land preparation for vegetable farm, making a	17	16	18	51	
seedbed, and sowing vegetable seeds					
Transplanting vegetable seedlings into pots	7	7	4	18	
Application of compost and transplanting	5	9	9	23	
seedlings					
Preparation of organic pesticide	3	5	9	17	
Application of organic pesticide control	4	4	9	17	
Harvest of vegetable and collection of seeds	8	5	8	21	
Making of botanic pesticide and liquid fertilizer	11	7	11	29	
Total	64	64	79	207	

Source: Halarae Foundation

(4) Vegetables produced and Cash Income generated by the Members

From June 2008 to August 2009, the members have produced nine (9) types of vegetables and earned more or less US\$ 40.0/family.

Average Production and Estimated Income from Major Vegetables from Jun 08-August 09

a. From June 2008 to February 2009

a. From June 2008 to February 2009								
Crops	No. of Members harvested	Total Production	Volume for Consumption	Volume for Sale	Average price	Sales (income)	Total Effect*	
Mustard	39	34 bundles	18 bundles	16 bundles	\$0.25	\$4.0	\$8.5	
Pechai	40	52 units	33 units	19 units	\$0.25	\$5.0	\$13.0	
lettuce	35	30 bundles	20 bundles	10 bundles	\$0.2	\$2.0	\$6.0	
Cabbage	10	48 units	46 units	2 units	\$0.5	\$1.0	\$24.0	
Cowpea	54	25 bundles	10 bundles	15 bundles	\$0.25	\$3.8	\$6.3	
Tomato	28	3.6 baskets	1.5 basket	2.1 baskets	\$ 8.5	\$17.8	\$30.6	
Eggplant	27	3.8 baskets	2.1 basket	1.7 baskets	\$ 3.1	\$ 5.4	\$11.8	

b. From May to August 2009

Crops	No. of Members harvested	Total Production	Volume for Consumption	Volume for Sale	Average price	Sales (income)	Total Effect*
Mustard	6	18 units	12 units	2 units	\$0.25	\$0.5	\$3.5
Pechai	22	44 bundles	10 bundles	34 bundles	\$0.25	\$2.5	\$11.0
lettuce	3	0.5 basket	0.5 basket	0.5 basket	\$5.0	\$1.0	\$2.5
Cabbage	4	14 bundles	7 bundles	7 bundles	n.a.	n.a.	n.a.
Cowpea	0	-	-	-	-	-	-
Tomato	0	-	-	-	-	-	-
Eggplant	2	38 bundles	0 bundles	38 bundles	\$0.25	\$ 9.5	\$9.5

Note: $total\ effect = total\ production\ x\ average\ price.\ $$

Source: JICA Study Team (2009)

(5) Assistance in Procurement of Seeds from MAF

In order to enable the beneficiaries' groups to procure vegetable seeds by themselves even after the end of the pilot project, the NGO helped them to prepare a request letter to MAF for obtaining vegetable seed support from MAF at no cost. Although the volume of seed given by MAF was not as much as the groups requested, they were able to get five (5) types of vegetable seeds from MAF as follows.

Vegetable Seeds requested to / obtained from MAF in 2009

Seeds reques	sted to MAF	Seeds obtained from MAF		
Type of vegetable	Volume of seeds	Type of vegetable	Volume of seeds	
Cabbage	0.1 kg	Green mustard	0.21 kg	
Mustard	0.2 kg	Long bean	1.4 kg	
Kangkung	10.0 kg	Kangkung	2.8 kg	
Long beans	10.0 kg	Bitter melon	0.05 kg	
Egg plant	2.0 kg	Red kangkung	3.0 kg	
Tomato	0.2 kg			
Chili	0.2 kg			
Carrot	2.0 kg			
Lettuce	2.0 kg			

Source: Halarae Foundation

(6) Development of Capacities of Local Communities

According to the results of the questionnaire survey conducted by the Study Team in August/September 2009, the members judged themselves to be capable of applying all the techniques on vegetable farming.

Level of Understanding and Application of the Techniques among the Members

Level of understanding of the techniques	Compost making	Land preparation	Seedling production.	Transplanting of seedlings to pots	Transplanting of seedlings to farm
Level of understanding (1-5) <1	3.5	3.3	3.4	3.8	3.9
Level of application (1-3) <2	2.0	2.4	2.1	2.1	2.3
Level of application of the techniques	Maintenance of farm	Natural pesticide application	Liquid fertilizer application.	Harvesting & seed collection	Preparation of request letter
Level of understanding (1-5) <1	3.3	3.0	3.6	3.1	2.8
Level of application (1-3)	2.1	2.4	2.0	2.0	1.6

Note: The number of samples is 20, unless specified with "n.".

- <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.
- <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

Source: JICA Study Team (2009)

I.3.2 Suco Samalete

I.3.2.1 Tree Planting Promotion Sub-program

(1) Group Organization

Six (6) beneficiaries' groups were formed with registration of 228 members in February 2008. The number of the members was revised to 184 after the review of the members' willingness in March 2009.

(2) Exposure visit

The NGO took 37 members of the groups to suco Metutu which PARDTL has assisted in the development of a community nursery. The members were able to observe the role model for them and deepen the understanding of the sub-program activities.

(3) Assistance in Seedling Production and Seedlings Produced by the Groups

The NGO had assisted the beneficiaries' groups in the production of seedlings from April 2008 to August 2009.

Support Activities done by the NGO for TPP-SP at Samalete

Year	Type of	Activities	Timing
	assistance		
March 08	Material	Material Provision of seeds and materials for nursery development	
- Feb 09	assistance	Provision of materials for rehabilitation of watering systems	May-Jun
	Technical	Establishment of nurseries	May-Jun
	assistance	Land preparation for nurseries	May-Jul
		Preparation of seed beds	May-Jul
		Roofing of the nurseries	Jun-Jul
		Mixing of soils with compost and wood chips	Jun-Sep
		Filling of mixed soils into ploy bags	Jun-Sep
		Sowing of seeds in seedbeds	June-Sep
		Transplant of seedlings in seedbeds into poly bags	June-Sep
		Transplant of seedlings in poly bags into other poly bags	Sep-Oct
		Watering, weeding, and mulching	Jul 08- Feb 09
March -	Material	Provision of seeds and materials for nursery development	Feb – Jun
Aug 09	assistance	Provision of materials for rehabilitation of watering systems	Mar - Apr
	Technical	Fixing nurseries including land preparation for seedbeds	Apr
	assistance	Collection of materials for seedbed preparation	Mar – Aug
		Sowing seeds in seedbeds	Mar – Aug
		Filling of mixed soils into ploy bags	Apr – Aug
		Maintenance of seedlings	Apr - Sep

Source: Haralae Foundation

In 2008, a total of 59,902 seedlings was produced by the beneficiaries' groups as shown below.

Seedlings produced in 2008

(Unit: Seedlings)

Seedlings	Aldeia Lo	eburema	Aldeia	Eraulun	Aldeia Ai urlalan	
	Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)
Petai	63	60	58	58	52	75
Albizia	776	191	350	305	168	291
Lamtoro L19	292	159	229	230	162	345
Caliandra	306	359	462	205	154	294
Rambutan	34	35	19	31	26	40
Mahogany	150	85	154	143	30	140
Clove	34	319	0	0	21	0
Jack fruits	246	213	275	316	303	252
Orange	96	170	0	260	211	4
Sandalwood	109	37	32	110	263	154
Tephorosia	510	170	258	619	867	471
Grevillea	89	64	136	77	51	80
Coffee	7,669	7,935	8,315	7,317	6,737	8,635
Total	10,374	9,797	10,288	9,617	9,045	10,781

Source: Halarae Foundation

In 2009, the groups have raised 31,742 seedlings in the nurseries as of October 2009.

Seedlings being produced in 2009

(Unit: Seedlings)

Seedlings	Aldeia Leburema		Aldeia I	Aldeia Eraulun		Aldeia Ai urlalan	
	Naro (32 HHs)	Lebsome (33 HHs)	Haburas (37 HHs)	Hadia (31 HHs)	Morisfoun (27 HHs)	Halibur (24 HHs)	
Longan	134	140	161	193	193	138	
Clove	700	366	283	430	286	305	
Petai	428	304	364	339	300	238	
Rambutan	211	208	316	329	210	230	
Mahogany	2,185	1,674	3,023	2,107	1,631	1,355	
Grivilia	42	73	87		28	5	
Coffee	1,820	2,928	2,150	1,950	2,009	1,869	
Total	5,520	5,693	6,384	5,348	4,657	4,140	

Source: Halarae Foundation

(4) Training on Planting Seedlings and Seedlings planted

In addition to the technical assistance in seedling production, the NGO has organized eight (8) hands-on training courses on tree planting so that the regular members could plant seedlings in their own plots in a proper manner.

Training Courses on Planting Seedlings

Training courses	Number of participants (Participation level)			
	Leburema	Eraulun	Aiulalan	Total
Training on compost making	57	72	62	191
Training on land preparation, sticking, hole	55	28	48	131
digging				
Training on filling compost/top soils in puts	37	55	48	140
Training on hauling and planting seedlings	32	19	19	70
Training on weeding	20	17	17	54
Follow-up training on compost making	33	55	21	109
Training on maintenance of demonstration plots	21	29	31	81
Training on preparation of natural pesticide	29	31	19	79
Total	284	306	265	855

Source: Halarae Foundation

A total of 55,200 seedlings were planted by 190 members in 2008. The NGO surveyed 332 plots with 50,428 seedlings planted by the members. Out of 50,428 seedlings, 49,859 seedlings or 99 % of the surveyed seedlings survived as of August 2009. The results of the monitoring survey made by the NGO are given in **Table I.3.2** and **Figure I.3.2**.

Seedlings distributed to the members in 2008

(Unit: Seedlings)

Seedlings	Aldeia Lo	eburema	Aldeia l	Eraulun	Aldeia A	Aldeia Ai urlalan	
	Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)	
Petai	51	0	62	58	29	60	
Albizia	693	191	329	266	153	264	
L19	292	159	219	250	177	345	
Caliandra	270	307	467	199	152	294	
Rambutan	26	30	17	28	25	26	
Mahogany	116	85	124	143	30	120	
Clove	32	290	0	0	11	0	
Jack fruits	242	175	155	316	290	242	
Orange	93	160	0	234	116	0	
Sandalwood	31	28	18	86	58	4	
Tephorosia	473	170	252	611	423	471	
Grevillea	59	64	93	64	28	60	

Seedlings	Aldeia Leburema		Aldeia Eraulun		Aldeia Ai urlalan	
	Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)
Coffee	7,669	7,765	8,265	6,900	5,989	7,150
Total	9,983	9,484	10,001	9,155	7,481	9,096

Source: Halarae Foundation

(5) Development of Village Regulations and Tara Bandu Ceremony

Like in the case of Tohumeta, suco Samalete developed the village regulations with the assistance from the NGO in October and November 2008. Four (4) meetings among the suco council and three (3) consultation meetings at the aldeia level were organized for the preparation of the village regulations. Tara Bandu ceremony was organized on November 25, 2008 with the participation of Minister of MAF, Director of National Directorate of Coffee and Industrial Crops, Officer-in-charge (OIC) of National Directorate of Forestry, Sub-district Administrator of Railaco, Resident Representative of JICA TL Office, and the representatives of the neighboring villages. In the ceremony, the village leader announced that the village would implement the regulations as the by-laws of the village and anyone who live in or enter the village msut obey the regulations.

(6) Development of Capacities of Local Communities

The members of the groups considered that they understood all the techniques and could apply them except designing of the plantation by themselves.

Level of Understanding and Application of the Techniques among the Members

201010101							
Level of understanding of the techniques	Compost making	Land preparation	Nursery establish.	Soil prep and soil filling	Seed preparation	Sawing seeds in seed beds	Trans- planting
Level of understanding (1-5) <1	4.0	3.8	3.9	4.2	3.4 (n=19)	3.9	4.2
Level of application (1-3) <2	2.5	2.2	2.4	2.6	2.2	2.1	2.2
Level of application of the techniques	Watering & weeding	Designing	Hole digging	Planting of	Weeding	Shading	Conventi- onal
	weeding			seedlings			irrigation
Level of understanding (1-5) <1	4.3	3.3	4.1	4.2	4.1	4.2	4.1

Note: The number of samples is 20, unless specified with "n.".

Source: JICA Study Team (2009)

(7) Effectiveness of the Village Regulations

The incidence of wildfire and cases of illegal activities (e.g., illegal cutting, seal of farm products) as well as violence have been drastically reduced in the village since Tara Bandu ceremony. Nevertheless, there have been only two (2) monitoring meetings organized by the suco council so far. The leaders should be more responsible for the implementation of the village regulations.

3.2.2 Coffee Plantation Rehabilitation Sub-program

(1) Group Organization

<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.

<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

The same beneficiaries' groups organized for TPP-SP worked for CPR-SP.

(2) Exposure visit

The same suco, suco Metutu, used for the exposure visit for TPP-SP was used for CPR-SP since the suco had also assistance from PARDTL in rehabilitation of aged coffee plantations. The members who visited the suco, 37 members of them, were able to gain a picture of the techniques to be introduced by the sub-program.

(3) Hands-on Training on Improvement of Coffee Plantations

A total of 11 hands-on training courses on the techniques to improve the productivity of existing coffee plantations has been organized from April 2008 to August 2009. The level of members' participation in the training courses ranged from 30 to 50 % of the total members on average.

Training Courses on Planting Seedlings

Training courses	Numbe	Number of participants (Participation level)			
	Leburema	Eraulun	Aiulalan	Total	
Compost making (part of training for TPP-SP)	57	72	63	192	
Identification of demonstration plots	37	43	25	105	
Rejuvenation of aged coffee plantation (1)	38	45	27	110	
Rejuvenation of aged coffee plantation (2)	31	28	20	79	
Pruning of young coffee trees (1)	28	33	17	78	
Pruning of young coffee trees (2)	37	42	26	105	
Seed selection	26	33	22	81	
Preparation of natural pesticide*	29	31	26	86	
Application of natural pesticide*	32	25	28	85	
Pruning of productive coffee trees	20	23	15	58	
Planting new seedlings*	32	19	19	70	
Total	367	394	288	1,049	

Note*: The trainings were conducted both for TPP-SP and CPR-SP.

Source: Halarae Foundation

In general, the members seem to have doubted the effectiveness of the techniques introduced by the sub-program, particularly those relating to rejuvenation of aged coffee and pruning of young or productive trees. However, many of them are presently appreciating the effectiveness of rejuvenation and pruning techniques as they see the coffee trees in the demo plot flowering.

(4) Development of Capacities of Local Communities

The members of the groups analyzed themselves that they well understood all the techniques introduced and would be able to fully to partially apply them in their own farms.

Level of Understanding and Application of the Techniques among the Members

Level of enderetaining and Application of the recliniques among the members						
Level of understanding of the techniques	Compost making	Rejuvenation	Pruning of coffee trees	Planting of coffee seedlings		
Level of understanding (1-5) <1	3.9	3.9	4.1 (n=17)	4.0		
Level of application (1-3) <2	2.3	2.1	2.1	2.7		
Level of application of the techniques	Maintenance of plantation	Harvesting of coffee cherries	Processing of coffee cherries	Seed selection		
Level of understanding (1-5) <1	4.1	4.1 (n=17)	3.7	4.1		
Level of application (1-3) <2	2.5	2.0	2.1	2.2		

Note: The number of samples is 18, unless specified with "n.".

Source: JICA Study Team (2009)

<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.

<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

(5) Application of the Techniques

Although the members judged themselves to be capable to apply the techniques, only two members rejuvenated aged coffee trees and one member replicated pruning techniques in his/her own farm as of August 2009. In fact, almost all the members are still in a wait-and-see attitude. However, many of them seem to have been realizing the effect of the rejuvenation and pruning as they see the results of the demonstration plots.

I.3.3. Suco Faturasa

I.3.3.1 Participatory Land Use Planning Sub-program

(1) Group Organization

A working group composed of 15 members, who were Chef de Suco, Chef de Aldeia, Representatives of women's group, Youth leaders, Lia Nain (Traditional leader) and large land owners, was formed by the sub-program.

(2) Meetings and Discussions for the Formulation of the Village Regulations

In 2008, five (5) meetings among the working groups and four (4) consultation meetings with local communities in aldeias were organized to prepare the village regulations as well as the future land use map of the village. In 2009, a two-day meeting was organized to revise the future land use map and village regulations. The topics discussed and the numbers of the participants in the meetings are summarized below.

Meetings/Workshops organized for PLUP-SP

Workshops / Meetings	Date of meeting	No. of participants
Workshop on present land use mapping	March 3-5, 2008	-
Workshop on future land use options	June 17-19, 2008	13
Workshop on future land use mapping and outlines of village	July 3-4, and 10 2008	13
regulations		
Workshop on the draft village regulations	July 10, 2009	13
Meetings with communities members for socialization of the draft	July 16 at Fakulao	55
village regulations at each aldeia	July 17 at Remehei	65
	July 19 at Kaitaso	56
	July 20 at Bereliso	68
Workshop on revision of present and future land use maps	May 22 & 25, 2009	19 and 25

Source: USC Canada

(3) Future Land Use Map and Village Regulations

The village regulations and the future land use map developed by the working group are outlined below.

Outlines of the Village Regulations of Suco Faturasa

Chapter	Outlines
Future land use	a. Reserved Ai ru / Ai buburforest b. Regeneration Ai bubur and mixed forest c. Reserved Sandalwood forest d. Coffee plantation e. Grassland f. Grazing land g. Permanent farm h. Protected springs
Activities banned	 a. Cutting Ai-ru / Ai-bubur trees not for domestic purposes (e.g., building a house) but for selling or without permission from local leaders, traditional leaders and land owners;

Chapter	Outlines					
		ndalwood for selling or without perm	sission from local leaders, traditional leaders and land			
	owners;					
		er trees, such as Ai-hali, Ai-saria, an				
	_	her people's coffee plantation withou	•			
		honey without permission from the o				
		tting a host tree for honey or tua without permission from the owner;				
		e areas except Grassland and Perman				
	_	mage to crops in other people's farm	0 m above and 100 m below the spring and 100 m to			
			building a house, and grazing animals;			
		e spring dirty or doing any activities of				
		ife without permission from local lea				
		shes in the river using electrical devi				
		ro grasses without permission from the				
		mboo without permission from the ov				
Guidelines in the use	Resources	Guidelines for Use and Manager				
of resources	Ai-ru	a. Do not cut branches of Ai-ru				
		b. Replant Ai-ru seedlings or other	species after cutting			
	Ai-bubur	a. Do not cut trees during the flow	vering season from January – March			
		b. Do not cut Ai-bubur trees with	or near a honeycomb			
	Bamboo	a. Cut only mature / old bamboo				
	Coffee	a. Plant and grow coffee trees with				
		 b. Pick only red cherries when har 	0			
	Honey	5 5	to May and from September to October			
		 b. Avoid killing bees when collect 				
		•	ful not to cause damage to bees as well as other			
		natural resources when using fi				
	Farmland	a. Do not cut trees or farm in the a				
		b. Plant trees or fruit trees in the a				
			ennial crops in the area at slopes from 40 - 55% res when faming the area at slopes from 15 - 40%			
			eful not to burn other natural resources in when			
		burning the farm by making fire				
	Livestock	a. Put and raise animals in a fence				
	(Animals)		is/her animals entering other people's farm			
Fines and penalties	Type of crir		Fines imposed			
Times and penantes	Severe (Hea		Compensation for the damage to a victim			
		stealing, illegal logging	Materials (rice, tua, cigarette, betel nut) /			
	Sexual ha		animals (cattle, pig, goat) as same as those			
		or murdering someone	used in Tara Bandu			
		ng someone with any weapons or	• US\$ 50 fine (paid to the committee)			
	sharp obje		In case the violator can not comply with the			
		g / damaging public and private	fines described above, he or she must be			
		s, such as, vehicle, school building,	handed over to the police.			
	home, etc		1			
	Burning of	or doing any activities that cause				
		mage to forests, houses or farms				
	Light crime		Compensation for the damage to a victim			
	Stealing (small items, fruits, small animals,	One head of big pig, one bag of rice, 10 lit of			
		less valuable things/goods)	tua, one carton of cigarette, and betel nut			
		es or illegal activities that are not	• US\$ 25 fine (paid to the committee)			
	categorize	ed as Serious Crime	In case the violator can not comply with the			
			fines described above, he or she must engage			
			in three-month community service.			

Source: Revised Village Regulations of Faturasa (2009)

(4) Tara Bandu Ceremony

In order to make the village regulations effective and announce them to the public, Tara Bandu ceremony was organized with the participation of i) Representatives from MAF, Ministry of Environment, and NDF, ii) Representatives from Aileu District and Remexio Sub-district, iii) Priest from church in Remexio, iv) Representative from PNTL of Remexio, v) village leaders of the neighboring villages, and vi) JICA Study Team on July 28, 2009.

(5) Implementation and Monitoring of the Regulations

The working groups had organized five (5) monthly monitoring meetings after the ceremony with the assistance of the NGO to monitor the implementation of the regulations and discuss the issues to be handled at the suco level.

Monthly Monitoring Meetings for Implementation of Village Regulations

Monthly Monitoring Meetings	Date	Number of participants
Monthly monitoring meeting in September	September 24	12 participants
Monthly monitoring meeting in October	October 31	16 participants
Monthly monitoring meeting in November	December 2	14 participants
Monthly monitoring meeting in December	January 21	21 participants
Monthly monitoring meeting in January	February 26	14 participants

Source: USC Canada

Major topics that the participants have discussed in the meetings are: i) issues on crop damage caused by animals being freely grazed, ii) illegal activities committed by villagers in the neighboring sucos, iii) disputes among community members over land, and iv) other domestic issues. Through a series of discussions, the suco leaders have deepened their understanding of the village regulations and developed their capacity to cope with the issues in the village.

(6) Set-up of Fence to separate the Designated Grazing Land

One of the issues that local communities have faced was to control stray animals in the village. In order to reduce crop damage caused by animals, the working group demarcated the grazing areas from permanent agricultural land in future land use mapping. Although the future land use map clearly allocated several grazing areas in the village, there was no clear separation or segregation made on the ground. In response to the strong request from local communities for realization of the future land use map, the NGO assisted local communities in the establishment of about 2.8 km fence on the boundary between the areas designed as grazing land and permanent farm.

(7) Development of Capacity of Local Communities

The working group or the village leaders likely understand the village regulations well. In fact, they have used the regulations to solve disputes taking place in the village so far. The results of the interview survey conducted by the JICA Study Team also support this tendency.

Level of Understanding and Application of the Techniques among the Members

Level of understanding of the techniques	Rules on NRM	Guidelines for land use	Future land use map	Monitoring system	Roles & responsibilities of the committee
Level of understanding (1-5) <1	4.0	4.0	4.0	4.0	4.0
Level of application (1-3) <2	3.0	3.0	3.0	3.0	3.0

Note:

- <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.
- <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

Source: JICA Study Team (2009)

(8) Effectiveness of the Regulations

No forest fire has taken place since Tara Bandu ceremony on July 28, 2008. Likewise, there has been no illegal cutting or illegal harvest of forest and other natural resources committed by communities in the village so far, though there have been several cases caused by local

people from the neighboring villages. There have been also several cases of crop damage caused by free grazing animals.

1.3.3.2 Community-Based Seed Extension Sub-program

(1) Group Organization

Two beneficiaries' groups were organized in two aldeias, aldeia Berliso and aldeia Kaitaso, of suco Faturasa. The group of aldeia Bereliso consists of 44 members, while the other group selected 40 members from communities in Kaitaso.

(2) Exposure visit

The NGO took 15 members of the groups to Quinta Portugal in Aileu on February 14 and 15, 2008 to observe the test plots of improved seeds. Through the exposure visit, the members deepened their interest in and understanding of the sub-program activities.

(3) Training on the Techniques on Improved Farming Practices

In order for the members to learn to grow upland crops in a productive way, the NGO conducted a total of 12 training courses between March 2008 and August 2009.

Training on Improved Farming Practices with Improved Seeds

	1		
Training courses	Bereliso	Kaitaso	Total
Training on land preparation	40	25	65
Training on compost making	44	44	88
Training on soil conservation	49	31	80
Training on compost application	22	35	57
Training on sowing seeds and planting	44	22	66
Training on preparation for liquid fertilizer	40	20	60
Training on farm maintenance	48	20	68
Training on planting seedlings	48	25	73
Training on application of liquid fertilizer	37	15	52
Training on harvest and post harvest	40	38	78
Follow-up training on compost making	37	39	49
Follow-up training on soil conservation	39	38	50
Total	488	298	786

Source: USC Canada

The members of GCPBWPR-SP of the same aldeia also participated in the above-listed training sessions and vice-versa; the numbers of the participants were sometimes more than the total members of the groups.

(4) Introduction of Improved Seeds

The NGO procured the improved seeds of corn, peanut and sweet potato from MAF/Seed of Life. The NGO also procured the local seeds of corn, soybean, red bean, cassava, and sweet potato at the same time. Both types of seeds were planted in the demonstration plots and also distributed to all the members of the groups.

(5) Production of Upland Crops

The members produced six (6) upland crops in the demonstration plots as well as the individual farms using improved and local seeds given by the NGO. The NGO also provided technical assistance to the members in managing the respective farms. The following tables shows the average productivity of the upland crops under the three cases: i) crop production under the conventional practices (production of local seeds under the shifting cultivation practices); ii) crop production in the demonstration plots (production of improved and local

varieties under the improved farming practices); and iii) crop production in the individual plots (production of improved and local varieties probably under the conventional farming practices).

1) Crop Production under the conventional practices

Crops		Local seed	ds with conventiona	al practice	
	Sample No.	Ave. volume of seed (kg)	Ave.Production (kg)	Yield/ Seed Volume (kg)	Average Vol. secured for next year (kg)
Corn	3	26.7	325	12.2	27.5
Peanuts	2	5	35	7.0	5
Cassava			Not yet harvested		
Red bean	3	1	N.A*	$\mathbf{N.A}^*$	2
Sweet Poteto	$\mathbf{N.A}^*$	$\mathbf{N.A}^*$	N.A*	$\mathbf{N.A}^*$	N.A*

Note*:Data not available Source: JICA Study Team (2009)

2) Crop Production of local and improved varieties in the demonstration plots under the improved practices<1

Jactices			Local					Improv	ed	
Crop	Sam ple No.	Ave. volume of seed (kg)	Ave.Pro duction (kg)	Yield/ Seed Volume (kg)	Ave. Vol. secured for next year (kg)	Sam ple No.	Ave. volume of seed (kg)	Ave.Pro duction (kg)	Yield/ Seed Volume (kg)	Ave. Vol. secured for next year (kg)
Corn	2	5	362.5	72.5	112.5	2	5	400	80.0	87.5
Peanuts	2	15	412.5	27.5	62.5	2	10	391.5	39.2	41.5
Cassava	2	Not yet harvested				-	-	-	-	-
Soy bean	2	4.5	157.5	35.0	27.5	-	-	-	-	-
Red bean	2	6.5	232.5	35.8	25	-	-	-	-	-
Sweet Potato	2	7.5 bunches		Damaged			7.5 bunches	Damaged		

Source: JICA Study Team (2009)

Note: Improved practices meas the farming practices introducing line planting, application of compost, and application of liquid fertilizer.

3) Crop Production of local and improved varieties in the individual plots

	crop Production of local and improved varieties in the individual plots									
Crop			Loca	ıl		Improved				
	Sam ple No.	Ave. volume of seed (kg)	Ave.Pr oductio n (kg)	Yield/ Seed Volume (kg/ kg or cutting)	Average Vol. secured for next year (kg)	Sam ple No.	Ave. volume of seed (kg)	Ave.Pr oductio n (kg)	Yield/ Seed Volume (kg)	Average Vol. secured for next year (kg)
Corn	17	12.4	419	33.8	46	6	5.1	278.3	54.6	15
Peanuts	16	6.5	100.6	15.5	42.7	9	1.55	23.88	15.4	6.6
Cassava	8		Not ye	t harvested		-	-	-	-	-
Soybean	11	3.5	45.9	13.1	8.6	-	-	-	-	-
Red bean	12	3.5	176.7	49.8	10.73	-	-	-	-	-
Sweet Potato	10	325	796	2.4	508.3	-	-	-	-	-

Source: JICA Study Team (2009)

As shown in the tables above, all the crops grown under the improved farming practices in the demonstration plots showed good results, while the yields of improved seeds of corn and peanut are higher than those of their local seeds in both demonstration and individual plots. The results revealed that using the improved varieties along with the introduction of the improved farming practices could bring about the higher returns that would allow local communities to secure enough seeds for future cropping.

(6) Operations of corn mills

Two units of corn mills were installed in Berliso and Fakulao. They have been operated and managed by the selected members of communities in the village. To operate corn mills in a proper and transparent manner, the communities developed the rules and guidelines on corn mill operations, which stipulate 1) composition of the management body of corn mill, 2) roles and functions of the management body, 3) regular operating hours of the mill, 4) milling fees, and 5) use of earnings from the operations. As of September 2009, both units had worked well and generated USD14 from the operations.

(7) Development of Capacities of Local Communities

The members judged that they would not have difficulty in the application of the improved farming techniques except farm management as shown below.

Level of Understanding and Application of the Techniques among the Members

Level of understanding of the techniques	Compost making	Making and use of A-frame	Application of soil conservation measures	Land preparation including design of plot	Selection of seeds
Level of understanding (1-5) <1	4.0	3.8	3.9	4.2	3.4 (n=19)
Level of application (1-3) <2	2.5	2.2	2.4	2.6	2.2
Level of application of the techniques	Line sowing	Farm management	Harvest and post-harvest	Storage of seeds	
Level of understanding (1-5) <1	4.3	3.3	4.1	4.2	
Level of application (1-3) <2	2.8	1.8	2.9	2.7	

Note: The number of samples is 20, unless specified with "n.".

Source: JICA Study Team (2009)

<u>I.3.3.3 Grazing Control with Protein Banks and Waste Pasture Rehabilitation</u> Sub-program

(1) Group Organization

Four (4) working groups were organized at a rate of one group per aldeia. Each group has five (5) members except in aldeia Kaitaso. The working group of aldeia Kaitaso consists of nine (9) members.

(2) Exposure visit

The NGO took eight (8) members of the groups to Suco Dare and Suco Tibar on February 22, 2008. The members observed fodder crop plantations in the former and the multiplication field insectaries of MAF in the latter. The exposure visit was likely effective in deepening their interest in and understanding of the sub-program.

(3) Training on the Techniques on Improved Farming Practices

<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.

<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

In order for the members to learn to develop protein banks and control Chlomoraena by using parasitic fly larvae, the NGO has conducted a total of 10 training courses between March 2008 and August 2009.

Training on Improved Farming Practices with Improved Seeds

Training courses	Bereliso	Kaitaso	Bereliso	Kaitaso	Total
Compost making	6	7	5	6	24
Identification of demonstration plots for protein	6	5	5	8	24
bank and biological control against Chlomoraena					
Making temporary fences	6	7	5	6	24
Land preparation with terrace making	15	7	7	14	43
Seed preparation of fodder trees and crops	5	8	5	6	24
Maintenance of the demonstration plots for protein	6	7	5	5	23
banks					
Planting fodder trees and crops	10	3	6	10	29
Collection of larvae and application of bunches of	10	6	5	12	33
Chlomoraena to the demo-plot					
Follow-up training on compost making	5	5	5	8	23
Follow-up training on terrace making	5	5	5	8	23
Total	74	60	53	83	270

Source: USC Canada

Since securing animal feeds in the dry season was one of the critical issues in the village, the members' expectation were apparently high and therefore their participation level have been kept high.

(4) Awareness Raising of the Techniques of the Sub-program

The NGO also carried out the following activities to enhance the awareness of the techniques.

- Provision of technical guidance on both techniques
- Distribution of information dissemination materials (i.e., posters and brochures) of the biological control method to local communities in the village
- Set-up of sign boards to protect the demonstration plots for the biological control of Chlomoraena from burning

(5) Development of Capacities of Local Communities

Like the other sub-programs, the members judged that they could replicate all the techniques that they had gone through the training courses as shown below.

Level of Understanding and Application of the Techniques among the Members

Level of understanding of the techniques	Compost making	Making and use of A-frame	Application of soil conservation measures	Planting of fodder trees/grasses	Biological chromoralena control
Level of understanding (1-5) <1	4.6	4.6	4.4	4.2	3.6
Level of application (1-3) <2	2.8	2.8	3.0	3.0	2.6

Note:

- <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.
- <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.

Source: JICA Study Team (2009)

I.3.4 Suco Batara

I.3.4.1 Sustainable Upland Farming Promotion Sub-program

(1) Group Organization

Four (4) beneficiaries' groups were organized for four (4) aldeias in Batara. Each aldeia organized one group with participation of 30 members. Hence, a total of 120 members participated in the sub-prpgram.

(2) Exposure visit

Forty (40) members visited suco Manelima in Laclubar on February 15, 2008 with the assistance from the NGO. The members observed the existing farms with the soil conservation measures and talked to farmers who applied the same techniques to their own farms. This experience deepened their interest in the upland farming techniques. In fact, some members introduced the soil conservation measures they observed in Manelima after the visit.

(3) Training on the Techniques on Improved Farming Practices

A total of 13 training courses have been organized with the total participation of 1,467 members from March 2008 to August 2009.

Training on Improved Farming Practices with Improved Seeds

Training on improved raining	Are-Ain		•		Takal
Training courses	_	Fatuha	Werulun	Balulin	Total
How to make and use A-frame	30	30	30	30	120
Making bench terraces and contour composting	28	32	19	31	110
systems					
Land preparation (making bench terrace and	20	30	25	30	105
contour compost systems)					
Planting annual crops	32	36	34	37	139
Weeding, planting pineapple, fodder trees and	25	32	29	30	116
peanuts, and digging hole					
Planting potato, talo and preparation of materials	28	29	26	30	113
for temporary fences					
Pest management	25	30	25	28	108
Second weeding, planting seedlings such as	30	30	30	30	120
orange and mahogany and harvesting red beans					
Harvesting and post harvesting	17	30	30	30	107
Compost making	29	29	26	30	114
Follow-up training on soil conservation	24	26	24	28	102
Follow-up training on how to make and use	26	29	24	27	106
A-frame					
Follow-up training on terrace making	27	28	23	29	107
Total	341	391	345	390	1,467

Source: USC Canada

(4) Production of Upland Crops

Each group developed one demonstration plot with the soil conservation measures (i.e., bench terrace and contour composting measures) and planted five (5) types of upland crops. The NGO also distributed seeds of the same crops to the individual members to encourage them to introduce the sustainable upland farming techniques in their own farms.

The following table gives the production and productivity of the crops planted in the demonstration plots.

Crops	Fat	uha	Wer-ulun		Are-ain		Balulin	
	Product	Yield**	Product	Yield**	Product	Yield**	Product	Yield**
Corn (bench terrace)	50 kg	39 kg	50 kg	44 kg	75 kg	68 kg	50 kg	29 kg
Corn (contour compost)	100 kg	66 kg	100 kg	87 kg	30 kg	23 kg	90 kg	57 kg
Soybean (bench terrace)	40 kg	33 kg	-	-	64 kg	52 kg	-	-
Soybean (contour compost)	80 kg	45 kg	75 kg	66 kg	80 kg	68 kg	75 kg	45 kg
Red bean (bench terrace)	=	=	=	-	26 kg	7 kg	=	=

Crops	Fatuha		Wer-	ulun	Are-ain		Balulin	
	Product	Yield**	Product	Yield**	Product	Yield**	Product	Yield**
Red bean (contour compost)	50 kg	25 kg	50 kg	35 kg	40 kg	28 kg	25 kg	5 kg
Sweet potato (bench terrace)	N.A.*	N.A.*	N.A.*	N.A.*	N.A.*	N.A.*	30 kg	1.5kg/ bunch
Sweet potato (contour compost)	N.A.*	N.A.*	30 kg	1.5kg/ bunch	40 kg	2.0kg/ bunch	15 kg	1.5kg/ bunch
Peanut (bench terrace)	18 kg	10 kg	N.A.*	N.A.*	75 kg	40 kg	15 kg	7 kg
Peanut (contour compost)	100 kg	60 kg	50 kg	35 kg	15 kg	3 kg	20 kg	15 kg

Note: * Data was not available.

In the demonstration plot, the crop yields in contour composting parcels are higher than those in bench terracing parcels. This tendency may be caused by the difference in soil fertility between the parcels. The sub-surface soils were often mixed with the surface soils when bench terraces were made. In addition, the parcels of contour composting are located in the bottom of slope and therefore their surface soils are likely more fertile.

(5) Development of Capacities of Local Communities

The members considered that they understood the techniques introduced by the sub-program. They also judged themselves to be able apply the techniques in their own farms as shown below.

Level of Understanding and Application of the Techniques among the Members

Level of understanding of the techniques	Compost making	Use of A-frame	bench terracing	contour composting	Land preparation
Level of understanding (1-5) <1	4.3	4.4	4.4 (n=23)	4.4	4.1
Level of application (1-3) <2	2.3 (n=23)	2.5	2.4 (n=23)	2.4	2.1 (n=23)
Level of application of the techniques	Selection of seeds	Mono-croppin g in line	Farm management	Harvest and post harvest	Storage of seeds
Level of understanding (1-5) <1	4.8	4.4	4.3	4.3	4.3
Level of application (1-3) <2	2.8	2.4	2.4	2.4	2.4

Note: The number of samples is 24, unless specified with "n.".

- <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.
- <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

Source: JICA Study Team (2009)

According to the NGO, 12 members have developed bench terraces and another 32 members have also introduced the contour composting method in their own farms as of September 2009.

1.3.4.2 Income Generating / Cost Saving Sub-program

(1) Group Organization

Each aldiea selected ten (10) women for the sub-program. Four (4) women's groups with participation of 40 women were organized for the sub-program in February 2008.

(2) Exposure visit

The NGO took 25 members to suco Manelima in Laclubar on February 15, 2008. The members observed the income generating activities, namely handicraft making (weaving) and

^{**} Yield is the productivity against the volume of seeds used.

vegetable gardening, being implemented by communities in Manelima. Through the exposure visit, the members deepened the understanding of the sub-program activities.

(3) Training on the Techniques on Improved Farming Practices

A total of 13 training courses have been organized with the total participation of 664 members from March 2008 to August 2009.

Training on Improved Farming Practices with Improved Seeds

Training courses	Are-Ain	Fatuha	Werulun	Balulin	Total
Training on compost making	10	10	10	10	40
Training on land preparation	10	10	10	10	40
Training on seed selection and seedbed making	12	12	10	11	45
Training on transplanting seedlings using pots	N.A.	N.A.	N.A.	N.A.	34
Training on planting	10	11	10	11	42
Training on business/financial management	N.A.	N.A.	N.A.	N.A.	41
Training on use of sewing machine	10	10	10	10	40
Training on food processing	10	10	10	10	40
Training on tais making	12	12	10	11	45
Follow-up training on compost making	11	17	15	9	52
Follow-up training on use of sewing machine	47	42	42	42	173
Training on land preparation with compost	10	8	12	8	38
application					
Follow-up training on financial management	7	10	9	8	34
Total	-	-	-	-	664

Source: USC Canada

(4) Market Survey

Between October 27 and 29, 2008, six (6) members of the groups with the NGO and JICA Study Team conducted the interview survey to the following market outlets to grasp the marketability of some of the major resources in the village.

- Middlemen at bazaar at Laclubar
- Church / Sub-district Administrative Office
- Supermarket in Dili
- Tais market in Dili
- School at Laclubar

(5) Production / Products from Income Generating Activities

The women's groups produced more than eight (8) types of vegetables at the demonstration plots with the assistance from the NGO.

Vegetables produced in the Demonstration Plots for Vegetable Farming

Vegetable produced		Aldeia							
	Areain	Balurin	Werlulun	Fatuha	Total				
Green Mustard (bunch)	40	35	NA	45	120				
Mustard (bunch)	422	498	260	343	1,523				
Lettuce/Green salad (unit)	300	80	NA	8	388				
Broccoli (units)	NA	NA	208	NA	208				
Pechai (pechai)	NA	14	NA	NA	12				
Cowpeas	NA	NA	30 bundles	0.5 sacks	NA				
Red beans	35 cups	NA	NA	20 bundles	NA				
Cabbage	15	10	NA	NA	25				
Others*1	NA	Tomato 1 bucket	Bitter melon 6 bundles	Water spinach 4 bundles	NA				

Note*1: Others are chilli, tomato, bitter gourd, egg plant, onion, garlic and soy bean

Source: USC Canada

In addition to vegetables, the groups also produced tais, clothes, and processed foods applying the techniques that they have learned through the training courses.

Other Products produced in the Sub-program

IG activities	Areain	Balurin	Werlulun	Fatuha	Total
Tais making					
Small tais	3 pcs	4 pcs	4 pcs	3 pcs	14 pcs
Clothes					
- Table cloths	2 pcs	1 pc	1 pc	2pcs	6 pcs
- Shirt (repair)	2 pcs	1 pc	1 pc	2 pcs	6 pcs
- Shirt (new)	2 pcs	1 pc	1 pc	2 pcs	6 pcs
- Trouser (repair)	2	1 pc	1 pc	2 pcs	6 pcs
Processed foods					
- Banana chips	45 pcs	50 pcs	65 pcs	45 pcs	205 pcs
- Cassava chips	25 packs	45 packs	60 packs	25 packs	155 packs
- Sweet potato chips	30 packs	40 packs	35 packs	25 packs	130 packs
- Fried peanut with egg	30 packs	30 packs	40 packs	30 packs	130 packs

Source: USC Canada

(6) Development of Capacities of Local Communities

As a result of the training courses, the members considered that they understood the techniques except "natural pesticide application" in vegetable farming, "designing of letters and motifs" in Tais making, "making of fried peanut with eggs and fried mach potato" in food processing, and "measuring and cutting cloths" and "fixing of sewing machine" in the use of sewing machine.

Level of Understanding and Application of the Techniques among the Members

a. Vegetable Farming

Level of understanding and application of the techniques	Compost making	Land preparat ion	Seedling producti on	Transpla nting	Mainten ance of farm	Natural pesticide application	Harvesting and Seed collection
Level of understanding (1-5) <1	4.8	4.8	4.8	4.5	4.5	1.3	4.9
Level of application (1-3) <2	2.9	3.0	2.9	2.9	2.9	1.1	3.0

b. Tais Making

Level of understanding and application of the techniques	Making weaving tools	Spinning	Color coordinatio n	Rolling	Designin g of letters	Designin g of motifs	Material setting
Level of understanding (1-5)	2.9	4.6	4.5	4.6	2.5	3.8	4.1
Level of application (1-3) <2	2.5	2.9	2.9	2.9	1.9	2.6	2.6

c. Food Processing

Level of understanding and application of the techniques	Cassava chips	Steam cassava	Taro chips	Sweet potato chips	Banana chips	Fried peanut with eggs	Fried mash potato
Level of understanding (1-5) <1	4.1	4.4	4.6	4.6	4.6	3.3	2.6
Level of application (1-3) <2	2.6	2.5	2.6	2.6	2.7	1.7	1.4

d. Use of Sewing Machine

Level of understanding and application of the techniques	Threadin g	Initial seesawin g	Measuri ng and cutting	Sewing	Fixing sewing machine	
Level of understanding (1-5) <1	4.8	4.6	3.9	4.3	3.9	
Level of application (1-3) <2	3.0	2.9	2.5	2.5	2.3	

Note:

Source: JICA Study Team (2009)

<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.

<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.</p>

(7) Impacts on Income Generation and Cost Saving

As of October 2009, the women's groups have earned cash income of US\$ 87~163 from the sales of the products produced by the groups from April 2008 to August 2009.

Cash Income generated by the Women's Groups

IG activities	Areain	Balurin	Werlulun	Fatuha	Total
Vegetables farming	129	111	50	62	343
Tais making	8	12	10	8	38
Clothes making/repairing	15	12	8	15	50
Food processing	11	15	19	11	56
Total	163	150	87	96	487

Source: JICA Study Team (2008)(2009)

At the same time, it was reported by the members that the products produced by the sub-program saved their daily expenditures. The following table gives the volume of vegetables used for consumption.

Vegetables used for Consumtion

Vegetable produced	Areain	Balurin	Werlulun	Fatuha	Total
Green Mustard (bunch)	NA	5	NA	5	10
Mustard (bunch)	22	208	100	105	435
Lettuce (units)	150	NA	NA	NA	150
Broccoli (units)	NA	NA	200	NA	200
Others	NA	NA	NA	NA	NA

Source: JICA Study Team (2009) Note: NA: Data not available

(8) Use and Management of the Group Funds

As described above, the women's groups have earned US\$ 87~163 per group as of October 2009. The groups decided not to merely share the earnings among the members, but to wisely use the money in a sustainable manner. In the concrete, they have used the earnings for operations of micro credit schemes and grocery shops (so-called kiosk) in aldeias. Such spin-off activities contributed to stabilizing the household economy.

In addition, each group has kept an account book for the income generating activities to manage their fund in a proper and transparent manner.

I.3.5 Public Awareness Campaign Sub-program

The Study Team together with the counterparts from NDF and the district MAF offices concerned has implemented PAC-SP from July 2008 to December 2009. The major activities as well as accomplishments are outlined below.

(1) Selection of the target groups

A total of 63 children, 20 from grade III and 43 from grade IV, of primary school and 30 adults in suco Samalete were selected as the target group for PAC-SP.

(2) Awareness Survey

With an aim to grasp the current awareness level of the target group, the Study Team interviewed 33 children and 21 adults among the target group in July 2008.

(3) Development of the PAC Materials (1)

Determined main topic/theme to be handled by PAC-SP based on the results of the awareness survey, the Study Team developed a picture book with a focus on the protection of forest and water resources as a main material for public awareness raising activities.



(4) Awareness Raising Activities

Aiming to promote awareness of forest degradation issues and encourage the target group, especially adult members, to reexamine their daily activities, the following awareness raising activities were organized from June 2008 to August 2009.

Awareness Raising Activities conducted under PAC-SP

Number of participants at workshops							
Workshops organized	Children	Adults	Total				
Presentation of picture card show and drawing session	63	-	63				
Presentation of drawings	55	22	77				
Dialogue between the village council and children	63	59	122				
Presentation of children's drawings in Tara Bandu ceremony	63	46	109				
Recapturing of the Tara Bandu ceremony	63	46	109				
Total	307	173	480				

Source: JICA Study Team

(5) Development of the PAC Materials (2)

To share the future visions of children among local communities in suco Samalete, the Study Team prepared a calendar for 2010 using the drawings made by children in the drawing session. The calendars were distributed to all the households in Samalete through the district MAF office of Ermera in December 2009.



(6) Promotion of Public Awareness of Forest Protection

In order to gauge the awareness level among the target group after the sub-program activities, the Study Team interviewed the participants about their visions of the village and the necessary action to be taken to achieve their visions. Both children and adult members envisaged that more trees would be planted and water supply in the village would be stabilized by tree planting and forest protection.

Visions of the Target Group about the Village Future

		Children		Adults
Question/Topic	Answers (% of respondents)	Reason	Answers (% of respondents)	Reason
Condition of forest area after 10 years	- More trees and plants (100%)	 Can plant trees from now on. Already have nurseries for planting trees NGO/JICA supported the adults to prepare nurseries and plant trees. Protection of environment is important. 	- More trees and plants (100%)	Can plant trees in bare land.Can protect trees.Should stop burning land.
Condition of water in the spring after 10 years	- More water in the springs (83%) - No change (17%)	Water can be conserved by planting trees More villagers will use water due to population increase in the village.	- More water in the springs (100%)	- Water can be conserved by planting and protecting trees around the spring, and stopping firing lands.

Source: JICA Study Team

As compared with the results of awareness survey conducted in the beginning of the sub-program, the children had more positive image of the future conditions of forest and water resources in the village. At the same time, the sub-program gave adult members the opportunities to reconsider the future of the village for their future generations.

I.4 Evaluation of the Sub-programs

The sub-programs are evaluated in accordance with DAC's five evaluation criteria, namely i) relevance, ii) effectiveness, iii) efficiency, iv) impact, and v) sustainability. Details of the results of evaluation are presented in **Appendix I-4-1.** In the course of evaluation, the implementation processes of the sub-programs were also reviewed as compiled in **Appendix I-4-1.** The following sub-sections give some highlights of the results.

I.4.1 Suco Tohumeta

I.4.1.1 Tree Planting Promotion Sub-program

(1) Relevance (mainly from the point of view of local community)

The sub-program is considered relevant to the needs of local communities, though it may not directly meet them. Many members of the sub-program envisioned that the sub-program could contribute to the stabilization of water flow in natural springs and the expansion of the potential areas for coffee production in the village.

(2) Effectiveness

It is judged that the sub-program was able to achieve its objective, which is to expand the forest cover in the village through the capacity development of local communities, on a certain level. A series of hands-on training on both seedling production and tree planting and introduction of the village regulations with the traditional ceremony (Tara Bandu ceremony) were effective in enhancing the capacity of local communities to expand and maintain the forest cover in the village.

It is however true that the participation in the whole process of seedling production for about eight (8) to nine (9) months is not necessarily easy for all community members to fulfill. Hence, due consideration should be paid in the examination of eligibility of local communities for membership, or the activities relating to seedling production may need to be considered as optional since those activities are not always acceptable to every village.

(3) Efficiency

The efficiency of the sub-program was evaluated in the following points: timing, cost efficiency, and effectiveness of the activities.

Efficiency of TPP-SP @ Tohumeta

Items	Descriptions
Timing	 Delay in the installation of water systems caused the delay in seedling production in 2008. There was also a period when the number of staff was not sufficient to cover three aldeias. Other activities except the installation of water systems were carried out as originally planned.
Cost	 The expenditures used for training activities were half as much as originally planned, since some training courses were integrated due to limited participation. The expenditures used for nursery operations became three times as much as planned as the NGO had to shoulder all the consumptions for the members participating in the nursery operations.
Effectiveness	 Hands-on training courses were considered effective in enhancement of knowledge and skills of the members. However, limited participation of the members in the training courses halved the effectiveness of training. Limited participation also causes some loss of seedlings in the nurseries. One of the constraints on the improvement of members' participation was the weak leadership of the village leaders.

- Given those difficulties, especially in seedling production, the Study Team judges
that the nursery operations have not been necessarily implemented efficiently.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found so far.

Impact made by TPP-SP @ Tohumeta

Impact	Descriptions
Positive	- Implementation of the village regulations with revival of Tada Bandu ceremony reduced the incidence of wildfire and cases of illegal activities as well as violence in the village.
Negative	- The members who have participated in the project activities may have lost the opportunities to earn cash income from other government projects.

Source: JICA Study Team

(5) Sustainability

Some of the members, mainly core members, of the beneficiaries' groups are willing to continue producing seedlings even after the pilot project. However, they need support in procurement of materials, such as poly bags and seeds, for them to continue the activities. Furthermore, the Study Team judges that it would be difficult for the groups to implement the sub-program at the same scale with what it is at present even when they could have the assistance from MAF, since many members of the groups have preferred to work for other projects for earning cash income.

I.4.1.2 Home Garden Sub-program

(1) Relevance (mainly from the point of view of local community)

Vegetable production will contribute to the diversification of agricultural crops in the village and the stabilization/improvement of household income. Improvement of livelihoods of local communities is consistent with the needs of local communities as well as the purpose of the draft watershed management plan. The sub-program is also expected to contribute to the empowerment of women in the village, since vegetable production is one of the women's tasks in general.

(2) Effectiveness

As compared with the sub-program objective, namely, to improve the living conditions of local communities through diversification and increase of vegetable production in their own vegetable farms, the achievements of the sub-program were not on a full scale. Although the sub-program helped about 50 members of the groups earn more or less US\$ 40 per members on average, another 50 members of the groups were not benefited by the sub-program at all since they did not participate in the training courses.

Furthermore, many of the participating members also did not often take part in the training courses as expected. The number of the members who acquired techniques/skills introduced by the sub-program might be limited.

(3) Efficiency

The efficiency of the sub-program was evaluated as follows.

Efficiency of HG-SP @ Tohumeta

Items	Descriptions	
Timing	- Inputs were made as scheduled, but there was a period when the number of staff was not sufficient to cover three aldeias.	
Cost	- The expenditures for training activities were beyond the amount originally planned. The NGO needed to repeat the same training courses since the participants in one session were limited.	
Effectiveness	 Hands-on training courses were considered effective in enhancement of knowledge and skills of the members. However, the limited participation of the members in the training courses halved the effectiveness of training. Limited participation affected the efficiency of the sub-program. Although the expenditures for the hands-on training courses were more than the amount originally planned, only half of the members of the groups likely learned the techniques on vegetable farming. 	

Source: JICA Study Team

The possible reasons why many members have not often participated in the training courses are that:

- They were used to being given farm inputs from the government as a part of agricultural extension services; and/or
- They thought that they had already acquired the skills and techniques necessary for vegetable production since they had produced vegetables before the pilot project.

(4) Impact

The following positive and negative impacts have been confirmed.

Impact made by TPP-SP @ Tohumeta

Impact	Descriptions
Positive	- On average, the members who received vegetable seeds were able to earn about
	US\$ 40 per member and consume vegetables equivalent to US\$ 40/farmily/year by
	outcomes from the sub-program.
Negative	- The members who have participated in the project activities may have lost the
	opportunities to earn cash income from other government projects.

Source: JICA Study Team

(5) Sustainability

The members who had gone through the hands-on training courses were likely able to develop their capacity to produce vegetables in both dry and rainy seasons, although they may still need to enhance their knowledge especially on natural pesticide and liquid fertilizer application.

The JICA Study Team expects that the members will continue the vegetable farming in their own farms even without any external support since many of them had grown vegetables by themselves even before the pilot project. However, the types of vegetables and volume of products might not be as same as what they produced in the pilot project.

I.4.2 Suco Samalete

I.4.2.1 Tree Planting Promotion Sub-program

(1) Relevance (mainly from the point of view of local community)

Ensuring the domestic water supply in the dry season and enhancing cash income from coffee plantations are the major concerns of local communities in suco Samalete. Therefore, they expected that the sub-program contributed to the stabilization of water supply and expansion

of the potential areas for coffee plantation.

(2) Effectiveness

Like in the case of Tohumeta, the JICA Study Team judges the sub-program to achieve its objective, which aims to enable local communities to produce and plant seedlings in the village, on a certain level considering the fact that the beneficiaries' groups produced 59,902 and planted 55,200 seedlings in 2008. In fact, it was confirmed that a series of hands-on training courses on both seedling production and tree planting and introduction of the village regulations with the traditional ceremony (Tara Bandu ceremony) were effective in enhancing the capacity of local communities to expand and maintain the forest cover in the village.

Considering the limited participation of the members in the nursery operations, the Study Team comes to the same conclusion as the former sub-section drew. The activities relating to seedling production may not necessarily be acceptable to all sucos, and therefore they should be regarded as an option that a village can choose.

(3) Efficiency

The efficiency of the sub-program was evaluated in terms of timing, cost efficiency, and effectiveness of the activities.

Efficiency of TPP-SP @ Samalete

Items	Descriptions
Timing	- Delay in the installation of water systems caused the delay in seedling production in 2008. There was also a period when the number of staff was not sufficient to cover six (6) groups. Other activities except the installation of water systems were carried out as originally planned.
Cost	- The expenditures used for training activities increased by about 50 %. The NGO needed to repeat the same training courses since the participants in one session were limited.
Effectiveness	 Hands-on training courses were considered effective in enhancing knowledge and skills of the members. However, the number of the members who acquired the skills is not as high as those registered in the groups. Limited participation also causes some loss of seedlings in the nurseries. Given those difficulties, especially in seedling production, the Study Team judges that the nursery operations have not been necessarily implemented efficiently.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have emerged so far.

Impact made by TPP-SP @ Samalete

Impact	Descriptions
Positive	 Working as a group and periodical meetings among the members made the solidarity of the group strong. Such solidarity contributed to the reduction of disputes/conflicts among the members Implementation of the village regulations with revival of Tada Bandu ceremony reduced the incidence of wildfire, and cases of illegal activities as well as violence in the village.
Negative	- The members who have participated in the project activities may have lost the opportunities to earn cash income from other government projects.

Source: JICA Study Team

(5) Sustainability

Core members as well as other members who have gone through the hands-on training courses and daily nursery operations are considered technically capable of continuing the sub-program activities, although they still need the assistance from MAF in the procurement of poly bags and seeds. The members are also willing to keep producing seedlings even after the pilot project. It is therefore judged that they would continue the sub-program activities as long as they could have the material support from MAF.

I.4.2.2 Coffee Plantation Rehabilitation Sub-program

(1) Relevance (mainly from the point of view of local community)

Coffee is the main source of income in Samalete. However, many existing coffee trees in the village are over-aged and under poor management as well, and therefore, the productivity of coffee in the area is estimated to be as low as less than 0.1 ton/ha. Consequently, the improvement of productivity of the existing coffee trees/plantation is one of the main concerns of local communities in the village.

(2) Effectiveness

The members of the beneficiaries' groups seem to have understood the techniques (rejuvenation and pruning) to improve the productivity of the existing coffee plantations. However, only three (3) members have applied them in their own farms so far. Many members hesitated to cut coffee trees for fear of losing their sources of income. According to the NGO, the members have felt interest in the application of the techniques after seeding the results in the demonstration plots recently. There should have been more years to see visible outcomes from the sub-program emerge in the village.

(3) Efficiency

Likely in the case of the other sub-programs, the efficiency of the sub-program was evaluated in the following points: timing, cost efficiency, and effectiveness of the activities.

Efficiency of CPR-SP @ Samalete

Emicinity of the Camalette	
Items	Descriptions
Timing	- Inputs were made as scheduled, but there was a period when the number of staff was not sufficient to cover three aldeias.
Cost	- The expenditures for training activities and field staff were beyond the amont originally planned. The NGO needed to repeat the same training courses since the participants in one session were limited.
Effectiveness	- Hands-on training courses were considered effective in enhancement of knowledge and skills of the members. However, limited participation of the members in the training courses reduced the effectiveness of the training courses.

Source: JICA Study Team

(4) Impact

The following table gives the positive and negative impacts found in the village.

Impact made by CPR-SP @ Samalete

impact made by or it or @ Camalete	
Impact	Descriptions
Positive	- Working as a group and periodical meeting among the members made the solidarity
	of the group strong. Such solidarity contributed to the reduction of disputes/conflicts
	among the members
	- The members have acquired the new knowledge and skills that can imprive the
	productivity of their coffee plantations.
Negative	- The members who have participated in the project activities may have lost the

. •.•	1 .	c .1	
opportunities to earn	cash income t	trom other govern	ment projects
opportunities to carn	cash income	mom omer govern	mem projects.

Source: JICA Study Team

(5) Sustainability

Some members have likely acquired the techniques of rejuvenation and pruning through the hands-on training courses; it would not be much difficult for them to apply such techniques in their own plantations from a technical point of view. However, many of them can not afford to take a risk of losing the opportunities to generate income by cutting either trunks or branches of the existing coffee trees. It is expected that the application of such techniques would be expanded gradually at a slower pace as they observe the coffee trees in the demonstration plots bear coffee cherries.

The members might be able to tap the technical assistance from the district MAF office of Ermera as the government plans to support coffee farmers in the improvement of aged coffee plantations.

I.4.3 Suco Faturasa

I.4.3.1 Participatory Land Use Planning Sub-program

(1) Relevance (mainly from the point of view of local community)

Sustainable natural resource management along with reduction of forest fire can directly contribute to ensuring the livelihoods of local communities since communities in the village are still significantly dependent on natural resources for their livelihoods. In particular, frequent forest fires causing severe damage to forests as well as farmlands was one of the major concerns in the village. The sub-program is highly consistent with the needs of local communities in Faturasa.

(2) Effectiveness

The incidence of forest fire and the number of cases of illegal activities have been drastically reduced since the village regulations were officially announced in Tara Bandu ceremony. Although the village still seems to need the assistance from the NGO in the implementation of the village regulations, the sub-program revealed that the sub-program activities were quite effective in developing the capacities of the village leaders and reducing the human activities causing the forest and land degradation.

(3) Efficiency

The efficiency of the sub-program was evaluated in terms of timing, cost efficiency, and effectiveness of the activities.

Efficiency of PLUP-SP @ Faturasa

Efficiency of 1 Lot -of S 1 attrasa	
Items	Descriptions
Timing	- Monthly monitoring meetings were not always organized every month due to busyness of the NGO. Aside from the monthly meetings, the inputs were made as originally scheduled.
Cost	- The expenditures for all the activities except those for the meetings/workshops were made as originally planned.
Effectiveness	- Workshops/meetings organized for the formulation of the village regulations, preparation of future land use map and monitoring of the implementation of the regulations were effective in developing the capacities of the village leaders to

govern the village.

- A large scale investment was made for fence making to separate the designated grazing land from permanent farms. Such investment was necessary for the sub-program to realize the future land use map in a short period of time, but it is also true that such scale of investment might not be rational from the viewpoint of applicability.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found so far.

Impact made by PLUP-SP @ Faturasa

Impact	Descriptions
Positive	 The sub-program improved the governing ability of the village leaders and made other community members serious about observing the regulations, and eventually resulted in improving the peace and order situation of the village and protecting the individual assets from illegal capture. Present and future land use mapping helped the village leaders to realize the present and possible future conditions of forests in the village and improved a sense of ownership of natural resources in their locality. The neighboring villages are willing to develop their future land use maps and village regulations to protect and manage natural resources in their villages.
Negative	- There were some disputes over land use between the land owners and tenants who have traditionally used the lands for a long time since the regulations did not mention the vested tenure right.

Source: JICA Study Team

(5) Sustainability

The village leaders are considered capable of solving issues in the village by themselves in accordance with the village regulations, though they still need the assistance to implement the regulations properly. The NGO, USC-CTL, was committed to supporting the village in the implementation of the regulations for the next five (5) years; the village is expected to be able to develop its capacity to govern the village well using the village regulations.

I.4.3.2 Community-Based Seed Extension Sub-program

(1) Relevance (mainly from the point of view of local community)

Low productivity of upland staple crops is one of the major concerns in the village. It has forced local communities to live on a subsistence level and made them vulnerable to environmental changes. The aim of the sub-program, which is to increase and stabilize the productivity of the major upland crops through introduction of the improved seeds, is in line with communities' needs.

(2) Effectiveness

The yields of crops produced by the members in the last rainy season were significantly higher than those produced by non-members. In addition, the yields of the improved seeds were higher than those of the local seeds. The members likely accepted the improved seeds as well as techniques introduced by the sub-program. Hence, the JICA Study Team judges the sub-program to have developed a model to improve the productivity of upland staple crops with small inputs.

(3) Efficiency

The efficiency of the sub-program was evaluated in the following three (3) points: timing, cost efficiency, and effectiveness of the activities.

Efficiency of CBSE-SP @ Faturasa

Items	Descriptions
Timing	- Procurement of seeds was delayed and some training courses were conducted behind the schedule. But there was no significant influence on the overall schedule.
Cost	- The expenditures for training and seeds were higher than the amount originally planned because the members of GCPBWPR-SP also treated as part of the members of the sub-program.
Effectiveness	- A series of hands-on training courses were considered effective in enhancing the knowledge and skills of the members.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found so far.

Impact made by CBSE-SP @ Faturasa

Impact	Descriptions
Positive	 The members were able to obtain enough harvests of upland crops for self consumption and next cropping as well. The members also learned to apply the soil conservation measures as well as the improved farming techniques, such as line sowing, application of compost, and application of liquid fertilizer.
Negative	- The members may have lost the opportunities to engage in other economic activities by securing their time for the sub-program.

Source: JICA Study Team

(5) Sustainability

The NGO was committed to continuing its assistance to the village even after the pilot project. Therefore, it is expected that the beneficiaries' group would receive similar support in the next cropping season. Another round of the hands-on training courses will help the members to acquire the skills firmly and to secure the improved seeds for next cropping for them as well as other community members.

1.4.3.3 Grazing Control with Protein Bank and Waste Pasture Rehabilitation Sub-program

(1) Relevance (mainly from the point of view of local community)

Animal diseases caused by the lack of edible grasses or herding places due to the expansion of chlomoraena are one of the major concerns in the village. The lack of herding places is also one of the causes of the extensive free grazing in the village, which has often caused the crop damage in farmland and forest degradation in forest. Hence the aims of the sub-program, development of fodder crops/trees plantation (so-called protein bank) and control of chlomoraena by a biological way, have high consistency with the necessity of the village as well as watershed management.

(2) Effectiveness

Looking back on the results of the sub-program, it is difficult to say that the sub-program achieved its objective, which is to develop a model for reducing animal grazing by reducing the areas covered with chlomoraena and producing animal fodder crops/trees. Time allocated for the pilot project might be too short for the sub-program to show its results. The sub-program should have covered at least two (2) dry seasons so that the members could see the actual development in the demonstration plots.

Nevertheless, given the fact that biological chlomoraena control usually takes five (5) years or more to show its visible results, the Study Team also judges that the introduction of this technique should be reconsidered since it may not be always accepted by local communities.

(3) Efficiency

The efficiency of the sub-program was evaluated as follows.

Efficiency of GCPBWPR-SP @ Faturasa

Items	Descriptions
Timing	- Some training courses were conducted behind the schedule due to the delays in starting the rainy season.
Cost	 The expenditure for training was beyond the budgets originally allocated to the activity as some members of CBSE-SP joined the activities of GCPBWPR-SP. The NGO distributed the planting materials of fodder crops/trees to the members as well as those who joined the activities, though a activity was not planned in the original plan.
Effectiveness	 A series of hands-on training courses were considered effective in enhancing the knowledge and skills of the members. However, the fodder crops/trees plantations were not fully developed in the demonstration plots, maybe because there was a long dry span after planting and the quality of planting materials was not necessarily good.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found in the village.

Impact made by GCPBWPR -SP @ Faturasa

Impact	Descriptions
Positive	- There has been no wildfire caused by carelessness in burning farms.
	- The members planted fodder crops/trees on the boundaries of their own farms.
Negative	- The demonstration plots for the biological control of chlomoraena become habitats
	for rodents as they are fully covered with chlororaena.

Source: JICA Study Team

(5) Sustainability

According to the results of the questionnaire survey done by the Study Team in August 2009, the members were willing to continue the sub-program activities though the appreciation of the biological control measure was rather lower than that of the protein bank. As described above, the NGO was committed to continuing the support to the village even after the pilot project. The working groups are expected to continue the activities and to establish the fodder crops/trees plantations, which can be used as a seed bank for other community members. In addition, the biological control measure might be accepted when they see a certain visible change in the demonstration plots while having the assistance from the NGO.

I.4.4 Suco Batara

I.4.4.1 Sustainable Upland Farming Promotion Sub-program

(1) Relevance (mainly from the point of view of local community)

Farming in slope land without application of soil conservation measures is the common practice in suco Batara. Local communities need to shift their farms to maintain the soil fertility due to the constant surface soil loss from sloping farms. Shifting cultivation is too laborious for them and also keeps them on a subsistence level. Hence, the improvement and

stabilitation of agricultural production by the introduction of the sustainable upland farming techniques, such as bench terracing and contour composting techniques, is in line with the needs of local communities.

(2) Effectiveness

The objective of the sub-program is to expand the areas/farms with the soil conservation measures through developing a model of the sustainable upland farming techniques and enhancing the capacities of the members to apply the techniques in their own farms. Given the fact that 12 bench terrace farms and 32 contour composting farms were developed by the members in addition to the demonstration plots, the Study Team judges the sub-program to have achieved its objective at a certain level in the given period of time.

However there is a need to introduce a scheme where the members could co-work for each other in the application of the soil conservation measures in addition to the extension of the sub-program period. The soil conservation measures, particularly bench terracing, require considerable labor and it is quite difficult for one household to apply such techniques in his/her farm.

To do so, using the traditional collective working system (halosan in Tetun or gotong yorong in Indonesian) should be considered. Small grouping of the members based on the existing working system and work scheduling of the small groups might encourage them to help each other.

(3) Efficiency

The efficiency of the sub-program was evaluated in terms of timing, cost efficiency, and effectiveness of the activities.

Efficiency of SUFP-SP @ Batara

Items	Descriptions
Timing	- Some training courses were conducted behind the schedule due to the delays in procurement of materials. Nevertheless the sub-program as a whole was implemented as scheduled.
Cost	- The expenditure for seeds and seedlings was higher than originally planned as the NGO needed to procure additional species, such as clove, rambutan and other fruit species, which were not listed in the original plan, in response to the request from the members.
Effectiveness	 A series of hands-on training courses were considered effective in enhancing the knowledge and skills of the members. If there was a scheme to facilitate the collaborative work among the members in the application of the soil conservation measures in their own farms, more members might have replicated the sustainable upland farming techniques in their farms.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found so far.

Impact made by SUFP -SP @ Faturasa

Impact	Descriptions
Positive	 There are members who introduced the soil conservation measures intending to change their farming practices from shifting cultivation to fixed farming. Non members or other community members who have not participated in the sub-program also tried to apply the techniques following what they had observed in the demonstration plots.
Negative	- The members may have lost the opportunities to engage in other income generating activities.

Source: JICA Study Team

(5) Sustainability

Technically speaking, the groups are considered capable of using A-frame and applying the contour composting practice on a certain level. It is however judged that they need to have more practices to literally acquire all the techniques introduced by the sub-program.

In order for the members to expand and continue the activities, the beneficiaries' groups should be reorganized into small groups so that they could help each other in the application of the soil conservation measures in the respective farms.

Like in the case of suco Faturasa, the NGO plans to continue the support to the village even after the pilot project. The beneficiaries' groups are expected to have the same assistance from the NGO and be able to develop their capacities as well as a working system in the village.

I.4.4.2 Income Generating / Cost Saving Sub-program

(1) Relevance (mainly from the point of view of local community)

Increase and stabilization of cash income is the most concerned topic for local communities in the village. Hence, the techniques and skills that could expand the opportunities to earn additional cash income highly match the needs of the communities.

In fact, the techniques introduced by the sub-program are closely related to the daily needs of women in the village. The hands-on training courses provided by the sub-program are considered effective in empowering the members (women) and improving their daily tasks.

(2) Effectiveness

The main objective of the sub-program is to enhance the capacity of the members to introduce and develop some livelihoods development activities to earn cash income and/or save expenditures. As described in Sub-section 3.4.2, the women's groups have earned US\$ 87~163 from their activities, not to mention the cost saving effects. Although there is still a need to provide technical and managerial support to the women's groups to ensure that they can continue the sub-program activities and manage the earnings in a proper manner, the Study Team judges that the sub-program achieved its main objective.

(3) Efficiency

The efficiency of the sub-program was evaluated in the following three (3) points: timing, cost efficiency, and effectiveness of the activities.

Efficiency of IG/CS-SP @ Batara

Items	Descriptions
Timing	- Some of the training courses were delayed due to the busyness of the members as well as resource persons. However, such delays did not influence the overall
	sub-program implementation.
Cost	- The expense for training on maintenance of vegetable farms was beyond the orignal budget, as the duration of the training course needed to be extended.
Effectiveness	 The training courses for the use of sewing machine, tais making, and food processing, should have been divided into two to three batches so that all the participants could practice the techniques or use the facilities in the courses. The training courses should be designed based on the number of trainers as well as equipment/facilities available for training.

Source: JICA Study Team

(4) Impact

The following positive and negative impacts have been found so far.

Impact made by IG/CS -SP @ Batara

Impact	Descriptions
Positive	 The women's groups started the operations of grocery stores (kiosk) and micro credit schemes using the earnings from the sub-program activities. These activities have helped them to stabilize the household economy and secure their assets, since they can either borrow money from the micro credit scheme or purchase groceries at kiosk on credit in case of emergency. The members had taken only watercress and cassava leaves before, however, they can eat a variety of vegetables from the demonstration plots three times a day at present. Non members or other community members who have not participated in the sub-program also started vegetable farming following the techniques demonstrated by the sub-program.
Negative	- The volume of water distributed to the demonstration plot in Werlulun has become scarce as vegetable farms have expanded in the village recently.

Source: JICA Study Team

(5) Sustainability

Almost all the members are apparently able to acquire the vegetable farming techniques except natural pesticide application, while some of the members likely have difficulties in tais making and sewing machine operations. Technically speaking, the groups are considered capable of applying the techniques that they have learned through the hands-on training courses at a certain level. But they still need further assistance in financial management of the group funds and operations of the micro credit schemes and grocery stores.

Since the NGO plans to stay in the village even after the pilot project, the women's groups could develop their capacity to keep running the livelihood improvement activities in a proper and transparent manner.

I.4.5 Public Awareness Campaign Sub-program

(1) Relevance

Without changing the ideas and practices on the use of natural resources in local communities, it would be quite difficult to realize the sustainable forest and natural resource management in the target watersheds. It is therefore quite important to raise the awareness of forest and watershed environment in hilly and mountainous communities through information dissemination activities. In fact, the main aim of the pilot project is to identify the effective means to get the messages across to local communities.

(2) Effectiveness

Since the duration of the pilot project was too short to cause a behavioral change among the target group, the sub-program did not bring about any visible changes on the ground. However, many adults as well as children who took part in the sub-program responded that the sub-program activities gave them good opportunities to consider the future of the village and examine their daily activities. It is judges that the sub-program was effective in making them conscious about forest and environment of the village.

(3) Efficiency

In the pilot project, the following PAC methods were put to trial.

- Reading picture card show/picture book to children
- Drawing session after PAC session
- Dialogue between children and adults
- Combination with Tara Bandu ceremony
- Distribution of PAC material (Calendar with children's drawings)

The effectiveness of the above-listed activities was confirmed in the course of the implementation of the pilot project. However, the following aspects should be reconsidered or reexamined to make them more efficient.

- a. Since every suco currently has a set of DVD player and monitor with a solar battery panel, the PAC material can be converted into an electrical form. By doing this, the PAC material can be easily duplicated at cheaper cost and one PAC session can cover more people at once.
- b. Distribution of calendar with drawings made by children would be effective in reminding adults of the children's visions. However, it may be financially difficult to conduct this activity in many villages in consideration of its incurred cost.
- c. Some of the activities listed above can be merged. For instance, the drawing session can be conducted after the reading session.

(4) Impact

Through the implementation of PAC-SP, the following positive and negative impacts were confirmed in Samalete.

Impact made by PAC -SP @ Samalete

Impact	Descriptions
Positive	 Teachers of primary school in Samalete became more conscious about forest and environment. They are willing to continue using the picture card show in their classes not only in Samalete but also in other sucos. The children's drawings/visions were shared among communities in Samalete by presenting them at Tara Bandu ceremony and distributing the calendar to all the households in the village. Children seem to have not cut trees along the road.
Negative	- The involvement of children in the PAC sessions may have interrupted the school curricula.

Source: JICA Study Team

(5) Sustainability

At present, there is no clear plan to conduct the same activities in the Ministry of Education as well as Ministry of Agriculture and Fisheries. As teachers in Samalete are willing to continue the

activities in Samalete and the neighboring sucos, the picture books may be used by them in the future. However, the government should allocate a certain budget to their activities so as to make them sustainable.

In terms of the sustainability of the effectiveness of the activities, both children and adults who participated in the sub-program expressed their willingness to gain more information about forest and environment. If the environmental information can be disseminated to them through proper media periodically, they could be more conscious about forest and watershed environment.

I.5 Lessons Learned and Good Practices

The results and processes of the pilot projects could give a number of useful suggestions and recommendations for the future watershed management activities not only in the target watershed but also other river basins. The following are the main lessons learned and good practices found through the implementation of the pilot projects.

I.5.1 Lessons Learned

(1) Size of the group

The size of a beneficiaries' group should be on a manageable level. If the organized beneficiaries' group is as large as the level of aldeia, it might be difficult to keep the members' participation high. Based on the experiences of the pilot projects, more or less 30 members in a group may be the maximum number for the group to maintain its solidarity among the members.

In case a target village requires a sub-program to cover all the villagers in the village, the sub-program should be implemented in a phased manner. Since it is not advisable to benefit only the selected number of communities in a village in the context of Timor-Leste¹, the sub-program should be flexible about the extension of the project period.

(2) Sub-program time frame

In any sub-programs taking a community-based approach, long-term assistance is necessary for development of capacity of local communities. It is quite difficult for local communities to learn the skills that they have never practiced and to become self-reliant in a short period of time. Any sub-programs where the hands-on training is the main intervention should have a sufficient time schedule to conduct the same training courses to the same beneficiaries' groups at least twice.

In addition, building a trust-based relationship with communities is essential in the implementation of a community-based project. Unless local communities have confidence in an implementer as a real partner for improving their living conditions, they would never listen to and merely consider any organization, either an NGO or MAF, as a source of materials or funds. In general, it is quite difficult to develop such a relationship in a short period of time.

(3) Avoidance of envy among the members

Sub-programs under the agriculture and forestry-based programs employ an FFS approach, where regular members work together at a demonstration plot which belongs to a core member. Regular members would often feel that such arrangement is partial to a core member and they must work for development of a core member's plot. This tendency was observed in the sub-programs at Tohumeta and Samalete and influenced the participation of the regular members. An implementer (MAF or NGO) should clearly explain the objectives of a demonstration plot to all community members and discuss with them how to treat the products generated by the sub-program, so that they do not have any negative feelings after establishment of a demonstration plot.

(4) Utilization of the existing collective working system

In reference to the above issue, there should be a scheme to enable the members to help each other and work in a collective manner in the respective farms, so that many members can replicate the techniques in their own farms/plots. To this end, the existing collective working group (so-called "Harosan" system) in the village should be utilized.

In the sub-programs that require a certain amount of labor, such as TPP-SP, CBSE-SP, and SUFP-SP, should create sub-groups/small groups in the beneficiaries' group based on the existing collective working group. Each small group should come up with a work schedule to develop the

-

¹ Such an arrangement may create internal conflicts between the communities benefited by a sub-program and those who are not benefited.

respective farms/plots. In order for the sub-groups to apply the techniques properly, the implementer shall supervise their works and provide technical assistance whenever needs arise.

(5) Delivery of information

One of the causes of the low participation of members in the sub-programs was insufficient or belated information dissemination. In the sub-programs at Tohumeta and Samalete, the NGO used to deliver the information of the sub-programs through the group leaders or core members, but the information had not necessarily been delivered to all regular members of the beneficiaries' groups.

In order to facilitate the information dissemination, it is again advisable to sub-divide the beneficiaries' group into several sub-groups or small groups. Each group should assign a focal person/leader of the small group who is responsible for information sharing among the small group members. Since a small group is organized by the members who live close to each other, the information dissemination is expected to be smoother.

(6) Utilization of PLUP-SP

In the course of the discussions under Participatory Land Use Planning Sub-program at suco Faturasa, local communities identified the needs of the village to realize its future land use map as well as village regulations. In other words, they were able to identify the sub-programs needed to be introduced in the village, such as TPP-SP for regenerating forest, SUFP-SP for permanent farm and GCPBWPR-SP in free grazing land, to name a few. Consequently, it is recommended that PLUP-SP shall be implemented ahead of any land-related management sub-programs (e.g., TPP-SP, CBSE-SP, SUFP-SP, etc.).

(7) Integrated Implementation of Sub-programs

Integrated implementation of the sub-programs in the pilot projects was effective in tackling rather complicated issues in the village. In Samalete, the combination of TPP-SP and CPR-SP was more logical to increase coffee production by the expansion of new coffee plantations simultaneously with rehabilitation of aged coffee plantations. On the other hand, the issues on free animal grazing and wildfire were tackled by the introduction of PLUP-SP, CBSE-SP, and GCPBWPR-SP in Faturasa. Since the issues that local communities have faced are complicated or interrelated, several sub-programs shall be implemented in the same village in a holistic manner. The following are some of the potential combinations of the sub-programs.

- PLUP-SP, TPP-SP, and SUFP-SP
- PLUP-SP, TPP-SP, and CRP-SP
- PLUP-SP, TPP-SP, CGPBWPR-SP, and CBSE-SP
- PLUP-SP, SUFP-SP, and CBSE-SP

(8) Consideration of the capacity of the village

When plural sub-programs are to be implemented in the same village simultaneously, the capacity of local communities should be carefully assessed prior to the implementation of the sub-programs. In the concrete, the labor balance of the village should be assessed in due consideration of their farming activities and traditional ceremonies in the village as well. Based on the experience in the pilot project, it would be difficult for one village to implement more than three (3) sub-programs at once.

(9) Support from the village leaders

Support from the village leaders of suco is indispensable for smooth operations of the sub-program. For instance, the local leaders in Batara and Samalete had often made their effort to inspire the members to participate in the sub-program activities, while those in Tohumeta did not paid much attention to the fulfillment of their responsibilities during the pilot project. In case the leadership of the village leaders is weak like Tohumeta, it might not be easy to keep the members being active in the sub-program.

(10) Considerations to tetun illiterates and women

Due consideration should be given to the members who can not comprehend Tetun in hands-on training. There should be at least an interpreter allocated in training so that participants could understand the explanation of a trainer. The farmer-to-farmer training approach, where a trained member becomes a trainer for other members, should also be considered if a sub-program is implemented in a phased manner. This approach may be more effective in terms of cost-effectiveness.

At the same time, due consideration should be given to women members. Making food for the participants in training courses are their additional burden and such arrangement reduced their opportunities to take part in the training courses. A work sharing arrangement should be made among the members.

I.5.2 Good Practices

(1) Deployment of Field Staff

Deployment of field staffs is essential in the establishment of a trust relationship with communities. Both NGOs, Halarae Foundation and UCS-CTL, have deployed field staffs in the implementation of the pilot projects; the communities recognized the NGOs as the organizations that were always with them.

(2) Exposure Visit prior to Field Implementation (Introduction of Role Models)

In general, communities are quite passive and sometime afraid of change. In particular, they tend to hesitate to take part in activities that they can not sense direct benefit from. It would not be easy for a sub-program to introduce new techniques, which will bring a change or additional burdens to them, in the beginning.

The study tours or exposure visits conducted prior to the implementation of the pilot projects helped the members to have a clear picture/image of the outcomes from the respective sub-programs. In particular, it was quite effective in motivating the members of Batara to participate in the sub-programs. After the exposure visit to Manelima, the members in Batara seemed to be keen to learn new techniques from the sub-programs.

(3) Effectiveness of Hands-on Training

A series of the hands-on training courses provided by the sub-programs helped the members to learn and gain the knowledge and skills introduced by the sub-programs. It was quite effective in developing the capacities of local communities.

(4) Effectiveness of Participatory Panning

Making a work plan and evaluating their own performance in a participatory manner helped the members foster a sense of ownership of the sub-program and deepen their understanding of the sub-program activities.

(5) Coordination with Other Agencies

The coordination with other agencies/organizations, such as PARDTL and church, in the sub-program implementation contributed to development of networks or linkages which the communities could make use of in the future. In addition, the involvement of the local governments (the sub-district or district administrative offices) in PLUP-SP was effective in making the village leaders responsible for their regulations.

Furthermore, the coordination with the extensionists (extension workers) and forest guards, who were recently hired by MAF, are also important for the members to receive the assistance from MAF since they are the field extension arms of the government at present.

I.5.3 Critical Issues for Each Sub-program

In addition to lessons learned and good practices mentioned above, the following critical issues were identified though the implementation of the respective sub-programs.

Critical Issues related to the Respective Sub-programs

Ck	Critical Issues related to the Respective Sub-programs
Subprogram	Critical Issues
TPP-SP	a. to assess the applicability of seedling production activities to a target village (Seedling
	production may not be necessarily acceptable to a village due to its heavy burden during the
	nursery operations.)
	b. to consider sufficient time for development of a nursery and installation / rehabilitation of a
	watering system prior to seedling production (collection of seeds, land preparation for
	seedbeds, sowing seeds, and preparation of poly bags)
	c. to take into account of the seasonal availability of tree seeds in making a work plan
	d. to make communities understand how hard they shall work (e.g., building a nursery, filling
	soils into poly bags, and daily maintenance of seedlings) as much as possible in the process of
	making a work plan
	e. to determine the number of seedlings based on the members' capacities of planting seedlings
	f. to include the revival of Tara Bandu with development of village regulations in the sub-program so that seedlings planted could be protected from any negligent activities
HG-SP	a. to be targeted mainly on women in communities since management of vegetable farms is one
	of the women's tasks
	b. to be implemented on a small scale in the beginning with proper selection of members, rather
	than involving all communities
	c. to design a cropping system with due consideration of crop suitability for season as well as
	the site conditions
	d. to periodically monitor the production of vegetables with beneficiaries so that they could
	grasp the produce from the farm
CRP-SP	a. to coordinate with external organizations that have long experience in coffee production, such
	as PARDTL, CCT, and MAF
	b. to implement in combination with TPP-SP
PLUP-SP	a. to involve traditional leaders, representative of church (Katakista), large-scale land owners,
	and principal of school in the village in the discussions
	b. to measure the locations of some landmarks such as water sources, specific forests, etc., to
	validate the accuracy of a land use map made by communities
	c. to let the council of suco present village regulations and future land use plan to other
	community members in consultation meetings, so that the council could digest the village
	regulations and future land use plan
	d. to monitor the effectiveness of the regulations every month after Tara Bandu ceremony
	e. to disseminate the information of the village regulations to the neighboring villages after the
	revival of Tara Bandu, so that the village could protect their natural resources from
	exploitation by the neighboring villages
GCPBWPR-SP	a. to start with a small group of people since the production of fodder crops/trees as well as
	control of chlomoranea is not high priority in communities in general.
CBSE-SP	a. to develop a demonstration plot based on the prevailing farming techniques so as to
	demonstrate the effectiveness of improved seeds clearly
	b. to introduce soil conservation measures in addition to new varieties of seeds since most of the
	farms in the village are on sloping lands
	c. to give due consideration to the amendment/improvement of soil conditions to ensure a
	reasonable output from the activities
SUFP-SP	a. not to fix the width of terrace but height in making terraces, or terraces made will be at high
2011 01	risk of collapse
	b. to give due consideration to the amendment/improvement of soil conditions to ensure a
	reasonable output from the activities
	c. to secure sufficient time for making compost before planting annual crops in the plot
	d. to allocate sufficient time for hands-on training on counter delineation and soil conservation
	measures so that communities can learn such techniques.
IG/CS-SP	a. to conduct training on financial management just after women's groups receive earnings
10/00-01	b. to assist women's groups in keeping an account book and managing their budget on a weekly
	or daily basis
	c. to conduct follow-up training on use of sewing machine, tais making and food processing
	especially for young members
PAC-SP	a. to use visual materials for PAC sessions as many rural people have limited capacity to read
1710-01	b. to emphasize verbal communication in disseminating information to communities
	o. to emphasize verbal communication in disseminating information to communities

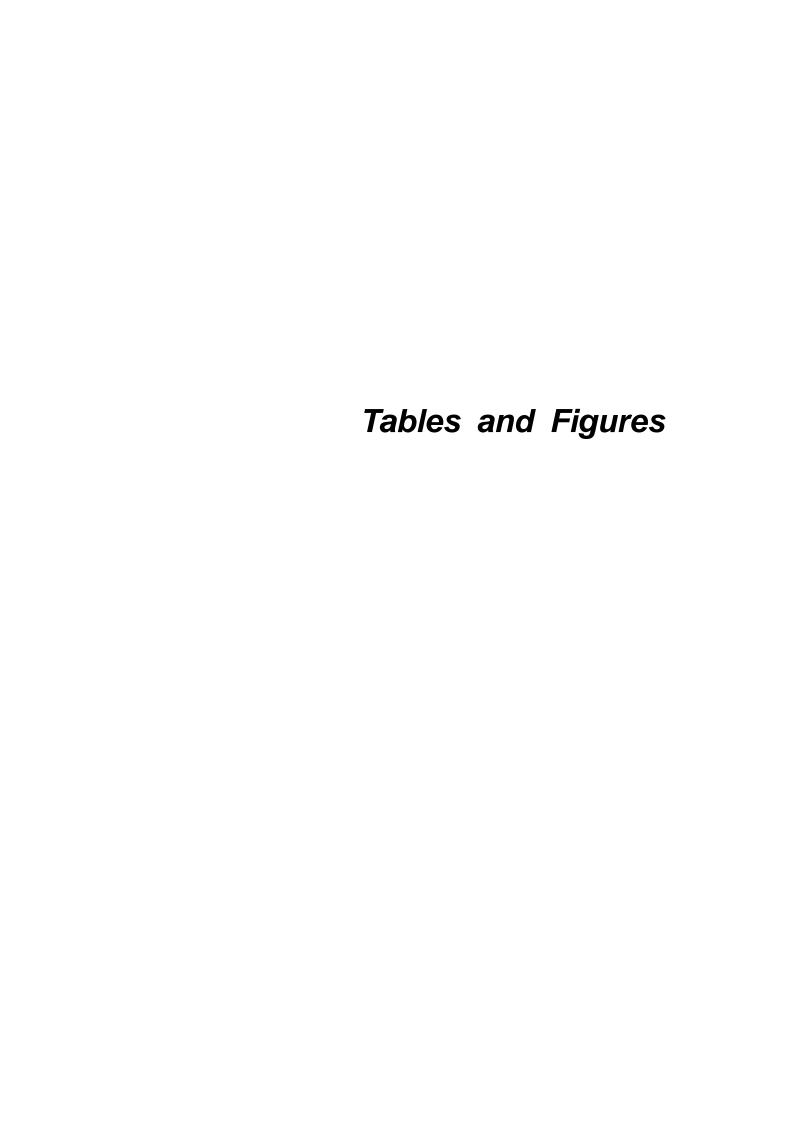


Table I.3-1 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Tohumeta

Group: Aldeia I

			GPS	5 data													No of :	Seedlings													
				00' - 00"		Caliandra			L-19		Clove		,	Feak		San	dalwood		lahogany		Coconut	Bre	adfruits tr	ee	Ra	mbutan	7	Fotal .			
		Date of		00		Sub-			Sub-		Sub	-		Sub-			Sub-		Sub-		Sub-		Sub-	Ï		Sub-					
Plot No.	Name of members	monitoring				, , Total	Survival		Total Survival		, , Tota	l Surviva	ıl	Total S	urvival		Total Survival		, Total Sur	ival	Total Surv	val	Total	Survival		Total Survival		Total	Survival		
		_	Lat(S)	Lon(E)	alive	dead No.of		alive dead	No.of Rate	alive	dead No.0		alive dead		Rate	alive dead	No.of Rate	alive dea	ld No.of R		lead No.of Ra		ad No.of		alive dead	No.of Rate	alive dead		Rate		
						Plante	_		Planted		Plant			Planted			Plante		Planted		Planted		Plante	d		Planted		Planted			
1	Domingos Guterres	13-May-09	08-38-14.3	125-32-43.0	22	0 2	2 100.0%	19	0 19 100.0%	22	3 2	25 88.0%	0 (0 0	-	10	0 10 100.0%	0	0 0	- 4	0 4 100.	0% 1	0 1	1 100.0%	1	1 2 50.0%	79 4	83	95.2%		
	Domingos Guterres	13-May-09	08-38-12.6	125-32-41.2	0	0	0 -	0	0 0 -	0	0	0 -	19 (0 19 1	00.0%	0	0 0 -	12	5 17 70	5% 0	0 0 -	0	0 () -	0	0 0 -	31 5		86.1%		
3	Alfredo Bareto	25-Mar-09	08-38-01.7	125-32-41.3	17	0 1	7 100.0%	15	0 15 100.0%	22	3 3	25 88.0%	19 (0 19 1		15	0 15 100.0%	28	2 30 93		0 8 100.	196	0 1	1 100.0%	2	0 2 100.0%	127 5		96.2%		
4	loao Fatima Tilman	N.A.	08-37-41.1	125-32-42.7	17		7 100.0%	15	0 15 100.0%	14		25 56.0%	19 (0 19 1		10	0 10 100.0%	30	0 30 100		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	112 11		91.1%		
5	Fernando da Conceicao	N.A.	08-37-40.0	125-32-43.1	17		7 100.0%	15	0 15 100.0%	28		30 93.3%	19	0 19 1		8	2 10 80.0%	27	3 30 90		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	121 7		94.5%		
6	Domingos S. Goncalves	N.A.	08-37-21.1	125-32-37.2	17		7 100.0%	15	0 15 100.0%	25		25 100.0%	19 (0 19 1		10	0 10 100.0%	28	2 30 93		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	121 2		98.4%		
7	Agusto Matos	25-Mar-09	08-38-07.4	125-32-40.0	17		7 100.0%	25	0 25 100.0%	19		25 76.0%	0 0	0 0	00.070	0	0 0 0	0	0 0	0	0 0 -	0	0 1	1 100.070	0	0 0	61 6		91.0%		
8	Agusto Matos	25-Mar-09	08-38-07.0	125-32-40.0	17		0 -	23	0 0 -	19		0 -	0 (0 0	-	0	0 0 -	51	4 55 92	70/	0 0 -	0	0 () -	0	0 0 -	51 4		92.7%		
9	Agusto Matos	25-Mar-09	08-38-07.2	125-32-40.7	0	0	0 -	0	0 0 -	0	-	0 -	19 (0 19 1	00.00/	0	0 0 -	0	0 0	770 0	0 0 -	0	0 () -	0	0 0 -	19 0		100.0%		
10	Alfredo Maia	10-Jun-09	08-38-03.6	125-32-40.7	17	0	7 100.0%	15	0 15 100.0%	14	Ü	15 93.3%	0 0	0 0	00.070	9	6 15 60.0%	10	0 10 100	00/	0 9 100.	10/	0 1	1 100.0%	0	0 2 100.0%	77 7		91.7%		
					17	0 1	7 100.076	13	0 0 -	14	1	0 -	17	2 19 8	20.50/	9	0 13 00.076	10	1 20 95		0 9 100.	770 1	0 1	1 100.070	2	0 2 100.076	36 3		92.3%		
11	Alfredo Maia	10-Jun-09	08-37-38.3	125-32-45.5	17	0 1	7 100.00/	15	0 0	25	0	0				0	0 0 -	17			0 0 -	0	0 () -	0	0 0 -					
12	Manuel Maia	10-Jun-09	08-37-37.3	125-32-43.9	17		7 100.0%	15	0 15 100.0%	25		25 100.09	19 (0 19 1	00.0%	2	8 10 20.0%	30	0 30 100	0% 4	0 4 100.		1 1	1 0.0%	2	0 2 100.0%	114 9		92.7%		
13	Joanina Tilman Soares	10-Jun-09	08-38-01.6	125-32-43.9	17		7 100.0%	15	0 15 100.0%	25		25 100.0%	0 0	0 0	- 00.00/	3	5 10 50.0%	0	0 0	00/	0 4 100.		0 1	1 100.0%	2	0 2 100.0%	69 5		93.2%		
14	Marcus Tilman	10-Jun-09	08-38-05.6	125-32-44.9	27		7 100.0%	26	0 26 100.0%	15		25 60.0%	19 (0 19 1		10	0 10 100.0%	30	0 30 100		0 8 100.		0 1	1 100.0%	0	2 2 0.0%	136 12		91.9%		
15	Manuel Marques Soares	10-Jun-09	08-38-04.6	125-32-38.4	17		7 100.0%	15	0 15 100.0%	13		25 52.0%	19 (0 19 1		0 1		29	1 30 96		1 3 66.7		0 1	1 100.0%	2	0 2 100.0%	98 24		80.3%		
16	Alcino Marques da Costa	12-Jun-09	08-37-55.0	125-32-29.3	17		7 100.0%	15	0 15 100.0%	25	-	25 100.0%	17 2	2 19 8	89.5%	0 1	0 10 0.0%	29	1 30 96		0 3 100.		0 1	1 100.0%	1	1 2 50.0%	108 14		88.5%		
17	Domingos Gomes	12-Jun-09	08-37-50.1	125-32-37.5	6		6 100.0%	10	0 10 100.0%	21		25 84.0%	0 (0 0	-	0	0 0 -	30	0 30 100		0 4 100.		0 1	1 100.0%	1	1 2 50.0%	73 5	70	93.6%		
18	lose Fernandes Araujo	12-Jun-09	08-37-49.7	125-32-37.4	17		7 100.0%	21	0 21 100.0%	17		25 68.0%	19 (0 19 1		5	5 10 50.0%	45	5 50 90		0 3 100.		0 1	1 100.0%	1	1 2 50.0%	129 19		87.2%		
19	Lorenso M. Santos	8-Jul-09	08-38-05.4	125-32-36.7	10		7 58.8%	13	2 15 86.7%	17		25 68.0%	19 (0 19 1		4	6 10 40.0%	20	10 30 66		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	90 33		73.2%		
20	Berehotu	8-Jul-09	08-38-15.1	125-32-50.5	15	2 1	7 88.2%	14	1 15 93.3%	21	4 2	25 84.0%	19 (0 19 1	00.0%	4	6 10 40.0%	30	0 30 100	0% 4	0 4 100.	0%	1 1	1 0.0%	1	1 2 50.0%	108 15	123	87.8%		
21	Alcino Lopes	8-Jul-09	08-38-12.4	125-32-39.6	0	0	0 -	0	0 -	25		25 100.0%	0 (0 0	-	6	4 10 60.0%	28	2 30 93		0 4 100.	0% 1	0 1	1 100.0%	1	1 2 50.0%	65 7	72	90.3%		
22	Alberto Lopes	8-Jul-09	08-38-10.0	125-32-38.9	17	0 1	7 100.0%	15	0 15 100.0%	20	5 2	25 80.0%	18	1 19 9	94.7%	5	5 10 50.0%	30	0 30 100	0% 4	0 4 100.	1	0 1	1 100.0%	1	1 2 50.0%	111 12	123	90.2%		
23	lose Pinto	15-Jul-09	08-38-17.1	125-32-41.9	16	1 1	7 94.1%	15	0 15 100.0%	21		25 84.0%	19	0 19 1	00.0%	3	7 10 30.0%	21	9 30 70	0% 4	0 4 100.	1	0 1	1 100.0%	2	0 2 100.0%	102 21	123	82.9%		
24	Estevo Babo Noronha	15-Jul-09	08-38-17.4	125-32-32.1	12	5 1	7 70.6%	15	0 15 100.0%	20	5 2	25 80.0%	19	0 19 1	00.0%	6	4 10 60.0%	28	2 30 93	3% 4	0 4 100.	1	0 1	1 100.0%	2	0 2 100.0%	107 16	123	87.0%		
25	Antonio Guterres	15-Jul-09	08-38-17.9	125-32-35.2	17	0 1	7 100.0%	13	2 15 86.7%	15	10 2	25 60.0%	17	2 19 8	89.5%	4	6 10 40.0%	28	2 30 93	3% 4	0 4 100.	1	0 1	1 100.0%	2	0 2 100.0%	101 22	123	82.1%		
26	Afonso Lemos	15-Jul-09	08-38-13.8	125-32-43.4	9	0	9 100.0%	0	0 0 -	21	4 2	25 84.0%	0 (0 0	-	0	0 0 -	28	2 30 93	3% 4	0 4 100.	0% 1	0 1	1 100.0%	1	1 2 50.0%	64 7	71	90.1%		
27	Guilhermi dos Santos	15-Jul-09	08-38-06.3	125-32-50.7	17	0 1	7 100.0%	15	0 15 100.0%	21	9 3	30 70.0%	19 (0 19 1	00.0%	4	6 10 40.0%	21	9 30 70	0% 4	0 4 100.	0% 1	0 1	1 100.0%	1	1 2 50.0%	103 25	128	80.5%		
28	loana Martins	15-Jul-09	08-38-04.7	125-32-39.2	15	2 1	7 88.2%	12	3 15 80.0%	19	6 2	25 76.0%	19 (0 19 1	00.0%	2	8 10 20.0%	22	8 30 73	3% 4	0 4 100.	0%	1 1	1 0.0%	0	2 2 0.0%	93 30	123	75.6%		
29	Armando M. de Carvalho	15-Jul-09	08-37-55.9	125-32-42.8	15	2 1	7 88.2%	14	1 15 93.3%	12	13 2	25 48.0%	17	2 19 8	39.5%	5	5 10 50.0%	28	2 30 93	3% 3	1 4 75.0	% 1	0 1	1 100.0%	2	0 2 100.0%	97 26	123	78.9%		
30	Alberto A. Soares	15-Jul-09	08-38-00.7	125-32-39.2	10		0 100.0%	6	0 6 100.0%	21		25 84.0%	0 (0 0	-	0	0 0 -	0	0 0	4	0 4 100.		0 1	1 100.0%	2	0 2 100.0%	44 4		91.7%		
31	Agusto Lobo	15-Jul-09	08-37-55.9	125-32-43.7	6		6 100.0%	8	0 8 100.0%	20		25 80.0%	0 (0 0	_	0	0 0 -	27	3 30 90	0% 4	0 4 100.	0% 1	0 1	1 100.0%	2	0 2 100.0%	68 8		89.5%		
32	Francisco Marcal	15-Jul-09	08-38-00.8	125-32-45.7	17		7 100.0%	15	0 15 100.0%	19		25 76.0%	18	1 19 9	94.7%	7	3 10 70.0%	26	4 30 86		0 4 100		0 1	1 100.0%	2	0 2 100.0%	109 14	123	88.6%		
33	Domingos Moreira	15-Jul-09	08-38-11.4	125-32-42.4	17		7 100.0%	15	0 15 100.0%	20		30 66.7%	19 (0 19 1		0	0 0 -	28	2 30 93		0 4 100.	0% 1	0 1	1 100.0%	1	1 2 50.0%	105 13		89.0%		
34	Alfaredo de Fatima	15-Jul-09	08-38-11.4	125-32-40.6	11		7 64.7%	9	6 15 60.0%	20		25 80.0%	19 (0 19 1		0 1	0 10 0.0%	25	5 30 83		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	91 32		74.0%		
35	Abril da Conceicao	16-Jul-09	08-37-58.4	125-33-13.8	15		7 88.2%	14	1 15 93.3%	15		25 60.0%	19	0 19 1		5	5 10 50.0%	49	4 53 92		0 4 100.		0 1	1 100.0%	2	0 2 100.0%	124 22		84.9%		
36	Rozario Xavier	15-Jul-09	08-38-07.7	125-33-13.8	15		7 88.2%	14	1 15 93.3%	20		25 80.0%	19 (0 19 1		6	4 10 60.0%	28	2 30 93		0 4 100.		0 1	1 100.0%	1	1 2 50.0%	108 15		87.8%		
37	Domingas Soares	22-Jul-09	08-38-06.1	125-32-40.6	15		7 88.2%	15	0 15 100.0%	21		25 84.0%	19 (0 19 1		7	3 10 70.0%	26	4 30 86		0 4 100.		0 1	1 100.0%	1	1 2 50.0%	109 14		88.6%		
38	Lourenso Maria	25-May-09	08-37-47.2	125-32-39.4	13	0	00.270	0	0 0 -	0	0	0 -	16	3 19 8		0	0 0	27	3 30 90		0 0	0	0 (100.070	0	0 0	43 6		87.8%		
39	Lourenso Maria	25-May-09 25-May-09	08-37-52.8	125-32-39.4	17	0 1	7 100.0%	15	0 15 100.0%	22	3 /	25 88.0%	0 (0 0	34.270	3	7 10 30.0%	0	0 0	0	0 0	1	0 1	1 100.0%	1	1 2 50.0%	59 11		84.3%		
40	Manuel Soares	25-May-09 25-May-09	08-37-32.8	125-32-37.3	17		7 100.0%	15	0 15 100.0%	24		25 88.0%	0 0	0 0	-	10	0 10 100.0%	0	0 0	0	0 9 100	104 1	0 1	1 100.0%	2	0 2 100.0%	78 1		98.7%		
41	Manuel Soares	25-May-09 25-May-09	08-38-02.3	125-32-43.7	1/		7 100.0%	13	0 0 -	24	0	0 -	19 (0 19 1	00.00/	0	0 10 100.0%	29	1 30 96	70/	0 9 100.	0	0 1	100.0%	0	0 2 100.0%	48 1		98.7%		
42	Domingos Maria Lobo	25-May-09 25-May-09	08-37-54.3	125-32-48.1	17	Ü	7 100.0%	15	0 15 100.0%	25	5	30 83.3%	17	2 19 8		2	7 10 30.0%	27	3 30 90		1 8 87.5	0/ 1	0 (1 100.0%	1	1 2 50.0%	113 19		85.6%		
		,			1/	0 1	7 100.0%	15	0 15 100.0%	23	3 3	0 83.3%				3	0 0 0	27			0 0 0	70 1	0 1	100.0%	1	2 30.0%					
43	Daniel Martins	25-May-09	08-37-52.1	125-32-36.8	0	0	7 100 001	15	0 0 -	0	U	0	18	1 19 9	94./%	0	7 10 30.0%		3 30 90	12	0 0 -	0	0 (1 100 001	U	0 0 -	7.5		91.8%		
	Daniel Martins	25-May-09	08-37-52.2	125-32-42.7	17		7 100.0%	15		22		30 73.3%	,	0	- 00.00/	3		0	0		0 12 100.		0 1	1 100.0%	1	1 2 50.0%			81.6%		
45	Alexandre Pereira	25-May-09	08-38-00.8	125-32-43.5	17		7 100.0%	15	0 15 100.0%	19		25 76.0%	19 (0 19 1		4	6 10 40.0%	30	0 30 100		0 4 100.		0 1	1 100.0%	1	1 2 50.0%	110 13		89.4%		
46	Amelia de Fatima	25-May-09	N.A.	N.A.	18		8 100.0%	15	0 15 100.0%	25		25 100.0%	19 (0 19 1			0 10 0.0%	27	0 27 100		0 4 100.		0 1	1 100.0%	1	1 2 50.0%	110 11		90.9%		
47	fuliao Tilman Doutel	22-Apr-09	08-38-09.9	125-32-47.4	14		4 100.0%	15	0 15 100.0%	19		25 76.0%	19 (0 19 1		8	2 10 80.0%	30	0 30 100		0 7 100.		0 1	1 100.0%	1	1 2 50.0%	114 9		92.7%		
48	Marcelino Doutel	22-Apr-09	08-38-09.1	125-32-45.9	21	0 2	1 100.0%	21	0 21 100.0%	25	5 3	83.3%	19 (0 19 1	00.0%	10	0 10 100.0%	37	1 38 97	10	0 10 100.	1	0 1	1 100.0%	0	2 2 0.0%	144 8	152	94.7%		
Grand To	tal				629	31 66	0 95.3%	584	7 601 97.2%	834	211 104	15 79.8%	649 10	6 665 9	97.6%	193 16	7 360 53.6%	1125	05 1230 91	5% 180	3 192 98.4	% 37	3 40	92.5%	56 2	4 80 70.0%	4296 577	4873	88.2%		
Granu 10	tu i				029	51 00	0 93.370	304	001 97.270	0.54	211 104	19.070	049 10	005	77.070	195 10	, 300 33.0%	1123	05 1250 91	109	3 172 90.4	70 31	3 40	72.3/0	30 2	4 60 70.0%	4290 377	4073	00.270		

Table I.3-1 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Tohumeta

Group: Aldeia II

lot No.					No of Seedlings												edlings													
lot No.			00°- 0	00' - 00"		Caliar	ndra		L-19		Clove			Te	ak	Sand	lalwood		Mahogany	C	oconut			Breadfruits tree	Rai	mbutan			Total	
iot ivo.	Name of members I	Date of monitoring					Sub-		Sub-		Sub	-			Sub-		Sub-		Sub-		Sub-			Sub-		Sub-			Tot	4.1
	Name of members		Lat(S)	Lon(E)	alive		Total Survival No.of Rate Planted	alive dead	Total Survi No.of Rate Planted		dead Tota No.c		alive	dead	Total Survival No.of Rate Planted	alive dead	Total Surviva No.of Rate Plante		dead Total Surviv No.of Rate Planted	alive dead	No.of Plante	Rate	alive	dead Total Survival Rate Planted	alive dead	Total No.of Planted	Survival Rate	alive	lead No. Plan	o.of Surviva
1 N	Mario da Cruz	13-May-09	08-38-10.8	125-32-53.7	24	0	24 100.0%	15 (15 100.0			50 94.0%		0	17 100.070	8 2	10 80.0%	43		6 2	_	4 50.0%	1	0 1 100.0%	2 (0 2	100.0%	161		175 92.0%
2 5	Simao Henrique	4-Feb-09	08-38-07.4	125-32-20.9	30	0	30 100.0%	10	10 100.0			50 100.0%	б 19	0	19 100.0%	0 0	0 -	53		ó 4		4 100.0%	1	0 1 100.0%	2 (100.0%	169		171 98.8%
	Abilio Gomes	6-May-09	08-38-08.4	125-33-08.7	33		33 100.0%	21	21 100.0	7.0	-	53 88.7%	19	0	19 100.0%	2 5	7 28.6%			6 8		8 100.0%	1	0 1 100.0%	0 2		0.0%	180		195 92.3%
	Domingos Lobato, Januario .	20-Feb-09	08-38-27.3	125-32-58.3	40		40 100.0%	10 (10 100.0			40 100.0%		0	38 100.0%	15 2	17 88.2%	140		2	-	2 100.0%	0	0 0 -	0 (#DIV/0!	285		290 98.3%
	Domingos Lobato	20-Feb-09	08-38-16.1	125-33-13.2	26		26 100.0%	22	0 22 100.0			44 100.0%		0	0 -	0 0	0 -	0	0 0 -	0	0 () -	1	0 1 100.0%	2 (_	100.0%	95		95 100.09
6 I	Domingos Lobato	20-Feb-09	08-38-15.1	125-33.12.7	22	0	22 100.0%	17	0 17 100.0	0% 69	0	69 100.0%	6 0	0	0 -	0 0	0 -	0	0 0 -	5	0 :	5 100.0%	2	0 2 100.0%	4 (100.0%	119		119 100.09
7 (Clementino marques and Do	16-Apr-09	08-38-09.5	125-33-01.1	0	0	0 -	0 0	0 0 -	0 00	0	0 -	0	0	0 -	0 0	0 -	96		0	0 (100.00/	0	0 0 -	0 (#DIV/0!	96 153		100 96.0%
8 (Clementino marques and Do	16-Apr-09	08-38-12.0	125-33-02.7	37	0	40 92.5%	17	0 0 -	% 80	10	90 88.9%	20	0	0 - 38 100.0%	5 2	7 71.4%	5 0	0 0 -	Ü	0 :	3 100.0%	2	0 2 100.0%	0 0		100.0%	38		170 90.09 38 100.09
9 C	Clementino marques and Do	16-Apr-09 12-Mar-09	08-38-12 08-38-13.5	125-33-03.9 125-33-05.7	0	0	0 -	0	0 0 -	0	0	0 -	38	0	19 100.0%	6 0	6 100.09	6 42	0 0	0	0 1) -	0	0 0 -	0 (#DIV/0! #DIV/0!	67		75 89.39
10 I	Duarte de Fatima Henrique Duarte de Fatima Henrique	12-Mar-09	08-38-15.2	125-33-05.7	10	0	10 100.0%	20	0 20 100.0	0 46	4	50 92.0%	19	0	0 -	0 0	0 100.09	0	0 00 0000	4	0 1	4 100.0%	1	0 1 100.0%	2 (#DIV/0:	83		87 95.49
	Domingos Marques	2-Apr-09	08-38-13.0	125-33-14.7	10	0	0 -	0 4	0 0 -	7/0 40 0	0	0 -	10	0	19 100.0%	0 0	0 -	53		% O	0 '	100.070	0	0 0	0 (#DIV/0!	72		72 100.0
12 I	Domingos Marques Domingos Marques	2-Apr-09 2-Apr-09	08-38-13.0	125-33-14.7	0	0	9 100.0%	26	26 100.0	0 70	0	70 100.0%	19	0	0 -	7 0	7 100.09		0 0 -	9	1 1	90.0%	1	0 1 100.0%	2 (#DIV/0:	124		125 99.29
	Juliao Castro	2-Apr-09	08-38-16.9	125-33-14.5	0	0	0 -	0	0 0 -	70	0	0 -	23	0	23 100.0%	0 0	0 -	48	0 0	5 0	0 1) -	0	0 1 100.070	0 (#DIV/0!	71		73 97.39
15 J	fuliao Castro	2-Apr-09	08-38-17.8	125-33-14.9	24	0	24 100.0%	15 (15 100.0	0% 70	0	70 100.0%	6 0	0	0 -	3 1	4 75.0%		0 0 -	4	0 4	1 100.0%	1	0 1 100.0%	2 (100.0%	119		120 99.29
16 E	Bernadino Leo Mali	12-Mar-09	08-38-17.1	125-33-02.6	20		20 100.0%	20	0 20 100.0			55 87.3%	19	0	19 100.0%	3 1	4 75.0%		0 50 100.0	% 4		1 100.0%	1	0 1 100.0%	2 (100.0%	167		175 95.49
17 (Oscar Aleixo	N.A.	08-38-17.3	125-32-59.2	7	0	7 100.0%	15	15 100.0			50 100.0%	6 19	0	19 100.0%	4 0	4 100.09			6 4		1 100.0%	1	0 1 100.0%	2 (100.0%	147		152 96.79
18	Antonio Alberto Carlos	10-Mar-09	08-38-11.6	125-33-09.7	16	0	16 100.0%	0	0 0 -	50		50 100.0%		0	21 100.0%	5 2	7 71.4%			6 8		8 100.0%	1	0 1 100.0%	2 (100.0%	152		155 98.19
19 N	Mario de Jesus do Rosario	10-Mar-09	08-38-10.9	125-33-13.2	24	0	24 100.0%	15	15 100.0	0% 48	2 :	50 96.0%	19	0	19 100.0%	6 1	7 85.7%	41	9 50 82.09	5 7	1 :	8 87.5%	1	0 1 100.0%	2 (0 2	100.0%	163	13 1	176 92.6
20 F	Fransisco do Rosario	10-Mar-09	08-38-09.4	125-33-13.2	24	0	24 100.0%	15	15 100.0	0% 47	3 :	50 94.0%	6	0	6 100.0%	3 1	4 75.0%	45	5 50 90.09	6 4	0 4	4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	147	9	156 94.2
21 I	Domingos dos Santos	3-Jul-09	08-38-23.0	125-33-13.2	25	0	25 100.0%	9 (9 100.0	0% 15	5	20 75.0%	0	0	0 -	7 0	7 100.09	6 50	0 50 100.0	% 4	0 4	4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	113	5	118 95.8
22 A	Antonio de Jesus	3-Jul-09	08-38-22.1	125-33-18.2	18	0	18 100.0%	15	15 100.0	0% 47	8 :	55 85.5%	15	4	19 78.9%	2 2	4 50.0%	50	0 50 100.0	% 4	0 4	4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	154	14 1	168 91.7
23 E	Eugenia dos Santos	3-Jul-09	08-38-09.5	125-33-13.3	2	0	2 100.0%	12	12 100.0	0% 51	5	56 91.1%	19	0	19 100.0%	3 4	7 42.9%	50	0 50 100.0	% 4	0 4	4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	144	9	153 94.1
24 N	Marito de Fatima	8-Jul-09	08-38-20.3	125-33-20.0	25	0	25 100.0%	0	0 -	42		50 84.0%	0	0	0 -	0 0	0 -	0	0 0 -	4		4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	74		82 90.2
25 N	Marcelino de Jesus Ximenes	8-Jul-09	08-38-25.5	125-33-17.8	40	0	40 100.0%	20	20 100.0	38		50 76.0%	0	0	0 -	0 0	0 -	0	0	4	0	4 100.0%	1	0 1 100.0%	2 (0 2	100.0%	105	12 1	117 89.7
	Mariano Lopes	3-Jul-09	08-38-17.0	125-33-04.7	0	0	0 -	19	19 100.0			50 90.0%	13	6	19 68.4%	1 3	4 25.0%			6 4	_	4 100.0%	1	0 1 100.0%	2 (100.0%	126		149 84.6
27 J	ferenimo Barreto	3-Jul-09	08-38-19.1	125-33-04.2	20		20 100.0%	10	0 10 100.0			45 80.0%	16	3	19 84.2%	0 4	4 0.0%	15		6 4		4 100.0%	1	0 1 100.0%	2 (_	100.0%	104		125 83.2
28 A	Armando Barros Soares	3-Jul-09	08-38-16.5	125-33-07.8	15	0	15 100.0%	15 (15 100.0	-		50 86.0%	17	2	19 89.5%	2 0	2 100.09	_		ó 4		4 100.0%	1	0 1 100.0%	2 (_	100.0%	146		158 92.4
	fasinto da Costa	8-Jul-09	08-38-26.3	125-32-17.8	0	0	0 -	0 (0 0 -	30		41 73.2%	11	8	19 57.9%	0 0	0 -	45		6 3		4 75.0%	0	1 1 0.0%	1 1		50.0%	90		117 76.9
30 I	Helena dos Santos	22-Jul-09	08-38-20.2	125-33-08.5	24	0	24 100.0%	15 (15 100.0			50 90.0%	19	0	19 100.0%	5 2	7 71.4%			6 4		4 100.0%	1	0 1 100.0%	2 (100.0%	163		172 94.8
31 J	Ioao Aleixo Borges	22-Jul-09	08-38-17.3	125-33-04.9	0	0	0 -	15	0 15 100.0			50 84.0%	28	1	29 96.6%	4 0	4 100.09			5 4		100.0%	1	0 1 100.0%	1 1	_	50.0%	155		170 91.2
32 F	Pascoal do Rego	15-May-09	08-38-18.7	125-32-55.5	0	0	0 -	15	0 15 100.0	0% 54	12	66 81.8%	16	4		2 5	7 28.6%			4	0 4	4 100.0%	1	0 1 100.0%	2 (~ -	100.0%	131		165 79.4
33 J 34 J	Jose Pereira Jose Pereira	15-May-09 15-May-09	08-38-21.0 08-38-24.2	125-33-09.7 125-33-11.4	24	0	24 100.0%	15	0 0 -	0 38	12	0 -	1/	2	19 89.5%	5 2	7 71.4%	33	17 50 66.09	0 0	0	1 100.0%	0	0 0 -	0 (#DIV/0! 100.0%	50 89		69 72.5 103 86.4
34 J		15-May-09 N.A.		125-33-11.4	24	0	0 -	15	0 0 -	38	12	0 -	10	0	0 -	5 2	/ /1.4%	102	0 0 -	4	0 4	+ 100.0%	1	0 1 100.0%	0 (_	#DIV/0!	121		
36 H	Fransisco Mesquita Fransisco Mesquita	N.A. N.A.	08-38-12.1 08-38-14.2	125-33-04.6	24	0	0 -	30	0 30 100.0	0% 45	5	50 90.0%	19	0	0 -	11 0	11 100.09				0	1 100.0%	1	0 1 100.0%	2 (#DIV/0!	117		121 100.0 122 95.9
	Manuel de Jesus	N.A. 15-May-09	08-38-14.2	125-33-03.4	55		62 88.7%	54	8 62 87.1			55 92.7%	10	0	19 100.0%	7 0	7 100.09			4		4 100.0%	0	1 1 0.0%	2 (100.0%	229		257 89.1
38 J	lose Mesquita & Domingas I	20-Feb-09	08-38-25.2	125-33-11.5	30		30 100.0%	19 (0 19 100.0			20 99.2%	39	0	38 100.0%	4 0	4 100.09		0 13 02.27	5 8		3 100.0%	2	0 2 100.0%	4 (100.0%	323		325 99.4
39	Abilio do Rego	26-Feb-09	08-38-23.2	125-33-01.7	34		34 100.0%	35	35 100.0			50 94.0%	38	0	38 100.0%	5 2	7 71.4%			0	_	4 100.0%	1	0 1 100.0%	2 (100.0%	222		230 96.5
40	Adriano da Conceicao	26-Feb-09	08-38-15.0	125-33-00.9	24		24 100.0%	15	0 15 100.0			35 100.0%		n	19 100.0%	6 2	8 75.0%			3		1 75.0%	1	0 1 100.0%	2 (_	100.0%	152		158 96.2
40 Z	Marcelo Borges	17-Feb-09	08-38-13.0	125-33-00.1	60		60 100.0%	36	36 100.0			00 100.0%	6 0	0	0 -	4 0	4 100.09			6 4	-	1 100.0%	1	0 1 100.0%	2 (_	100.0%	254		257 98.8
	Manuel Soares Maia	13-Aug-09	08-38-13.8	125-33-12.4	17	3	20 85.0%	0	0 0 -	34		50 68.0%	17	2	19 89.5%	4 2	6 66.7%	42		6 4		1 100.0%	1	0 1 100.0%	1 1		50.0%	120		152 78.99
43 F	Filomena Martins	12-Aug-09	08-38-08.7	125-33-07.8	0	0	0 -	o o	0 0 -	32		40 80.0%	17	2	19 89.5%	0 0	0 -	43		5 3	0 :	3 100.0%	0	1 1 0.0%	2 (100.0%	97		115 84.39
44 I	Henrique Guterres	22-Jul-09	08-38-20.7	125-33-11.5	23	1	24 95.8%	14	1 15 93.3	% 50		61 82.0%	18	1	19 94.7%	5 2	7 71.4%			ó 4	0	4 100.0%	1	0 1 100.0%	2 (100.0%	165		183 90.29
45 E	Egidio Francisco Aleixo	12-Aug-09	08-38-10.1	125-33-06.6	0	0	0 -	0	0 0 -	27		50 54.0%	0	0	0 -	2 2	4 50.0%			6 3	0 :	3 100.0%	0	1 1 0.0%	1 1	1 2	50.0%	74		110 67.39
46 5	Salmao Guterres	27-Aug-09	08-38-22.2	125-33-08.3	20	5	25 80.0%	10	0 10 100.0	0% 41		55 74.5%	19	0	19 100.0%	4 0	4 100.09			<u> </u>	0 4	4 100.0%	0	1 1 0.0%	1 1		50.0%	145		170 85.39
rand Tot	tal				826	19	845 97.8%	611 1	1 622 98.2	% 1913	227 21	40 89.4%	653	35	688 94.9%	150 49	199 75.4%	1838	155 1993 92.29	169	6 17:	96.6%	36	5 41 87.8%	75 7	7 82	91.5%	6271	514 67	785 92.4%

Table I.3-1 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Tohumeta

Group: Aldeia III

Lat(S)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
No. Name of members Manual Control Lat(S) Lat(S)	Survival Rate Planted
No.	Survivar Rate
2 Antonio Castro de Jesus 1-May-09 08-38-12.9 125-32-36.8 0 0 0 0 0 - 0 0 0 0 - 45 100.0% 0 0 0 0 - 45 100.0% 0 0 0 0 - 45 100.0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
3 Julio de Jesus 13-May-09 08-38-07.5 125-32-20.9 68 0 68 100.0% 54 0 54 100.0% 13 12 25 52.0% 0 0 0 0 - 4 5 9 44.4 4 Julio de Jesus 13-May-09 08-38-06.8 125-32-19.4 0 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
4 Julio de Jesus 13-May-09 08-38-06.8 125-32-19.4 0 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5 Julio de Jesus 13-May-09 08-38-09.3 125-32-21.6 0 0 0 0 - 0 0 0 - 0 0 0 0 - 54 100.0% 0 0 0 0 - 6 Angelina Pereira 13-May-09 08-38-05.1 125-32-29.1 34 0 34 100.0% 27 0 27 100.0% 22 3 25 88.0% 27 0 27 100.0% 7 0 7 100.0% 7 Rafael Humberto 13-May-09 08-38-04.4 125-32-24.0 40 0 40 100.0% 18 0 18 100.0% 22 3 25 88.0% 27 0 27 100.0% 14 0 14 100.0 8 Andre Tolo 13-May-09 08-38-16.1 125-32-21.7 61 0 61 100.0% 36 0 36 100.0% 27 3 30 90.0% 22 0 22 100.0% 14 0 14 100.0 9 0 13 May-09 08-38-16.1 125-32-21.7 61 0 61 100.0% 36 0 36 100.0% 27 3 30 90.0% 22 0 22 100.0% 2 6 8 25.0 9 Clemetino de Fatima 13-May-09 N.A. N.A. N.A. N.A. N.A. N.A. N.A. N.A	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
6 Angelina Pereira 13-May-09 08-38-05.1 125-32-29.1 34 0 34 100.0% 27 0 27 100.0% 22 3 25 88.0% 27 0 27 100.0% 7 0 7 100.0 7 Rafael Humberto 13-May-09 08-38-04.4 125-32-24.0 40 0 40 100.0% 18 0 18 100.0% 22 3 25 88.0% 27 0 27 100.0% 14 0 14 100.0 8 Andre Tolo 13-May-09 08-38-16.1 125-32-21.7 61 0 61 100.0% 36 0 36 100.0% 27 3 3 0 90.0% 22 0 22 100.0% 2 6 8 25.0 9 Clemetino de Fatima 13-May-09 N.A. N.A. N.A. 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 7 0 0 7 100.0 10 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 6 25 76.0% 0 0 0 0 - 0 0 0 0 - 11 Carolina da Cruz 3-Apr-09 08-38-06.3 125-32-21.7 0 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 0 27 100.0% 0 0 0 0 - 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
7 Rafael Humberto 13-May-09 08-38-04.4 125-32-24.0 40 0 40 100.0% 18 0 18 100.0% 22 3 25 88.0% 27 0 27 100.0% 14 0 14 100.0 8 Andre Tolo 13-May-09 08-38-16.1 125-32-21.7 61 0 61 100.0% 36 0 36 100.0% 27 3 3 30 90.0% 22 0 22 100.0% 2 6 8 25.0 9 Clemetino de Fatima 13-May-09 N.A. N.A. 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 7 0 7 100.0 10 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 6 25 76.0% 0 0 0 - 0 0 0 0 - 11 Carolina da Cruz 3-Apr-09 08-38-06.3 125-32-21.7 0 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 0 0 0 - 12 Carolina da Cruz 3-Apr-09 08-38-05.0 125-32-21.6 54 0 54 100.0% 26 1 27 96.3% 23 2 25 92.0% 0 0 0 0 - 6 0 0 6 100.0 13 Abrao Tilman 3-Apr-09 08-38-07.7 125-32-32.0 34 0 34 100.0% 25 2 27 92.6% 23 2 25 92.0% 0 0 0 0 - 6 2 8 75.0 15 Abrao Tilman 3-Apr-09 08-38-03.7 125-32-33.3 0 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 0 - 0	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
8 Andre Tolo 13-May-09 08-38-16.1 125-32-21.7 61 0 61 100.0% 36 0 36 100.0% 27 3 30 90.0% 22 0 22 100.0% 2 6 8 25.0 9 Clemetino de Fatima 13-May-09 N.A. N.A. 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 7 0 7 100.0 10 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 6 25 76.0% 0 0 0 - 0 0 0 - 0 0 0 - 1 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 0 27 100.0% 19 0 0 0 - 27 0 27 100.0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25.0% 38 0 38 100.0% 8 0 8 100.0% 1 0 1 100.0% 2 0 2 100.0% 197 9 206 95. 100.0% 48 2 50 96.0% 0 0 - 0 0 - 0 0 - 82 2 84 97.
9 Clemetino de Fatima 13-May-09 N.A. N.A. 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 7 0 7 100.0 10 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 6 25 76.0% 0 0 0 - 0 0 0 0 - 0 0 0 0 - 11 Carolina da Cruz 3-Apr-09 08-38-06.3 125-32-21.7 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 0 27 100.0% 0 0 0 0 - 12 Carolina da Cruz 3-Apr-09 08-38-07.1 125-32-21.6 54 0 54 100.0% 26 1 27 96.3% 23 2 25 92.0% 0 0 0 0 - 6 0 0 6 100.0 13 Abrao Tilman 3-Apr-09 08-38-07.1 125-32-30.9 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 0 0 0 0 - 14 Abrao Tilman 3-Apr-09 08-38-07.1 125-32-30.3 4 0 34 100.0% 25 2 27 92.6% 23 2 25 92.0% 0 0 0 0 - 6 2 875.0 15 Abrao Tilman 3-Apr-09 08-38-07.1 125-32-33.3 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0	100.0% 48 2 50 96.0% 0 0 0 - 0 0 0 - 0 0 0 - 82 2 84 97.
10 Clemetino de Fatima 13-May-09 N.A. N.A. 19 0 19 100.0% 19 0 19 100.0% 19 6 25 76.0% 0 0 0 0 0 0 0 0 0	
11 Carolina da Cruz 3-Apr-09 08-38-06.3 125-32-21.7 0 0 0 0 0 0 0 0 0	- 0 0 0 - 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 64 6 70 91.
12 Carolina da Cruz 3-Apr-09 08-39-05.0 125-32-21.6 54 0 54 100.0% 26 1 27 96.3% 23 2 25 92.0% 0 0 0 - 6 0 6 100.0 13 Abrao Tilman 3-Apr-09 08-38-07.1 125-32-32.9 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 0 0 0 - 14 Abrao Tilman 3-Apr-09 08-38-07.7 125-32-32.0 34 0 34 100.0% 25 2 27 92.6% 23 2 25 92.0% 0 0 0 0 - 6 2 8 75.0 15 Abrao Tilman 3-Apr-09 08-38-03.7 125-32-33.3 0 0 0 0 - 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0	
13 Abrao Tilman 3-Apr-09 08-38-07.1 125-32-30.9 0 0 0 - 0 0 - 27 0 27 100.0% 0 0 0 14 Abrao Tilman 3-Apr-09 08-38-07.7 125-32-32.0 34 0 34 100.0% 25 2 27 92.6% 23 2 25 92.0% 0 0 0 - 6 2 8 75.0 15 Abrao Tilman 3-Apr-09 08-38-03.7 125-32-33.3 0	- 49 1 50 98.0% 4 0 4 100.0% 0 0 0 - 0 0 0 - 80 1 81 98.
14 Abrao Tilman 3-Apr-09 08-38-07.7 125-32-32.0 34 0 34 100.0% 25 2 27 92.6% 23 2 25 92.0% 0 0 0 - 6 2 8 75.0 15 Abrao Tilman 3-Apr-09 08-38-03.7 125-32-33.3 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0	
15 Abrao Tilman 3-Apr-09 08-38-03.7 125-32-33.3 0 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 -	- 45 5 50 90.0% 0 0 0 - 0 0 0 - 0 0 0 - 72 5 77 93.
	- 0 0 0 - 10 0 10 100.0% 1 0 1 100.0% 2 0 2 100.0% 13 0 13 100 - 46 4 50 92.0% 0 0 0 - 0 0 0 - 0 0 0 - 46 4 50 92.
16 Marcos Pinto Carvalho 19-Mar-09 08-38-09.3 125-32-23.5 0 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 17 Marcos Pinto Carvalho 19-Mar-09 08-38-08.5 125-32-23.7 0 0 0 0 - 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- 40 4 30 92.00 0 0 0 - 0 0 0 0 - 0 0 0 0 - 277 0 277 10 27
17 Marcos Finio Carvalho 19-Mar-09 08-38-07.9 125-32-25.3 37 0 37 100.0% 17 1 18 94.4% 21 4 25 84.0% 0 0 0 0 - 7 1 8 87.5	
19 Nuno Abrantes 19-Mar-09 08-38-07.2 125-32-27.6 30 4 34 88.2% 21 6 27 77.8% 35 10 45 77.8% 27 0 27 100.0% 6 2 8 75.0	
20 Jose Lemos 25-Mar-09 08-37-57.9 125-32-39.3 65 0 65 100.0% 65 0 65 100.0% 21 4 25 84.0% 0 0 0 0 - 0 0 0 0 -	- 0 0 0 0 - 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 158 4 162 0
21 Jose Lemos 25-Mar-09 N.A. N.A. 0 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 6 0 6 100.0	
22 Esperanca Castro de Jesus 12-Jun-09 08-37-44.2 125-32-39.4 20 0 20 100.0% 18 0 18 100.0% 25 0 25 100.0% 0 0 0 0 - 3 2 5 60.0	
23 Rosa dos Santos 12-Jun-09 08-37-57.5 125-32-27.0 0 0 0 0 - 0 0 0 - 17 8 25 68.0% 0 0 0 - 5 10 15 33.3	
24 Domingos Alves 12-Jun-09 08-37-50.6 125-32-27.2 10 0 10 100.0% 10 0 10 100.0% 5 5 10 50.0% 27 0 27 100.0% 0 7 7 0.09	
25 Domingos Lemos 12-Jun-09 08-37-47.6 125-32-34.9 18 0 18 100.0% 18 0 18 100.0% 42 0 42 100.0% 0 0 0 - 0 10 10 0.09	0.0% 10 0 10 100.0% 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 95 10 105 90.
26 Simao dos Santos 12-Jun-09 08-37-45.9 125-32-38.7 35 0 35 100.0% 20 0 20 100.0% 28 0 28 100.0% 27 0 27 100.0% 7 3 10 70.0	70.0% 50 0 50 100.0% 8 0 8 100.0% 1 0 1 100.0% 2 0 2 100.0% 178 3 181 98.
27 Armando Lobo 12-Jun-09 08-37-48.0 125-32-33.0 35 0 35 100.0% 22 0 22 100.0% 40 0 40 100.0% 27 0 27 100.0% 0 4 4 0.09	0.0% 49 1 50 98.0% 3 0 3 100.0% 1 0 1 100.0% 1 1 2 50.0% 178 6 184 96.
28 Moises da Conceicao 12-Jun-09 08-37-47.4 125-32-33.0 23 1 24 95.8% 30 0 30 100.0% 25 0 25 100.0% 26 1 27 96.3% 0 4 4 0.09	0.0% 50 0 50 100.0% 3 0 3 100.0% 1 0 1 100.0% 1 1 2 50.0% 159 7 166 95.
29 Domingas Sarmento 24-Jun-09 08-38-18.2 125-32-54.5 10 1 11 190.9% 0 0 0 - 60 15 75 80.0% 20 0 20 100.0% 8 10 18 44.4	44.4% 0 0 0 0 - 3 0 3 100.0% 1 0 1 100.0% 2 0 2 100.0% 104 26 130 80.
30 Joao Fernandes 24-Jun-09 08-37-58.6 125-32-40.0 26 4 30 86.7% 19 1 20 95.0% 20 5 25 80.0% 0 0 0 - 0 0 0 -	- 0 0 0 0 - 3 0 3 100.0% 1 0 1 100.0% 2 0 2 100.0% 71 10 81 87.
31 Joao Fernandes 24-Jun-09 08-37-16.2 125-32-34.5 0 0 0 0 - 0 0 0 - 0 0 0 - 25 2 27 92.6% 4 4 8 50.0	
32 Fernando Soares 24-Jun-09 08-37-33.2 125-32-20.4 25 0 25 100.0% 6 0 6 100.0% 25 5 30 83.3% 0 0 0 - 5 5 10 50.0	
33 Fernando Soares 24-Jun-09 08-37-34.3 125-32-22.1 0 0 0 - 0 0 0 - 0 0 0 - 27 0 27 100.0% 0 0 0 -	- 47 3 50 94.0% 0 0 0 - 0 0 0 - 0 0 0 - 74 3 77 96.
34 Fernando Lemos 24-Jun-09 08-37-21.1 125-32-18.3 41 3 44 93.2% 26 1 27 96.3% 20 5 25 80.0% 27 0 27 100.0% 2 5 7 28.6	
35 Antonio Cardozo de Jesus 15-May-09 08-38-26.7 125-32-50.2 20 0 20 100.0% 20 0 20 100.0% 57 18 75 76.0% 0 0 0 - 0 0 0 -	- 0 0 0 - 0 0 - 0 0 - 0 0 - 97 18 115 84.
36 Antonio Cardozo de Jesus 15-May-09 08-38-26.6 125-32-54.1 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 - 0 0 0 -	- 42 8 50 84.0% 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 49 8 57 86.
37 Antonio Cardozo de Jesus 15-May-09 08-38-27.3 125-32-55.5 0 0 0 0 - 0 0 0 - 30 0 30 100.0% 6 0 6 100.0	
38 Bento Gomes 8-Jul-09 08-38-09.9 125-32-21.8 29 1 30 96.7% 12 2 14 85.7% 69 11 80 86.3% 27 0 27 100.0% 7 3 10 70.0	
39 Francisco Lopes 8-Jul-09 08-38-10.8 125-32-21.4 8 0 8 100.0% 15 0 15 100.0% 60 6 66 90.9% 26 1 27 96.3% 3 2 5 60.0	
40 Antonio Soares 15-Jul-09 08-37-57.1 125-32-40.0 0 0 0 - 60 0 0 - 62 18 80 77.5% 0 0 0 - 6 4 10 60.0	
41 Alfaredo da Silva 15-Jul-09 08-37-53.7 125-32-35.3 10 0 10 100.0% 10 0 10 100.0% 25 10 35 71.4% 0 0 0 0 - 6 4 10 60.0 42 Alfaredo da Silva 15-Jul-09 08-37-52.2 125-32-33.8 0 0 0 0 - 0 0 0 - 0 0 0 0 - 27 0 27 100.0% 0 0 0 -	
43 Francisco Pinto 22-Jul-09 08-38-12.5 125-32-21.1 31 3 34 91.2% 22 5 27 81.5% 9 1 10 90.0% 25 2 27 92.6% 6 2 8 75.0 44 Jose Vila Nova 1-May-09 08-38-11.1 125-32-29.9 20 5 25 80.0% 10 0 10 100.0% 35 10 45 77.8% 25 2 27 92.6% 3 7 10 30.0	75.0% 43 7 50 86.0% 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 143 20 163 87.
	20.00/ 46 4 50.02.00/ 4 0 4.100.00/ 1 0 1.100.00/ 2 0 2.100.00/ 146 29 174 92
Grand Total 835 24 859 97.2% 591 21 612 96.6% 881 170 1051 83.8% 703 8 711 98.9% 142 106 248 57.3	30.0% 46 4 50 92.0% 4 0 4 100.0% 1 0 1 100.0% 2 0 2 100.0% 146 28 174 83.

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

Group:Nalo

			GP	S data													No of	Seedlings									
				00' - 00"	Pet	ai	A	lbizia		L-19	Cali	andra	Ra	mbutan	Mahogany	Clove	110 01		c fruits	Ci	inamon	San	dalwood	Tephrosia	Grevilia	Coffee	Total
Plot	Name of members	Date of				Sub-		Sub-		Sub-		Sub-		Sub-	Sub-	Sub-			Sub-		Sub-		Sub-	Sub-	Sub-	Sub-	
No.	Name of members	monitoring	Lat(S)	Lon(E)		otal Surviv	val alive dead	Total Survival	alive dea	Total Survival	alive dead	Total Survival	alive dead	Total Survival	e dead Total Survival	alive dead Total			Total Survival	alive dead	Total Survival	alive dead	Total Surviva	alive dead Total Survival aliv	e dead Total Survival alive	dead Total Survival	alive dead No.of Survival
			Lat(0)	Lon(L)	I N	o.of Rate	e	No.of Rate Planted	anve dea	No.of Rate		No.of Rate	anve dead	No.of Rate	No.or Rate	No.of	Rate		No.of Rate Planted	anve dead	No.of Rate Planted	anve ucau	No.of Rate	No.01 Rate	No.01 Kate	No.of Rate	Planted Rate
1	Angelino dos Santos	14-May-09	08-40-52.2	125-31-25.0	0 0	anted	9 0	9 100.0%	0	Planted	0 0	Planted 0 -	0 (Planted	Plante	1 100.0%		Planted -	2 0	3 100.0%	1 0	1 100.0%	Planted	0 0 0 - 204	0 204 100.0%	218 0 218 100.0%
	Zacarias Piadade	14-May-09		125-31-25.0	2 0	2 100.0		24 100.0%		0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	7 1	8 87.5%	3 0	3 100.0%	1 0	1 100.0%		2 0 2 100.0% 0		81 1 82 98.8%
	Zacarias Piadade	14-May-09		125-31-09.0	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204		
	Manuel Oliveira	14-May-09		125-31-21.0	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	2 0 2 100.0%	1 0	1 100.0%	0 0	0 -	3 0	3 100.0%	1 0	1 100.0%	0 0 0 -	0 0 0 - 204		
5	Recardino dos Santos	14-May-09	08-40-52.5	125-31-24.4	2 0	2 100.0	0% 24 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	26 0 26 100.0%	2 0 2 100.0% 304	0 304 100.0%	395 0 395 100.0%
6	Armando Soares	7-Apr-09	08-40-46.1	125-31-34.1	2 0	2 100.0	9% 83 0	83 100.0%	10	0 10 100.0%	10 0	10 100.0%	2 (2 100.0%	3 0 3 100.0%	2 0	2 100.0%	28 0	28 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	163 0 163 100.0%
7	Armando Soares	7-Apr-09		125-31-32.4	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 237	0 237 100.0%	237 0 237 100.0%
8	Belarmino S. Coli		08-40-46.2	125-31-30.0	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 404		
	Afonco Mendonca		08-40-50.6	125-31-47.5	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 81	0 81 100.0%	81 0 81 100.0%
10	Afonco Mendonca	7-Apr-09		125-31-46.3	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	5 0 5 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%		2 0 2 100.0% 0	0 0 -	84 0 84 100.0%
	Iendrique Mendonca	12-Mar-09 12-Mar-09		125-31-28.0	2 0	2 100.0	0% 24 0	24 100.0%	9	0 9 100.0% 0 1 100.0%	9 0	9 100.0%	1 (1 100.0%	5 0 5 100.0%	0 0	0 -	8 0	8 100.0%	0 0	0 -	0 0	0 -	16 0 16 100.0%	3 0 3 100.0% 0 0 0 - 204	0 0 -	77 0 77 100.0% 207 0 207 100.0%
12	Hendrique Mendonca Fransisco Sarmento	12-Mar-09		125-31-15.8 125-31-10.2	2 0	2 100.0	0 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	6 0 6 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	1 0 1 100.0%	2 0 2 100 0% 204	0 201 1001010	289 0 289 100.0%
	ose de Araujo	12-Mar-09		125-31-10.2	2 0	2 100.0		24 100.0%	14	0 14 100.0%	10 0	10 100.0%	0 0	0 -	5 0 5 100.0%	0 0	0 -	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	19 0 19 100.0%	2 0 2 100.0% 204	0 243 100.0%	331 0 331 100.0%
	Agostinho V.Tilman	12-Mar-09		125-31-14.9	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 241	0 241 100.0%	241 0 241 100.0%
	Agostinho V.Tilman	12-Mar-09		125-31-18.3	2 0	2 100.0	0% 24 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	82 0 82 100.0%
17	Manuel Ancelmos	2-Mar-09	08-40-57.8	125-31-24.7	2 0	2 100.0		24 100.0%	24	0 24 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	0 0	0 -	8 0	8 100.0%	0 0	0 -	0 0	0 -	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	91 0 91 100.0%
	Manuel Ancelmos	2-Mar-09		125-31-27.0	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204		
	Martinho Pinto	2-Mar-09		125-31-30.1	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204		
	oao Martins	2-Mar-09		125-31-27.3	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204		204 0 204 100.0%
	Agostinho Martins	2-Mar-09		125-31-25.6	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 40		40 0 40 100.0%
	Manuel dos Santos Manuel dos Santos	4-Jun-09 4-Jun-09		125-31-40.4 125-31-41.4	0 0	2 100.0	0 0	24 83 3%	0	6 10 40.0%	0 0	10 40.0%	0 (1 100.0%	3 0 3 100.0%	0 0	1 100.0%	6 2	8 75.0%	0 0	3 100.0%	0 0	1 100.0%	14 3 17 82.4%	0 0 0 - 300	0 300 100.0%	300 0 300 100.0% 62 21 83 74.7%
24	Apolonia Pinto Varia	4-Jun-09 4-Jun-09		125-31-41.4	0 0	0 -	0 0	0 -	0	0 0	0 0	0	0 (1 100.0%	0 0 0 0	1 0	1 100.0%	0 0	0 -	3 0	3 100.0%	1 0	1 100.0%		0 0 0 - 204	0 204 100.0%	
	eofoldino dos Santos	4-Jun-09		125-31-24.6	2 0	2 100.0	0 0	24 91.7%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%		2 0 2 100.0% 304		
	Elias Martins	4-Jun-09		125-31-30.2	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%		3 0 3 100.0% 0	0 0 -	83 0 83 100.0%
	lias Martins	4-Jun-09		125-31-32.2	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 250	4 254 98.4%	250 4 254 98.4%
	Manuel Piedade	4-Jun-09		125-31-14.2	2 0	2 100.0	0% 24 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	13 4 17 76.5%	2 0 2 100.0% 0	0 0 -	78 4 82 95.1%
	Manuel Piedade	4-Jun-09		125-31-14.8	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204	0 204 100.0%	204 0 204 100.0%
30	Belarmino Coli Soares	15-Jun-09		125-31-42.8	2 0	2 100.0		24 100.0%	8	2 10 80.0%	6 4	10 60.0%	1 (1 100.0%	5 0 5 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%		4 0 4 100.0% 0	0 0 -	80 6 86 93.0%
	ose Ximenes	15-Jun-09		125-31-38.2	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	82 0 82 100.0%
	ose Ximenes	15-Jun-09		125-31-50.1	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204		204 0 204 100.0%
	uis Soares	15-Jun-09 15-Jun-09		125-31-38.0 125-31-37.8	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 0	0 -	0 0 0 -	1 0	1 100.0%	3 0	3 100.0%	0 0	0 -	1 0	1 100.0%	0 0 0 -	0 0 0 - 0	0 0	5 0 5 100.0%
	uis Soares Martinho Pinto	15-Jun-09		125-31-37.9	2 0	2 100.0	0 0	24 100.0%	10	0 10 100.0%	10 0	10 100,0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 204 100.0%	204 0 204 100.0% 82 0 82 100.0%
	Agustinho Martins	15-Jun-09		125-31-40.1	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	1 0	1 100.0%	0 0	0 -	3 0	3 100.0%	1 0	1 100.0%	0 0 0 -	0 0 0 - 0	0 0 -	5 0 5 100.0%
	Rafael Monteiro	15-Jun-09		125-31-28.2	2 0	2 100.0	0% 24 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	82 0 82 100.0%
	Rafael Monteiro	15-Jun-09		125-31-31.0	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 192	12 204 94.1%	192 12 204 94.1%
	ose Learak	15-Jun-09		125-31-30.2	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 400	8 408 98.0%	400 8 408 98.0%
	ose Learak	15-Jun-09		125-31-19.2	2 0	2 100.0		24 91.7%	10	0 10 100.0%	6 4	10 60.0%	1 (1 100.0%	5 0 5 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0	78 6 84 92.9%
41	Silverio Honoratu	15-Jun-09		125-31-26.9	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 204	0 204 100.0%	
	Silverio Honoratu	15-Jun-09		125-31-25.1	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	1 0	1 100.0%	0 0	0 -	3 0	3 100.0%	1 0	1 100.0%		0 0 0 - 0	0 0 -	5 0 5 100.0%
43	orensa Soares Manuel de Oliveira	24-Jun-09 24-Jun-09		125-31-32.3 125-31-37.8	0 0	0 -	0 0 24 0	24 100.0%	10	0 10 100.0%	10 0	0 -	0 (0 - 1 100.0%	0 0 0 -	0 0	1 100.0%	0 0	0 - 8 100.0%	3 0	3 100.0%	1 0	1 100.0%	0 0 0 -	2 0 2 100.0% 0	0 0 -	5 0 5 100.0% 78 0 78 100.0%
44	/icente dos Santos	24-Jun-09 24-Jun-09		125-31-37.8	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	82 0 82 100.0%
46	/icente dos Santos	24-Jun-09		125-31-34.8	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 304	0 304 100.0%	304 0 304 100.0%
	Abilio Babo	24-Jun-09		125-31-34.6	2 0	2 100.0		24 100.0%	10	0 10 100.0%	6 0	6 100.0%	0 (0 -	4 0 4 100.0%	1 0	1 100.0%	14 0	14 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 204		
48	Domingos dos Santos	24-Jun-09		125-31-31.1	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	1 0	1 100.0%	0 0	0 -	3 0	3 100.0%	1 0	1 100.0%	0 0 0 -	0 0 0 - 0	0 0 -	5 0 5 100.0%
49	Domingos dos Santos	24-Jun-09		125-31-31.3	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 92		92 8 100 92.0%
50	Oscar dos Santos	24-Jun-09		125-31-10.9	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%		2 0 2 100.0% 204		
	ose Soares	25-May-09		125-31-26.5	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 100	0 100 100.0%	100 0 100 100.0%
	ose Soares	25-May-09		125-31-49.8	2 0	2 100.0		24 100.0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	3 0 3 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100.0% 0	0 0 -	82 0 82 100.0%
	Castao Soares	25-May-09		125-31-31.6	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 -	2 0 2 100.0%	0 0	1 100.0%	0 0	0 - 8 100.0%	0 0	3 100 0%	0 0	1 100.0%	0 0 0 -	0 0 0 - 344	0 344 100.0%	344 0 344 100.0% 16 0 16 100.0%
	Castao Soares Antonio da Cruz	25-May-09 25-May-09		125-31-34.1 125-31-21.9	0 0	0 -	0 0	1 100.0%	0	0 0 -	0 0	0 -	0 (0 -	0 0 0	0 0	0	0 0	8 100.0%	0 0	3 100.0%	0 0	0 1 100.0%	0 0 0 -	0 0 0 - 0	0 100 100.0%	16 0 16 100.0% 100 0 100 100.0%
	Antonio da Cruz	25-May-09 25-May-09		125-31-21.9	2 0	2 100.0		24 100 0%	10	0 10 100.0%	10 0	10 100.0%	1 (1 100.0%	6 0 6 100.0%	1 0	1 100.0%	8 0	8 100.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	2 0 2 100 0% 0	0 200 2001010	85 0 85 100.0%
	Rita Doutel	25-May-09		125-31-20.2	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0 (0 0 0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 - 104	0 0	104 0 104 100.0%
	Rita Doutel	25-May-09		125-31-20.0	2 0	2 100.0	0 0	24 100.0%	10	0 10 100.0%	10 0	10 100.0%	0	1 0.0%	5 0 5 100.0%	0 1	1 0.0%	6 2	8 75.0%	3 0	3 100.0%	1 0	1 100.0%	17 0 17 100.0%	3 0 3 100.0% 0	0 0 -	81 4 85 95.3%
	Rita Doutel			125-31-20.9	0 0	0 -	0 0			0 0 -	0 0	0 -	0 (0 0 0 -	0 0	0 -	0 0	0 -	0 0		0 0	0 -		0 0 0 - 100	0 100 100.0%	
Grand To	tal.				40 0	48 100.0	0% 661 8	669 98.8%	260	8 268 97.0%	222	246 94.3%	22	24 95.8% 10	0 101 100.0%	20 1 2	1 96.8%	232 5	237 97.9%	00 0	90 100.0%	21 0	31 100.0%	446 7 453 98.5%	56 0 56 100.0% 7200	32 7232 99.6%	9410 76 9486 99.1%
Grand 10	ai				48 0	48 100.0	770 001 8	009 98.8%	260	8 268 97.0%	232 14	246 94.3%	2.5	24 95.8% 10	0 101 100.0%	30 1 3	96.8%	232 5	237 97.9%	90 0	90 100.0%	31 0	31 100.0%	440 / 453 98.5%	56 100.0% 7200	32 /232 99.6%	9410 /6 9486 99.1%
37	I A . Data not musi																										

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

Group:Lebsam

Part				GP9	5 data										No of	Seedlings								
**************************************						Petai		Albizia		L-19	Caliandra	Rambutan	Mahogany				Cinamon		Sandalwood	Tephrosia		Grevilia	Coffee	Total
	Plot	Name of members	Date of			Sul							Sub-							Sub-				Tetal
The color The	No.	tune of memoers	monitoring	Lat(S)	Lon(E) al	live dead Tota	al Survival	alive dead Tota																N- 6 Survival
See March 1964 1965 1965 1965 1965 1965 1965 1965 1965				Lat(3)	Lon(E) ai	No.	of Rate	No.o	f Rate	No.of Rate	No.of Rate	No.of Kate	No.01 Kate	anve	No.01 Kate	No.of Rate	No.of R	te anve	No.of Rate	No.of Ka	te anve e	No.of Rate anve dea	No.of Rate	
September 1968 1968 1969 1969 1969 1969 1969 1969	1 Cal	otino de Isono	22 Apr 00	09 41 20 2	125 21 10 9	Plan	ted	Plant	ed	Planted		Planted		0	Planted	Planted	Planted	0	Planted	Planted	0	Planted	Planted 100.00/	211 0 211 100.0%
Column C						2 0	2 100.0%	4 2	6 66 7%			1 0 1 100.09		6 9	0 9 100.0%	3 1 4 75.0% 5	0 5 100		0 1 100.0%	6 0 6 100	096 2		0 0 -	51 4 55 92.7%
Mart			23-Apr-09			2 0		4 2														0 2 100.0% 0	0 0 -	
Column C						2 0		6 0								0 0 0 - 5							0 -	51 0 51 100.09
Sept Mark Mark Mark Mark Mark Mark Mark Mark	5 Ma	eus Piadade	17-Mar-09	08-41-14.4	125-31-10.0	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0	0 0 - 211	0 211 100.0%	211 0 211 100.09
March Marc					125-30-57.7	0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0		0 100 100.0%	
Marchane						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0			185 0 185 100.09
France Property						2 0	2 100.0%	6 0	6 100.0%	6 0 6 100.0%	10 0 10 100.0%	1 0 1 100.0%	0 0 0 00000	6 9	0 9 100.0%	7 0 7 100.0% 5	0 5 100	0% 1	0 1 100.0%	6 0 6 100	0% 2	0 2 100.0% 0		
March Marc						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	-	0 0 -	0 0 0 -	0			211 0 211 100.09
March Marc						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	-	0 0 -	0 0 0 -	0			211 0 211 100.0
Second						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -		0	0 0 -	0 0 0 - 0	0 0		0 0 -		0		0 211 100.0%	211 0 211 100.0 35 0 35 100.0
						0 0	0 -	6 0	0 2001070	0 0 0 -				6 0	0 0 -		0 0 .	-	0 0 -				0 0 -	
Septime Septim						0 0	0 -	6 0		0 0 0 100.070		1 0 1 100.07		y 0	0 / 100.070		0 5 100							268 0 268 100.0
No. 1. No						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 9	0 9 100.0%	0 0 0 - 0	0 0	0 0	0 0 -	0 0 0	0/0 2	0 0 - 211		211 0 211 100.0
Property Services Prop						0 0	0 -	6 0	6 100.0%	6 0 6 100.0%	10 0 10 100 0%	1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100 0%	0 0 0 - 5	0 5 100	0% 1	0 1 100.0%	6 0 6 100	0% 5	0 5 100.0% 0	0 0 -	52 0 52 100.0
Section Sect						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -		Ó	0 0 -	0 0 0 - 0	0 0	0	0 0 -		0	0 0 - 211	0 211 100.0%	211 0 211 100.0
May No.						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	9	0 9 100.0%	0 0 0 - 5	0 5 100	0% 0	0 0 -	0 0 0	1	0 1 100.0% 0	0 0 -	
Descript Conduct School	19 Ale	xo Oliveira		08-40-26.1	125-30-42.6	2 0	2 100.0%	4 2	6 66.7%	6 0 6 100.0%	8 2 10 80.0%	1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100.0%	0 0 0 - 5	0 5 100	0% 0	0 0 -			0 2 100.0% 211		256 5 261 98.19
Septiment Septim						2 0		3 3	6 50.0%	4 2 6 66.7%		1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100.0%		0 5 100	0% 1	0 1 100.0%				0 211 100.0%	257 9 266 96.69
Martine Name Martine	21 Doi	ningos Carvalho				2 0	2 100.0%	3 3	6 50.0%	4 2 6 66.7%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.0%	6 9	0 9 100.0%	2 2 4 50.0% 5	0 5 100	0% 1	0 1 100.0%	6 0 6 100	0% 2	0 2 100.0% 0	0 0 -	48 7 55 87.39
Martine Name Alley Continue Alley						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0	0 0 - 211		211 0 211 100.0
Semination						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0	0		0 211 100.0%	
Secondary Name Seco						2 0		5 1									0 5 100		0 0 -				0 0 -	50 7 57 87.7
Same						2 0	2 100.0%	6 0	6 100.0%	5 1 6 83.3%			e e e e e e e e e e e e e e e e e e e	6 9	0 7 2001010		0, 0,00	0.10	0, 1,100.070		96 2		0 0 -	49 6 55 89.19
Septiment Sheef of M. A. A. A. C.	26 Doi	ningos Sousa				0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0	0	0 0 - 211		
Part	27 Siq	ito Sarmento				2 0	2 100.00	4 2	6 66 70	5 1 6 82 20	20 2 22 00.00	1 0 1 100.00	3 0 3 100.00	V 0	0 0 100.00/	0 0 0 - 0	0 5 100	00/ 1	0 0 -	6 0 6 100	000/	0 0 - 211	0 211 100.0%	58 5 63 92.19
Manuscal Professor Manusca						2 0		5 1								40 10 50 80.0% 5							0 0 -	
Franciscular Al Cases 15-base						0 0	0 -	0 0	0 03.370	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 0	0 0	0.0	0 0 -		0		0 900 100.0%	
Bank Park						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0	0			
Dome Part Pender Part Pe	32 Ern	elinda da Costa	18-Jun-09	08-40-52.5	125-30-49.5	2 0	2 100.0%	5 1	6 83.3%	5 1 6 83.3%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.0%	6 9	0 9 100.0%	6 1 7 85.7% 5	0 5 100	0% 0	0 0 -	6 0 6 100	0% 2	0 2 100.0% 0	0 0 -	54 3 57 94.79
S. Maria Analeska Instrumer M. S. Ale More M. A. S. L. S.	33 Bas	ilio Piadade	18-Jun-09	08-41-02.6	125-30-50.4	2 0	2 100.0%	3 0	3 100.0%	6 0 6 100.0%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100.0%	7 0 7 100.0% 5	0 5 100	0% 2	0 2 100.0%	6 0 6 100	0% 3	0 3 100.0% 0	0 0 -	57 0 57 100.0
File Plane Naciment Section 10 5 15 15 15 15 15 15 15						2 0	2 100.0%	6 0	6 100.0%	6 0 6 100.0%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.0%	6 9	0 9 100.0%	11 0 11 100.0% 5	0 5 100	0% 1	0 1 100.0%	4 0 4 100	0% 2	0 2 100.0% 0	0 0 -	60 0 60 100.0
7. Armando de Creat						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	- 0	0 0 -	0 0 0 -	0		0 216 100.0%	
Formal Performance Formal						0 0	0 -	0 0	0 -			0 0		9							0		0 0 -	15 0 15 100.0
9 Poleback Sharpon Gallon	37 AII					2 0	2 100.0%	4 2	6 66.7%	6 0 6 100.0%	7 3 10 70.0%	1 0 1 100.0%	3 0 3 100.09	6 9		6 1 7 85.7% 5					1% 2	0 2 100.0% 0	0 0 -	51 7 58 87.99
Friends Lam 18-May-99 08-449-11 12-5-0-94-4 0						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	9		0 0 0 - 5				0 0	0	0 0 - 0	0 0 -	
Franch Lam 18-May-9 08-41-02 125-30-94 0 0 0 0 0 0 0 0 0						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0	0			211 0 211 100.0
2 Doseguin Bake 18-May-90 (8-64-92) 12-53-13-48 0 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0						0 0	0 -	6 0	6 100.0%	6 0 6 100.0%	10 0 10 100 0%	1 0 1 100.00	3 0 3 100.00	6 0	0 9 100 0%	7 0 7 100 0%	0 5 100	0% 1	0 1 100.0%	6 0 6 100	096 2		0 0 0	56 0 56 100.0
Section Sect	42 Joa	uim Babo				0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0		0 0 -	0 0 0	0		0 211 100.0%	211 0 211 100.0
4 Antoni-Honoratus 18-May-99 (88-Ho-S1). 2123-09-94 0 0 0 0 - 66 06 100.0% 1 0 0 100.0% 1 0 0 100.0% 1 0 1 100.0% 1 0 0 1 100.0% 1 0 0 1 100.0% 2 0 2 100.0% 1 0 21 100.0% 2 1 0 2 1 100.0% 2 1 0 2	43 Joa	quim Babo				0 0	0 -	6 0	6 100.0%	6 0 6 100.0%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100.0%	0 0 0 - 5	0 5 100		0 1 100.0%	6 0 6 100	0% 2		0 0 -	49 0 49 100.0
5 Autonie Homogratus 18-May-99 Su-4-St. 125-31-62 0 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0		onio Honoratus				0 0	0 -	6 0	6 100.0%	6 0 6 100.0%		1 0 1 100.0%			0 9 100.0%	7 0 7 100.0% 5	0 5 100	0% 1				0 2 100.0% 0	0 0 -	56 0 56 100.0
7. Abel Mendonca 18-May-09 08-41-059 09-41-059 09-41-059 09-41-059 09-41-059 09-41-059 09-100-06 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	45 Ant	onio Honoratus				0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0	0 0 - 211	0 211 100.0%	211 0 211 100.09
$ 8. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	46 Ab	l Mendonca				0 0	0 -	6 0	6 100.0%	0 0 100.070				6 9					0 1 100.0%		0% 2		0 0 -	57 0 57 100.0
9 Hernegido Loc 26 May-99 0841934 0 12531915 0 0 0 0 1 1000% 5 1 6 $83.\%$ 6 0 6 1000% 1 0 0 0 - 0 0 0 0 - 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 0 - 0 0 0						0 0	0 -	0 0	0 -	0 0 0	01 01 01	0 0	0 0 0	0	V V	0 0 0 - 0	0, 0	01	0 0 -	0 0	0			211 0 211 100.0
0 Hemegido Loc	48 Lui	Loe				2 0		0 0	0 -					9		0 0 0 - 5								
1 Afoliario Scares 26-May-09 (8-40-46) [25-31-38.8] 2 0 2 100.0% 5 1 6 83.3% 6 0 6 100.0% 9 1 100.00% 0 0 - 0 0 0 0 - 0 0 0 0 -						2 0	2 100.0%	5 1	0 001010					6 9							7% 2			
2 Afolianic Scares 26-May-09 (08-41-04-0						0 0	2 100.00	0 0	O	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0	0		0 0 0 - 0	0 0	- 0	0 0 -		0			211 0 211 100.0
						0 0	2 100.0%	0 0	0 83.3%	0 0 0 0		0 0 1 100.0%		9		0 0 0 0	0 3 100		0 1 100.0%		070 2			50 2 52 96.29 211 0 211 100.0
						2 0	2 100.0%	6 0	6 100.0%	6 0 6 100.0%		1 0 1 100.00		6 0		0 0 0 - 5	0 5 100		0 1 100.0%		096		0 0 0	51 0 51 100.0
$ 5 Damino Picdade \\ 26 May-09 \\ 5 Damino Picdade \\ 26 May-09 \\ 68 41 23.0 10.0 \\ 68 Sebastian Picdade \\ 26 May-09 \\ 68 41 25.3 10.0 \\ 68 Sebastian Picdade \\ 26 May-09 \\ 68 41 25.3 10.0 \\ 60 Celestinho Picdade \\ 27 Mag-09 \\ 60 41 25.3 10.0 \\ 60 Celestinho Picdade \\ 26 May-09 \\ 60 41 25.3 10.0 \\ 60 60 60 10.0 \\ 60 60 60 10.0 \\ 60$						0 0	0 -	0 0	0 -	0 0 0 -	0 0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0	0		0 211 100.0%	211 0 211 100.0
6 Damino Picclade 26 May-09 $(0.44 + 1.05.7)$ $(0.25.40 + 1.05.7)$ $(0.$						2 0	2 100.0%	20 2	22 90.9%	10 0 10 100.0%	10 0 10 100.0%	1 0 1 100.0%	3 0 3 100.09	6 9	0 9 100 0%	1 0 1 100.0% 5	0 5 100	0% 1	0 1 100.0%	5 1 6 83	1% 2		0 0 -	
7 Sebastiao Picdade 26-May-09 08-41-23.0 125-31-06.2 2 0 0 1 100.0% 5 1 6 83.3% 6 0 6 100.0% 9 1 10 90.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 6 0 6 100.0% 3 0 3 100.0% 0 0 0 - 54 2 56 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5						0 0	0 -	0 0	0 -	10 0 10 100.070	0 0 0 -	0 0 0 -		0	0 7 100.070	0 0 0 - 0	0 0	_			0		0 211 100.0%	211 0 211 100.0
8 Schwarzian Piedude 26 Aug-or 9 (84-11-94 125 -31-08.0 0 0 0 0 0 0 0 0 0 0						2 0	2 100.0%	5 1	6 83.3%	6 0 6 100.0%	9 1 10 90.0%	1 0 1 100.0%	3 0 3 100.09	6 9		4 0 4 100.0% 5	0 5 100				0% 3			
0 Celestinho Piechade 27-Aug-09 08-40-52.7 125-30-57.5 0 0 0 - 0 0 0	58 Seb	astiao Piedade	26-May-09	08-41-19.4	125-31-08.0	0 0	0 -	0 0	0 -	0 0 0 -		0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0	0 0 - 211	0 211 100.0%	211 0 211 100.0
0 Celestinho Piechade 27-Aug-09 08-40-52.7 125-30-57.5 0 0 0 - 0 0 0			27-Aug-09	08-39-51.9	125-30-45.0	0 0	0 -	6 0	6 100.0%	6 0 6 100.0%		1 0 1 100.0%		6 4	2 7 44.470	6 1 7 85.7% 3	2 5 60.				0% 2			
nd Total 42 0 42 100.0% 163 24 187 87.2% 169 9 178 94.9% 311 16 327 95.1% 31 0 31 100.0% 84 0 84 100.0% 283 5 288 98.3% 149 26 175 85.1% 159 2 161 98.8% 29 0 29 100.0% 162 12 174 93.1% 64 0 64 100.0% 7365 6 7371 99.9% 9011 100 9111	60 Cel	estinho Piedade	27-Aug-09	08-40-52.7	125-30-57.5	0 0	0 -	0 0	0 -	0 0 0 -	0 0 -	0 0 0 -	0 0 0 -	0	0 0 -	0 0 0 - 0	0 0	0	0 0 -	0 0 0 -	0	0 0 - 205	6 211 97.2%	205 6 211 97.29
1 10 10 10 10 10 10 10 10 10 10 10 10 10	Frand Total			-		42 0	42 100 0%	163 24 19	87 87 294	169 9 178 94 9%	311 16 327 95 1%	31 0 31 100 09	84 0 84 100 00	6 283	5 288 98 304	149 26 175 85 1% 150	2 161 98	8% 20	0 29 100 0% 16	52 12 174 93	% 64	0 64 100 0% 7365	6 7371 99.0%	9011 100 9111 98.99
	nanu rotai					42 0	42 100.0%	103 24 18	37 07.270	107 9 170 94.9%	311 10 327 93.1%	31 0 31 100.0%	0 04 100.0%	203	3 200 98.3%	147 20 173 63.1% 139	2 101 98.	370 29	0 29 100.0% 10	12 174 93.	70 04	0 04 100.0% /303	0 7371 99.9%	7011 100 9111 98.99

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

Group:Haburas

The content we show that the content we show t		_	GPS data														No o	f Coodlings										
The section of the se				0"	Petai	Albizi	ia	1	L-19	Ca	liandra	Rambutan	Mahogany						Cinamon Sandalwood			wood	od Tenhrosia		Grevilia		Coffee	Total
State Stat	Plot Name of members	Date of	00 00 0		Sub-														Sub-			Sub-	Sub-					
Mark	No. Name of members	monitoring	Lot(E) I	on(F) olivo						olino dood	Total Survival	Total Survival	olivo doos	Total Survival	alina			olive deed Total Survival			donal 1	Total Survival			dood dood	Total Survival	olive deed Total Survival	U J J N Survivai
Second			Lau(5)	Lon(E) anve	No.of Rate	l N		anve dead	No.of Rate	anve dead		110101	anve ueac	No.01 Kate	anve	No.of	Rate	anve dead No.of Rate	anve dead No.of R	ite anve	1	NO.0I Kate	No.of	Rate	inve ueau	No.of Rate	No.01 Kate	Planted Rate
Column C	1 Facility Mandalan	12 14 00	00.40.12.6	F 20 40 C	Planted	Pla	anted		Planted	0			0		0	Planted		Planted	Planted		P	lanted	Planted		0	Planted		
Second					0 0 -	10 0	10 100 00	V 11		0		0 0 0 -	0		0	0 0		5 0 5 100 00		. 0	0	0 -	17 0 17	100.00	0	0 0 -		
March Marc						10 0		76 III				0 0 0 -	4		0	0 0				00/	0	0 -			3		0 0 0 -	
Description Control						10 0		% 6				1 0 1 100 0%	4		0	0 0	<u> </u>			.0% 0	0	0 -			3		0 0 0 -	
Depth Dept					0 0 -	0 0	0 -	0	0 0 -	0	0 0 -		0	0 0 -	0	0 0		0 0 0 -	0 0 0	. 0	0	0 -	0 0 0	-	0	0 0 -		
March Address 1.0	6 Pedro dos Santos				0 2 100.0%	10	10 100.0%	% 6	0 6 100.0%	13	0 13 100.0%	1 0 1 100.0%	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%		51 0 51 100.0%
Fig. 1 Section Control Contr					0 0 -	0 0	0 -	0	0 0 -	0	0 0 -		0		0	0 0	-	0 0 0 -		. 0	0	0 -	0 0 0	-	0	0 0 -		
March Series Marc	8 Martinho Oliveira	13-May-09	08-39-51.2 125	5-30-39.7 2	2 0 2 100.0%	10 0	10 100.09	% 6	0 6 100.0%	13	0 13 100.0%	0 0 0 -	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%	0 0 0 -	50 0 50 100.0%
Manus Manu	9 Gracilda Soares	13-May-09	08-40-03.1 125	5-30-57.8	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 -		348 0 348 100.0%
9. American Service 1.	10 Antonio de Jesus				0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 -	241 0 241 100.0%	
1. Decimination of the property of the propert	11 Antonio de Jesus				2 0 2 100.0%	10 0	10 100.0%	% 6	0 6 100.0%	13	0 13 100.0%	0 0 0 -	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0 0	- 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%		
Section Control Cont					0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 -		
Lambson Parish	13 Domingos Guca				2 0 2 100.0%	10 0	10 100.0%	% 6	0 6 100.0%	13	0 13 100.0%	1 0 1 100.0%	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0 0	- 0	0	0 -	4 3 7	57.1%	3	0 3 100.0%	0 0 0 -	
Section Sect	14 Domingos Guca				0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 0 -		
2. Algordone See See See See See See See See See S					0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	0	0 0	-	0 0 0 -	0 0	0	0	0 -	0 0 0	-	0	0 0 -		
James Algorians 13-box 1	10 Abrao Soares				0 0 -	0 0	10 100 00	V 6	0 6 100 000				4			0 0	-	0 0 -		0	U	0 -	7 0 7	100.00/	0	0 3 100 000		
2 Panel Antones 2 Panel 2 Panel 2 Panel 3 Panel					0 2 100.0%	0 0		76 0	0 6 100.0%			0 0	0			0 0	<u> </u>	0 0 0	0 0	. 0	0	0 -	0 0 0	100.0%	3	0 3 100.0%	0 0 0	
No. Marke Bay Series 1. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					0 2 100 0%	10 0	0 -	% 6	0 6 100 0%	- 0	0 0		4	0 0	0	0 0	-	5 0 5 100.0%		096 0	0	0 -	7 0 7	100.0%	3	0 3 100 0%		
Secondary Seco								% 20					4		0	0 0				. 0	0	0 -			10			
24 Alsonom						10 0		% 6		13		0 0 0 -	4		0	0 0				. 0	0	0 -			3			
3 James Marie Mari						6 4		6 6		13		0 0 0 -	4		0	0 0	-			. 0	0	0 -			3		0 0 0 -	
Separation Sep	23 Jose Soares					10 0		% 6		13		1 0 1 100.0%	4		0	0 0	-		0 0 0	. 0	0	0 -			3		0 0 0 -	
State Memory and Memor		24-Feb-08	08-39-58.9 125	5-30-40.4	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	. 0	0	0 -	0 0 0	-	0	0 0 -	171 0 171 100.0%	171 0 171 100.0%
September 1		24-Feb-08	08-40-00.1 125	5-30-41.7 4	1 0 4 100.0%	10 0	10 100.09	% 6	0 6 100.0%	28	0 28 100.0%	1 0 1 100.0%	2	2 4 50.0%	0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	12 0 12	100.0%	10	0 10 100.0%	0 0 0 -	78 2 80 97.5%
Marked Fee 1-4-pee 0-6-0-0-14 23-1-10-13 0 0 0 0 0 0 0 0 0	26 Hermenegildo da Costa				2 0 2 100.0%	10 0	10 100.0%	% 6	0 6 100.0%	13	0 13 100.0%	0 0 0 -	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0 0	- 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%		50 0 50 100.0%
No.	27 Hermenegildo da Costa			5-30-47.7	0 0 -	0 0	0 -	0	0 0 -	0	0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 0 -	241 0 241 100.0%	241 0 241 100.0%
	28 Markus Loe				0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0	0			0 0	-	0 0 0 -		- 0	0	0 -	0 0 0	-	0	0 0 -		
Application of Sames 1, Age of Sames 1, Ag						10 0		% 6				0 0 0 -	4		0	0 0	-		0 0 0	- 0	0	0 -			3	3 100.070	0 0 0 -	
23 Adminis						10 0		% 6				0 0 0 -	4		0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%	0 0 0 -	
3					/ 0 0	0 0		0 0	0	0	0 0	0 0 0	0		0	0 0		0 0 0 -		. 0	0	0 -	0 0 0	- 100.00/	0	0 0 -		
Section Continue					2 0 2 100.0%	10 0		% 6				1 0 1 100.0%	4		0	0 0		5 0 5 100.0%		. 0	0	0 -			3	0 3 100.0%	600 0 600 100.0%	
S Calmer Erivs					0 2 100 00	10 0		% 9 1		20		0 0 0 -	4	0 0	0	0 0		5 0 5 100 00	0 0	. 0	0	0 -			2	0 2 100.00	0 0 0 -	
6 Californ Files F. Age of 63-95-95 125-30-46.3 2 0 0 0 0 0 0 0 0 0						10 0		76 III				0 0 0 -	4		0	0 0			0 0 0	. 0	0	0 -			3		0 0 0 -	
77 Allow Markers 9-Jimes 9 (39-95-83) 21 225-30-442 21 25-30-442 21 25-30-442 22 2 0 2 10 100					0 2 100.0%	0 0	0 -	0		1.0		0 0 0 -	0	0 4 100.070	0	0 0		0 0 0 -	0 0 0	. 0	0	0 -	0 0 0	100.070	0	0 0 -	319 0 319 100.0%	
88 Book Cleverine 9-June 9 Box 9-44 1 25 -0.04 2 2 0 2 1000 m 10 0 10 1000 m 6 20 4 1000 m 10 1000 m 6 20 4 1000 m 10 1000 m 6 20 6 1000 m 13 0 13 1000 m 10 0 10 1000 m 4 0 4 1000 m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					2 0 2 100.0%	10 0	10 100.0%	% 6					4		0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	5 2 7	71.4%	3	0 3 100.0%		
98 Mel Aushie 9-June 90 (8-40-037) (2-5) (3-7) (2-5) (3-7) (2-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (3-5) (3-7) (38 Joao de Oleveira					10 0		% 6		13		1 0 1 100.0%	4		0	0 0	-		5 0 5 100	.0% 0	0	0 -	7 0 7		3			
11 Po Alaycle 9-Jun-69 08-3-45.1 12:3-05.13 2 0 2 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 6 100.0% 6 0 10 10 10 10 10 10	39 Abel Ataide	9-Jun-09	08-39-44.9 125	5-30-51.7 2	2 0 2 100.0%	10 0	10 100.09	% 6	0 6 100.0%			1 0 1 100.0%	4		0	0 0	-	5 0 5 100.0%	0 0 0	. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%	0 0 0 -	51 0 51 100.0%
12 mauri dos Santos 17-Ju-09 08-40-11,0 125-31-07 08-40-12,	40 Pio Atayde	9-Jun-09	08-40-03.7 125	5-31-02.2	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 0 -	300 0 300 100.0%	300 0 300 100.0%
43 Januari dos Santos 17-Jun-99 08-40-0.21 12-5.1-0.35 0 0 0 0 0 0 0 0 0	41 Pio Atayde					10 0		% 6		13			4		0	0 0	-		0 0 0	- 0	0	0 -	7 0 7		3		0 0 0 -	51 0 51 100.0%
44 Marclino Oliveira 17-Jun-09 (08-40-09) (125-31-10.7 2 0 2 10.00% 15 1 08.33% 20 2 2 29.99% 0 0 0 0 - 4 0 1 5 80.00% 10 0 - 50 9 59 84.78 55 Marclino Oliveira 17-Jun-09 (08-40-09) (125-31-10.8 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0	42 Januari dos Santos				2 0 2 100.0%	8 2	10 80.0%	6 6	0 6 100.0%			1 0 1 100.0%	4	0 4 100.0%	0	0 0	-	5 0 5 100.0%	0 0	- 0	0	0 -	4 3 7	57.1%	3	0 3 100.0%	0 0 0 -	42 9 51 82.4%
	43 Januari dos Santos				0 0 -	0 0	0 -	0	0 0 -	- 0	0 0	0 0 0 -	0	0 -	0	0 0	-	0 0 0 -	0 0 0	- 0	0	0 -	0 0 0	-	0	0 0 -	241 0 241 100.070	
46 Amonio dos Santos	44 Marcelino Oliveira				2 0 2 100.0%	8 2		6 5				0 0 0 -	4		0	0 0	-	4 1 5 80.0%		- 0	0	0 -	4 3 7	57.1%	3	0 3 100.0%		
47 Francisco Soares					0 0 -	0 0	0	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	0	0 0	-	0 0 0 -	0 0	. 0	0	0 -	0 0 0		0	0 0 -		155 0 155 100.070
## Cistaino Scares						7 3		6 3		11		0 0 0 -	4		0	0 0	-			0	0	0 -	5 2 7		3		0 0 0 -	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						10 0		70 4				0 0	4		0	0 0				0	U	0 -	4 3 7		3		150 0 150 100 00	
						8 2		6 0				0 0 0	4			0 0				0	0	0 -			3			
					0 2 100.0%	0 0	0 70.0%	0				0 0 0	0			0 0		0 0 0		0	0	0 -	0 0 0	03.770	0	0 0 -		
52 Citivater Leki 29 -Jun-09 08 -40-13.0 125 -30-27.7 2 0 2 100.09 7 3 10 70.09 4 2 2 6 $6.7%$ 9 4 13 $692%$ 0 0 0 0 0 0 0 0 0 0					0 0 -	0 0	0 -	0	0 0 -	0	0 0	0 0 0 -	0	0 0	0	0 0		0 0 0 -	0 0	. 0	0	0 -	0 0 0		0	0 0 -		95 5 100 95.0%
	52 Cilvester Leki					7 3	10 70.0%	6 4	2 6 66.7%				4			0 0	-	4 1 5 80.0%		. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%		
54 Pedro dos Santos Sama 29-Jun-90 08-40-02-2 125-30-39-0 2 0 2 100-06 8 2 10 80-66 10 3 13 76-96 1 0 1 100-06 4 0 4 100-96 0 0 0 - 4 1 5 80-96 0 0 - 6 1 7 85-76 3 0 3 100-66 0 0 - 42 9 51 82-49 8	53 Pedro dos Santos Sama				0 0 -	0 0	0 -	0	0 0 -		0 0 -	0 0 0 -	0		0	0 0	-	0 0 0 -		. 0	0	0 -	0 0 0	-	0	0 0 -		331 10 341 97.1%
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	54 Pedro dos Santos Sama				2 0 2 100.0%	8 2	10 80.0%	6 4	2 6 66.7%	10	3 13 76.9%	1 0 1 100.0%	4	0 4 100.0%	0	0 0	-	4 1 5 80.0%		. 0	0	0 -	6 1 7	85.7%	3	0 3 100.0%		42 9 51 82.4%
56 Liis Oliveira 29-Jun-09 08-40-31.5 125-30-59.4 2 0 2 100.0% 7 3 10 70.0% 5 1 6 83.3% 10 3 13 76.9% 1 0 1 100.0% 3 1 4 75.0% 0 0 0 - 4 1 5 80.0% 0 0 0 - 7 0 7 100.0% 3 0 3 100.0% 134 6 140 95.7% 176 15 191 92.19 100.0% 100.0					0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	. 0	0	0 -	0 0 0	-	0	0 0 -	93 7 100 93.0%	93 7 100 93.0%
	56 Luis Oliveira	29-Jun-09	08-40-31.5 125	5-30-59.4 2	2 0 2 100.0%	7 3	10 70.0%	6 5	1 6 83.3%	10	3 13 76.9%	1 0 1 100.0%	3	1 4 75.0%	0	0 0	-	4 1 5 80.0%	0 0 0	. 0	0	0 -	7 0 7	100.0%	3	0 3 100.0%	134 6 140 95.7%	176 15 191 92.1%
md Total 68 0 68 100.0% 325 24 349 93.1% 218 13 231 94.4% 469 24 493 95.1% 18 0 18 100.0% 129 3 132 97.7% 0 0 0 - 158 7 165 95.8% 10 0 10 100.0% 0 0 0 #DIV/0! 248 18 266 93.2% 113 0 113 100.0% 7575 38 7613 99.5% 9331 127 9458 98.69	57 Luis Madeira	29-Jun-09	08-40-13.7 125	5-30-40.9	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0 0 -	0	0 0 -	0	0 0	-	0 0 0 -	0 0 0	. 0	0	0 -	0 0 0	-	0	0 0 -	106 0 106 100.0%	106 0 106 100.0%
100 U U 1500.07 2-2 2-7 73.170 2.10 13 231 74.770 10 U 10 100.070 127 3 132 71.770 U U U - 1.50 / 1.00 73.070 10 U U U 1500.070 U U U U U U U U U U U U U U U U U U	Grand Total			20	0 68 100 00/	325 24	340 03 10	4 218 1	3 231 94 49/	460 2	4 493 95 16	18 0 18 100 00	120	3 132 97 70	0	0 0		158 7 165 05 00	10 0 10 10	0% 0	0	0 #DIV/01	248 18 266	03.2%	113	0 113 100 0%	7575 38 7613 90.50	0331 127 0458 00 607
	Grand 19th			- Oc	0 00 100.0%	323 24	349 73.170	210 1.	2.51 74.470	40) 2	475 75.170	10 0 10 100.0%	127	132 71.170	J	0		1 105 93.8%	10 10	.0,0	٧	0 #151470:	2.00	73.270	.13	113 100.0%	7575 56 7015 79.576	7551 127 7450 96.076

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

Group:Hadia

		CDC	1.1-4-																										
			6 data 00' = 00"	Peta	oi.	All	bizia	L-19		Calian	dro	Rambut	on	١	Iahogany	C	love	No of Seedlings	ck fruits		Cinamon	Sandalwood		Tephrosia		Grevilia		Coffee	Total
Plot	Date of	00 - (70 - 00		Sub-	All	Sub-	Sub-			Sub-		ıb-		Sub-		Sub-	Ja	Sub-		Sub-	Sanuarwood Sub-		Sub-	— •	Sub-		Sub-	
No. Name of members	monitoring				Total Survival			Total Sur	vival	1	Total Survival	To	otal Survival		Total Survival		Total Survi	ival	Total Survival		Total Survival	Total	Survival	Total Sumir		Total Survi	val	Total	Total Survival
		Lat(S)	Lon(E)	alive dead	No.of Rate	alive dead	Total Survival Rate al	ive dead No.of R	aliv	e dead N	No.of Rate	alive dead No	o.of Rate	alive dea	No.of Rate	alive dead	No.of Rat	alive dead	No.of Rate	alive dead	d No.of Rate	alive dead No.of	Rate	alive dead No.of Rate	alive dead	d No.of Rat	alive dea	d No.of Survival Rate	alive dead No.of Rate
				P	Planted		Planted	Planted		Pl	lanted	Pla	nted		Planted		Planted		Planted		Planted	Plante	d	Planted		Planted		Planted	rianteu
1 Jaime Oliveira	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	391	0 391 100.0%	391 0 391 100.0%
2 Bernadino Oliveira	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	491	0 491 100.0%	491 0 491 100.0%
3 Lindo Oliveira	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	401	0 401 100.0%	401 0 401 100.0%
4 Pedro Lequi	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	470	0 470 100.0%	470 0 470 100.0%
5 Pedro Lequi	19-Mar-09	N.A.	N.A.	2 0	2 100.0%		15 100.0%	14 0 14 100		14 0	14 100.0%	1 0	1 100.0%	6	0 6 100.0%	0 0	0 -	20	0 20 100.0%	8	0 8 100.0%	2 0	2 100.0%	23 0 23 100.0	2	0 2 100.0		0 0 -	107 0 107 100.0%
6 Duarte Piedade	19-Mar-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	15	0 15 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0		0 0 -	79 0 79 100.0%
7 Duarte Piedade	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	491 290	0 491 100.0%	491 0 491 100.0% 290 0 290 100.0%
8 Antonio Oliveira 9 Pedro dos Santos	19-Mar-09 19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	489	0 489 100.0%	290 0 290 100.0% 489 0 489 100.0%
10 Jacinto Oliveira	19-Mar-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	449	0 449 100.0%	449 0 449 100.0%
11 Carlos Oliveira	19-Mar-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	00/	7 0	7 100.0%	1 0	1 100.0%	- 6	0 5 100.0%	0 0	0 -	11	0 11 100.0%	- 6	0 6 100.0%	4 0	4 100.0%	23 0 23 100.0	2	0 2 100.0		0 449 100.0%	80 0 80 100.0%
12 Vasco Lav	5-Mar-09	N.A.	N.A.	0 0	0	0 0	0	0 0 0	.070	0 0	7 100.0%	0 0	0 -	0	0 0 0	0 0	0 -	0	0 0	0	0 0 -	0 0	100.076	0 0 0	0	0 0	75	0 75 100.0%	75 0 75 100.0%
13 Elvis Honoratus	6-Apr-09		N.A.	2 0	2 100.0%	11 0	11 100.0%	10 0 10 100	00/	7 0	7 100 0%	1 0	1 100.0%	0	0 9 100.0%	0 0	0 -	20	0 20 100.0%	14	0 14 100.0%	6 0	6 100.0%	23 0 23 100.0	2	0 3 100.0	20/	0 0	106 0 106 100.0%
14 Elvis Honoratus	6-Apr-09	N.A.	N.A.	0 0	0	0 0	0 -	0 0 0	1.070	0 0	7 100.0%	0 0	0 -	0	0 9 100.0%	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 100.0%	0 0 0	0	0 0	291	0 291 100.0%	291 0 291 100.0%
15 Americo Mendonca	6-Apr-09		N.A.	2 0	2 100.0%	0 0	0 -	6 0 6 100	0%	0 0	0 -	1 0	1 100.0%	4	0 4 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	15 0 15 100.0	2	0 2 100.0		0 0 -	40 0 40 100.0%
16 Americo Mendonca	6-Apr-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 .	100	0 100 100.0%	100 0 100 100.0%
17 Jilbino dos Santos	6-Apr-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	0%	7 0	7 100.0%	1 0	1 100.0%	6	0 6 100.0%	0 0	0 -	15	0 15 100.0%	9	0 9 100.0%	2 0	2 100.0%	23 0 23 100.0	4	0 4 100.0		0 0 -	88 0 88 100.0%
18 Jilbino dos Santos	6-Apr-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	ó	0 0 -	0 0	0 -	0 0 0 -	0	0 0 .	291	0 291 100.0%	291 0 291 100.0%
19 Domingos Carvalilho	6-Apr-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0		0 0 -	69 0 69 100.0%
20 Joanico Oliveira	25-Feb-09	N.A.	N.A.	2 0	2 100.0%		11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	9	0 9 100.0%	0 0	0 -	5	0 5 100.0%	9	0 9 100.0%	4 0	4 100.0%	6 4 10 60.09	2	0 2 100.0		0 40 100.0%	104 4 108 96.3%
21 Agostinho Oliveira	25-Feb-09	N.A.	N.A.	2 0	2 100.0%		11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	6	0 6 100.0%	0 0	0 -	10	0 10 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0		0 100 100.0%	175 0 175 100.0%
22 Jeorge de Araujo	25-Feb-09	N.A.	N.A.	2 0	2 100.0%		11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	20	0 20 100.0%	9	0 9 100.0%	2 0	2 100.0%	23 0 23 100.0	3	0 3 100.0		0 0 -	91 0 91 100.0%
23 Marculino Oliveira	21-May-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0	0% 0	0 0 -	69 0 69 100.0%
24 Carlos Barreto	21-May-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0	0% 0	0 0 -	69 0 69 100.0%
25 Marcus Piedade	3-Jun-09	N.A.	N.A.	2 0	2 100.0%	6 5	11 54.5%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	15	0 15 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0)% 94	0 94 100.0%	168 5 173 97.1%
26 Gabriel Fatima	3-Jun-09	N.A.	N.A.	3 0	3 100.0%	10 1	11 90.9%	10 0 10 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	8	1 9 88.9%	4 0	4 100.0%	23 0 23 100.0	2	0 2 100.0	096	0 0 -	78 2 80 97.5%
27 Evaristu Oliveira	3-Jun-09	N.A.	N.A.	2 0	2 100.0%	9 2	11 81.8%	7 1 8 87.	.5%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0	0	0 0 -	66 3 69 95.7%
28 Celestino da Costa	3-Jun-09	N.A.	N.A.	2 0	2 100.0%	8 3	11 72.7%	6 2 8 75.	.0%	6 1	7 85.7%	1 0	1 100.0%	4	1 5 80.0%	0 0	0 -	3	2 5 60.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0)% 291	0 291 100.0%	351 9 360 97.5%
29 Domingos Carvalho	9-Jun-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	0 0	0 -	23 0 23 100.0	2	0 2 100.0	0%	0 0 -	69 0 69 100.0%
30 Lindo Oliveira	9-Jun-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	22 0 22 100	.0%	17 0	17 100.0%	1 0	1 100.0%	9	0 9 100.0%	0 0	0 -	15	0 15 100.0%	30	0 30 100.0%	8 0	8 100.0%	23 0 23 100.0	2	0 2 100.0	0%	0 0 -	140 0 140 100.0%
31 Jasinto Oliveira	9-Jun-09	N.A.	N.A.	2 0	2 100.0%		11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	15	0 15 100.0%	5	0 5 100.0%	4 0	4 100.0%	23 0 23 100.0	2	0 2 100.0		0 0 -	83 0 83 100.0%
32 Bernadino Oliveira	9-Jun-09	N.A.	N.A.	6 0	6 100.0%	11 0	11 100.0%	12 0 12 100		11 0	11 100.0%	3 0	3 100.0%	6	0 6 100.0%	0 0	0 -	25	0 25 100.0%	14	0 14 100.0%	10 0 1	0 100.0%	23 0 23 100.0	6	0 6 100.0		0 0 -	127 0 127 100.0%
33 Carlos Oliveira	9-Jun-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	11	0 11 100.0%	6	0 6 100.0%	4 0	4 100.0%	23 0 23 100.0	2	0 2 100.0		0 0 -	80 0 80 100.0%
34 Vasco Lay	9-Jun-09	N.A.	N.A.	5 0	5 100.0%		11 100.0%	8 0 8 100		7 0	7 100.0%	1 0	1 100.0%	5	0 5 100.0%	0 0	0 -	5	0 5 100.0%	5	0 5 100.0%	4 0	4 100.0%	23 0 23 100.0	4	0 4 100.0		0 0 -	78 0 78 100.0%
35 Pedro dos Santos	9-Jun-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	6	0 6 100.0%	0 0	0 -	15	0 15 100.0%	24	0 24 100.0%	8 0	8 100.0%	23 0 23 100.0	4	0 4 100.0		0 0 -	109 0 109 100.0%
36 Jorge de Araujo	15-Jul-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	289	2 291 99.3%	289 2 291 99.3%
37 Jaime Oliveira	15-Jul-09	N.A.	N.A.	2 0	2 100.0%	8 3	11 72.7%	8 0 8 100	.0%	7 0	7 100.0%	0 0	0 -	5	0 5 100.0%	0 0	0 -	8	2 10 80.0%	5	0 5 100.0%	4 0	4 100.0%	20 3 23 87.09	2	0 2 100.0		0 0 -	69 8 77 89.6%
38 Carlos Barreto	15-Jul-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	291	0 291 100.0%	291 0 291 100.0%
39 Domingos Carvalho	15-Jul-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	100	0 100 100.0%	100 0 100 100.0%
40 Armando Soares	21-May-09	N.A.	N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	0	0 0 -	0	0 0 -	0 0	0 -	0 0 0 -	0	0 0 -	140	0 140 100.0%	140 0 140 100.0%
41 Armando Soares	21-May-09	N.A.	N.A.	2 0	2 100.0%	10 0	10 100.0%	10 0 10 100	.0%	7 3	10 70.0%	1 0	1 100.0%		0 5 100.0%	0 0	0 -	10	0 10 100.0%	8	0 8 100.0%	4 0	4 100.0%	25 0 25 100.0	2	0 2 100.0		0 0 -	84 3 87 96.6%
42 Florentino Oliveira	21-May-09		N.A.	0 0	0 -	0 0	0 -	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0 -	0 0	0 -	10	0 10 100.0%	0	0 0 -	0 0	U -	0 0 0 -	0	0 0 -	100	0 100 100.0%	110 0 110 100.0%
43 Anival dos Santos	21-May-09	N.A.	N.A.	2 0	2 100.0%		10 100.0%	10 0 10 100		10 0	10 100.0%	0 0	0 -	- 5	0 5 100.0%	0 0	0 -	10	0 10 100.0%	11	0 11 100.0%	6 0	6 100.0%	25 0 25 100.0	1	0 1 100.0		0 291 100.0%	381 0 381 100.0%
44 Horacio Oliveira	21-May-09	N.A.	N.A.	2 0	2 100.0%	11 0	11 100.0%	8 0 8 100	.0%	7 0	7 100.0%	1 0	1 100.0%	6	0 6 100.0%	0 0	0 -	20	0 20 100.0%	14	0 14 100.0%	6 0	6 100.0%	23 0 23 100.0	3	0 3 100.0	0% 291	0 291 100.0%	392 0 392 100.0%
Grand Total				62 0	62 100.0%	274 14	288 95.1%	243 3 246 98.	.8% 2	05 4	209 98.1%	27 0	27 100.0%	151	1 152 99.3%	0 0	0 -	313	4 317 98.7%	235	1 236 99.6%	82 0 8	2 100.0%	597 7 604 98.89	66	0 66 100.0	0% 6256	2 6258 100.0%	8511 36 8547 99.5%

Note N.A.: Data not available

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

Group:Moris foun

			GPS data														No of Seed	ings												
. B. C. B. C		00)°- 00' - 00"		Albizia				Caliandra	Rai			Maho	ogany	-	Clove		Jack fruits									Grevilia	Coffee	Tota	al
. B. C.	Plot Name of members	Date of						Sub-																					7	Total
Part	No.	monitoring Lot(S	Lon(E) alive		alive dead Total	Survival	alive dear	Total Survival	alive dead Total Surviv	al plive dead		urvival oliv	e dead	Total Survival	live dead	Total Su	rvival	e dead Total	Survival	alive dead	Total Survival	d alive dead 7	Total Surviva	d alive	lead Total Sur	vival				N Survival
Secondary Secondary Secondary Secondary Secondary Secondary Secondary Secondar		Zan(o	, Lon(L) unive	No.of Rate			l unite ucus	No.of Rate		unit utuu	No.oI	Rate		No.01 Kate			Rate	No.of	Rate	unive dend	No.of Rate	unite detail 1	No.of Rate		No.of R	ate	No.01 Kate	No.of Rate	PI	lanted Rate
No. 10. No.	4 8 1 14 1	20 4 00 00 20 2		Planted			22	Planted				00.00/						Planted	100.00/	P	'lanted	PI	anted	100	Planted	001		Planted	224	224 400 004
Heat of the control							22				0 1 10	00.0%	5 0	5 100.0%	0	0 0	-			4 0			0 -	122	0 122 100	1.0%			331 0	
Part							3				0 0	-	0 0	0 -	- 0	0 0	-			4 0			5 100.00	0	0 0	-			331 0	
Maria Maria Maria Maria Maria							15						3 0				0.0%			4 0			5 100.09	6 00	0 00 100	1.0%				
- Mathe - Mather - Ma							5						3 0			0				4 0			0 -	10	0 10 100	- 00/		0 150 100.0%		
No. 19				0 1 100.0%			3	0 3 100.0%		70 1 1	0 0	00.070	0 0	3 100.0%					100.076	0 0	4 100.070	0 0	0 -	10	0 10 100	.070		0 200 100 000		
Part				0 1 100.00			- 0	0 5 100.00		0 0	0 0	-	0 0	0 -					100.00/	4 0	4 100.00/	/ 0 0	0 -	0	0 0	-		0 300 100.0%	300 0	
No. More Andrew No.							3	0 3 100.0%	0 0 0	70 0	0 0		0 0	0 -		0 0			100.076	0 0	0	0 0	0 -	0	0 0	-		0 150 100 00	150 0	6.0 0001070
10 10 10 10 10 10 10 10				0 0			- 6	0 5 100.00	5 0 5 100.0	0 1	0 1 1	00.00/	0 0	0 -		0		0 0	100.00/	4 0	4 100.00	(0 0	0 -	0	0 0	-		0 130 100.070	22 0	
1. Septem Calaber 1.54 a. 3. 5. 5. 5. 5. 5. 5. 5							- 5						0 0	0 -		0 0				4 0			6 100.00	4 0	0 0			0 300 100 0%	328 0	
1				0 1 100.070	0 0 0	100.070	0	0 0 0	0 0 0	0 1	0 0	00.070	0 0	0 -		0		0 0 0	100.070	0 0	0	0 0	0 100.07	0	0 0					
New Part of Marco 1. Alegoria de Cross				0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	04 1 (0 1 14	00.0%	0 0	0 -			0.0%	0 0 0		4 0	4 100.0%	4 0 0	0 -	28	2 30 93	304	0 0 0 - 25	0 230 100.070	54 2	
1				0 1 100.070		100.070	0	0 0 0	0 0 0	0 1	0 0	00.070	0 0	0 -			0.070	0 0 0		0 0	0	0 0	0 -	0	0 0	.570	0 0 0 10	0 105 100 0%	105 0	
Figure Control Contr				0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	04 1 (0 1 1	00.0%	2 0	2 100.0%	0	0 0	_	10 0 10	100.0%	0 0	0 -	0 0	0 -	18	12 30 60	094		0 0	100	
Formace OA Cur 18-84-00 58-95-00 13-14-01 19-95-00 13-14-01 13-				0 0 -	0 0 0	100.070	0	0 0 -	0 0 0 -	0 0	0 0	-	0 0	0 -	0	0 0		0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-		0 80 100 0%		
Figure Continue				0 1 100.0%	5 0 5	100.0%	5	0 5 100 0%	7 0 7 100.0	96 1 (0 1 10	00.0%	3 0	3 100 0%	0	0 0	_	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	70	0 70 100	0%	1 0 1 100.0%	0 0 -		
In the following states In the following				0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 0	0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-		0 270 100.0%		
10 Search Series 16 May 10 16 17 17				0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 0	0 0	_	0 0	0 -	0	0 0	_	0 0 0		0 0	0 -	0 0	0 -	0	0 0	_				
Section Continue					5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	4 0	4 100.0%		-	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	25	5 30 83	3%		0 0 -	61 5	
1 Tear Some Share Shar							5				0 0	-	9 0		0	0 0	-			4 0			8 100.09	6 22				0 0 -	73 0	
28 Ascelare Shared (6-5-25) 1 (9 1) 1007h (5-5) 2 (5-5) 1007h (7-5) 2 (5-5) 1007h (7-5							5				0 1 10	00.0%	0 0	0 -	0	0 0	-			4 0			0 -	0	0 0	-		0 0 -		32 100.0%
9. Again Angele 9. Shaper 69-59-27 St 51-100 1 0 0 1 10000 5 0 0 5 10000 5 0 0 5 10000 5 0 0 5 10000 5 0 0 0 0							4	1 5 80.0%					0 0	0 -	0	0 0	-			4 0	4 100.0%	6 0 0	0 -	0	0 0	-		0 0 -		
1 Designed States				0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	0	0 0	-			4 0	4 100.0%	6 8 0	8 100.09	6 0	0 0	-	1 0 1 100.0%	0 0 -	40 0	40 100.0%
1 Designed States				0 1 100.0%	1 4 5	20.0%	5	0 5 100.0%	5 0 5 100.0	% 1 0	0 1 10	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	3 1	4 75.0%	0 5	5 0.0%	0	0 0	-	1 0 1 100.0%	0 0 -		37 73.0%
8 Benifa Morning 1				0 0 -		-	0	0 0 -		0 0	0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 290	4 300 98.7%		300 98.7%
8 Benifa Morning 1	32 Daniel Caldas	16-Jun-09 08-39-1	8.2 125-31-17.0 1	0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	32 0	32 100.0%
State Figure 1 Figure 2 Figure 3 F	33 Bendito Mozinho	8-Jun-09 08-39-2	8.1 125-31-02.5 0	0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 (0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 150	0 150 100.0%	150 0	150 100.0%
16 Paul de Reyo	34 Bendito Mozinho	16-Jun-09 08-39-1	7.2 125-31-16.8 1	0 1 100.0%	4 1 5	80.0%	4	1 5 80.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	1	0 1 10	0.0%	8 2 10	80.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	29 4	33 87.9%
37 Selvino Percim 16-Jun-99 (8-39-88,7 125-31-04.2 1 0 1 100.098 9 4 13 69.28 8 2 2 10 80.98 3 2 5 60.098 1 0 1 100.098 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	35 Filomeno Cardoso	16-Jun-09 08-39-2	4.8 125-31-21.2 1	0 1 100.0%	5 0 5	100.0%	3	2 5 60.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	30 2	32 93.8%
Selvino Pereira 16-Jun-0 88-98-887 128-31-075 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	36 Paul do Rego	16-Jun-09 08-39-5	2.0 125-31-24.6 1	0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 0 0	0 0	-	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	31 0	31 100.0%
9 Francisco Sources 16-Jun-9 08-39-\$8.4 125-31-17.3 0 1 10.09% 0 0 0 0 0 0 0 0 0	37 Selvino Pereira	16-Jun-09 08-39-5	8.7 125-31-04.2 1	0 1 100.0%	9 4 13	69.2%	8	2 10 80.0%	3 2 5 60.09	6 1 (0 1 10	00.0%	2 0	2 100.0%	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	39 8	47 83.0%
Hermitian Sources 16-Jun-09 (8-39-S84 125-31-173 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	38 Selvino Pereira	16-Jun-09 08-39-5	8.7 125-31-07.5 0	0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 (0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 14	3 2 150 98.7%	148 2	150 98.7%
41 Marcelino da Costa	39 Francisca Soares	16-Jun-09 08-39-5	2.7 125-31-11.2 1	0 1 100.0%	3 2 5	60.0%	2	3 5 40.0%	4 1 5 80.09	6 1 (0 1 1	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	0 1 1 0.0%	0 0 -	25 7	32 78.1%
42 Moizes Sources 13-Jul-09 (08-39-26A) [22-31+17.6] 1 0 1 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 1 0 1 100.0% 5 0 5 100.0% 5 0	40 Francisca Soares	16-Jun-09 08-39-5	8.4 125-31-07.3 0	0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 (0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 140	4 150 97.3%	146 4	150 97.3%
43 Domingos Mendonca 13-Jul-09 (08-39-24.4 12-531-13.7 1 0 1 100.0% 5 0 5 100.0% 5 0 1	41 Marcelino da Costa	13-Jul-09 08-39-2	6.1 125-31-15.4 1	0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 1	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 6 0	6 100.09	6 0	0 0	-	1 0 1 100.0%	0 0 -	38 0	38 100.0%
44 Agustinbo Gidino 13-Jul-09 (08-39-24.1 125-31-13.5 1 0 1 100.0% 5 0 5 100.0% 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	42 Moizes Soares	13-Jul-09 08-39-2	6.0 125-31-17.6 1		5 0 5	100.0%	5				0 0	-	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0			0 -	0	0 0	-	1 0 1 100.0%	0 0 -		
45 Paul Castro 13-Jul-99 (08-39-26.1 125-31-02.4 1 0 1 100.0% 5 0 5 100.0% 5 0	43 Domingos Mendonca	13-Jul-09 08-39-2	4.4 125-31-13.7 1	0 1 100.0%	5 0 5	100.0%	18				0 1 1	00.0%	5 0	5 100.0%	0	0 0	-	8 2 10	80.0%	4 0	4 100.0%	6 0 0	0 -	120	2 122 98.	.4%	1 0 1 100.0%	0 0 -	172 9	181 95.0%
46 Eleven Ximenes 13,14-09 (08-41-17) 125,305.05 (0 0 0 - 0 0 0 - 0 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 - 0 0 0 0 0 0 - 0	44 Agustinho Gidino	13-Jul-09 08-39-2	4.1 125-31-13.5 1	0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%			0 1 1	00.0%	0 0	0 -	0	0 0	-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -	32 0	32 100.0%
$ 47 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	45 Paul Castro	13-Jul-09 08-39-2	6.1 125-31-02.4 1	0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	1	0 1 10	0.0%	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	0	0 0	-	1 0 1 100.0%	0 0 -		
48 Jose Tilman 27-May-09 (08-39-32.0 125-30-58.8 0 0 0 0 - 0 0 0 0 0 0 0 0 0 0 0 0 0 0	46 Estevao Ximenes			0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 0	0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 25	8 238 96.6%		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				0 1 100.0%	5 0 5	100.0%	5	0 5 100.0%		% 1 (0 1 10	00.0%	0 0	0 -			-	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	30	0 30 100	.0%				
50 Floriano Garsia 27-May-99 08-39-27.3 125-30-57.1 1 0 1 100.0% 5 0 5				0 0 -	0 0 0		0	0 0 -		0 0	0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 150	0 150 100.0%	150 0	
51 Autonio Martins 27 May-99 (08-39-30-4 125-31-02.7 1 0 1 100.0% 5 0 5 100.0% 5 0							3				0 0	-	0 0	0 -	0	0 0	-			4 0		6 9 0		6 0	0 0	-	0 0 0 -	0 0 -	31 8	
52 Americo Honoratus 27-May-09 (08-39-06.4 125-30-35.9 1 0 1 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 5 0 5 100.0% 6 0 0 0 0 0 0 0 0 0	50 Floriano Garsia						5						0 0	0	0	0 0	-			4 0			17 100.09	6 0	0 0	-		2 28 150 81.3%		
53 Agustinho Gidino 29-Jul-09 08-39-40.9 125-31-04.2 0 0 0 - 0					5 0 5	100.0%	4						0 2	2 0.0%	0	0 0	-	10 0 10	100.0%	4 0			0 -	0	0 0	-	1 0 1 100.0%	0 0 -	29 5	
				0 1 100.0%		100.0%	5	0 5 100.0%	5 0 5 100.0	% 1 (0 1 10	00.0%	0 0	0 -	3	0 3 10	0.0%	10 0 10	100.0%	4 0	4 100.0%	6 0 0	0 -	30	0 30 100	.0%				
Grand Total 32 1 33 97.0% 157 16 173 90.8% 198 16 214 92.5% 167 10 177 94.4% 27 0 27 100.0% 39 2 41 95.1% 11 0 11 100.0% 316 4 320 98.8% 127 1 128 99.2% 59 5 64 92.2% 541 21 562 96.3% 33 1 34 97.1% 4269 46 4315 98.9% 5976 123 6099 97.9%	53 Agustinho Gidino	29-Jul-09 08-39-4	0.9 125-31-04.2 0	0 0 -	0 0 0	-	0	0 0 -	0 0 0 -	0 0	0 0	-	0 0	0 -	0	0 0	-	0 0 0	-	0 0	0 -	0 0	0 -	0	0 0	-	0 0 0 - 250	0 250 100.0%	250 0	250 100.0%
Januari 10 10 10 10 10 10 10 10 10 10 10 10 10	Grand Total		32	1 33 97.0%	157 16 173	00.8%	108	16 214 92 5%	167 10 177 94 49	y 27 (27 14	00.0%	30 2	41 05 1%	11	11 10	0.0%	16 4 320	08 804	127 1	128 99 2%	50 5	64 92 20	541	21 562 96	304	33 1 34 97 1% 4269	16 1315 08 0%	5076 123	6000 07 0%
	Orana Total		32	1 33 77.0%	137 10 173	70.070	170	214 72.570	10/ 10/ 17/ 94.4	2/	2/ 1		~ ²	41 75.170	**	11 10	0.070	320	J3.070	.27 1	120 77.270	3)	04 72.2%	, ,,,,,,,	21 302 90.		37 77.176 420	40 4313 98.9%	3770 123	3079 71.970

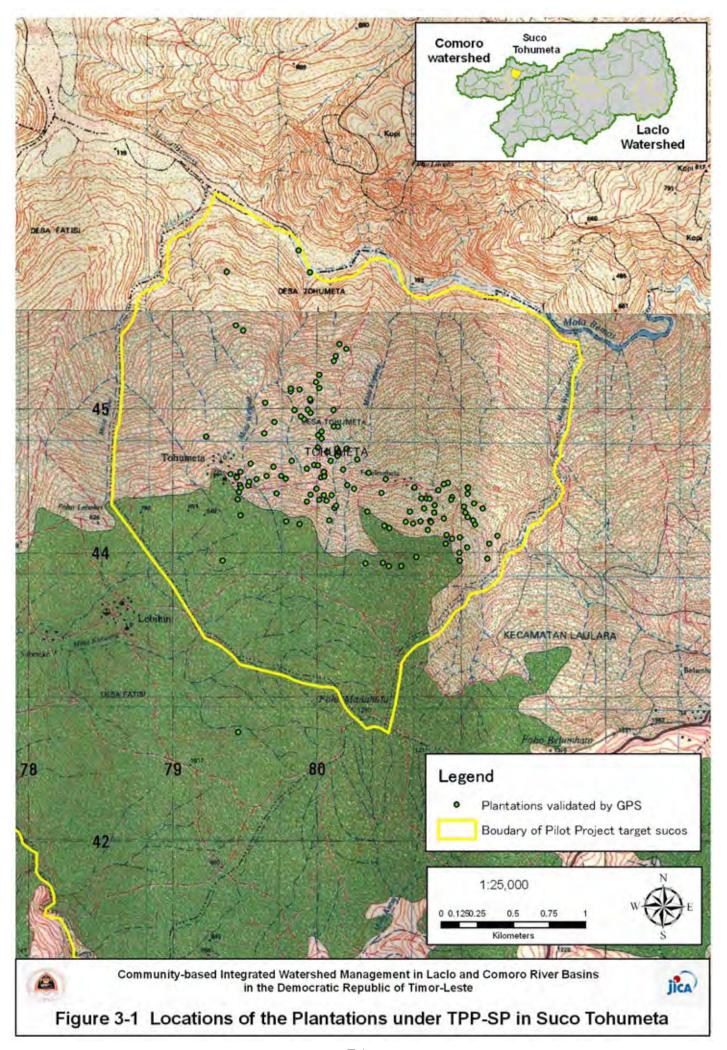
Note N.A.: Data not available

Table I.3-2 Species planted and the estimated survival of the planted seedlings in the respective plantations under TPP-SP in Suco Samalete

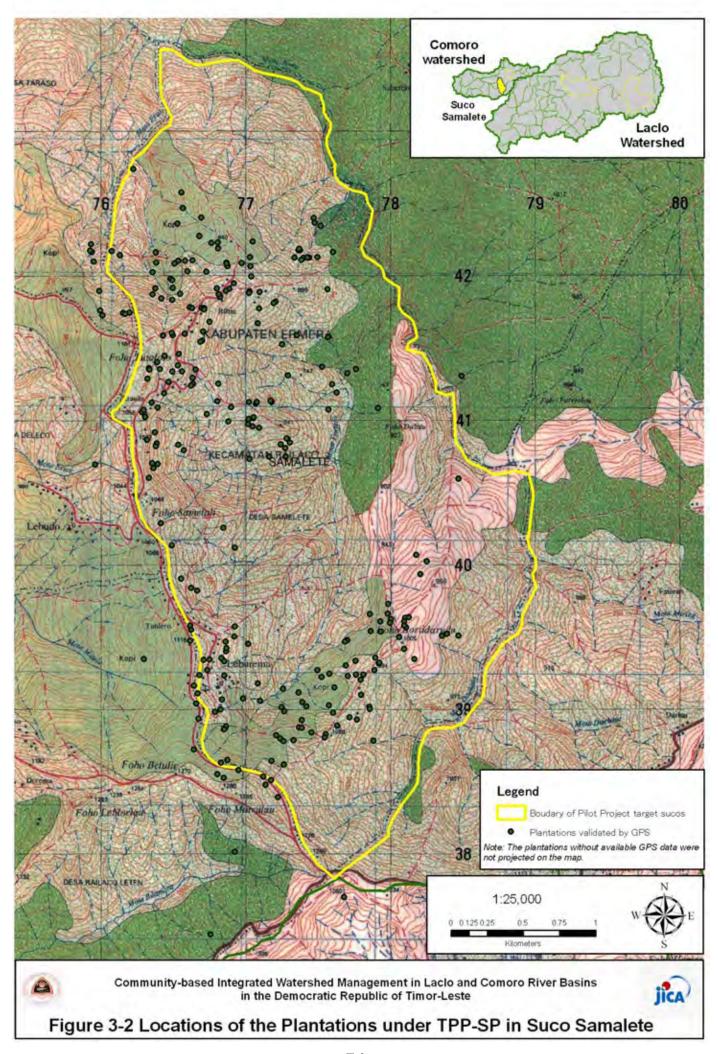
Group:Halibur

	G	PS data												No of Seedling	gs										
	00°-	00' - 00"	Petai	Al	Ibizia	L-19	Ca	liandra	Rambutan		Mahogany		Clove	occurry	Jack fruits	Cina	amon	Sandal	lwood	Tephrosia		Grevilia	Co	offee	Total
Plot Name of member	Date of		Sub-		Sub-	Sub-		Sub-	Sub-		Total		Sub-		Sub-		Sub-		Sub-	Sub-		Sub-		Sub-	Total
No.	monitoring Lat(S)	Lon(E)	alive dead Total Survival	alive dead	Total Survival No.of Rate alive d	ead Total Survival No.of Rate	alive dead	Total Survival Ali	ive dead Total Surv No.of Ra	ival alive	dood Na at	Survival	ive dead Total	Survival Rate alive	dead Total Survival No.of Rate	alive dead	Total Survival No.of Rate alive	dead	Total Survival No.of Rate	alive dead Total	Survival Rate aliv	ve dead Total Surviv	al alive dead	Total Survival No.of Rate	alive dead No.of Survival
			No.01 Rate		No.01 Rate	Planted Rate		Planted Rate	Planted Ra	ite	Plante	Rate	Planted	Kate	Planted Rate		Planted		Planted Rate	No.or Plante		Planted Rate		Planted Rate	Planted
1 Anastasiu Luis	5-Mar-09 08-39-31	125-30-44.5		0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	. 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0) -	0 0 0 -	200 0	200 100.0%	200 0 200 100.0%
2 Jujo Luis Soares	5-Mar-09 08-39-27.6	125-30-45.4		0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	0 -	0 0 0 -	60 0	60 100.0%	60 0 60 100.0%
3 Jujo Luis Soares	5-Mar-09 08-39-27	125-30-46.2	2 0 2 100.0%	8 0	8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.	.0% 4		100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	2 0 2 100.09		0 -	57 0 57 100.0%
4 Manuel Diogo	5-Mar-09 8-39-25.2	125-30-41.1	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	- 0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -		-	0 0 0 -	206	206 100.0%	206 0 206 100.0%
5 Adao de Oliveira	5-Mar-09 08-39-27	125-30-47.8		8	8 100.0% 15	15 100.0%	23	23 100.0%	1 1 100.	.0% 4		100.0%	0 0 0	- 7	7 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 2 100.09		0 -	76 0 76 100.0%
6 Abilio Diogo	5-Mar-09 08-39-29.4 26-Feb-09 08-39-43.7	125-30-48.3 125-30-45.1	2 0 2 100.0%	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	. 0	0 0		0 0 0	- 0	7 0 7 100.0%	0 0	0 - 0	0	0 -	0 0	4 100.0%	2 0 2 100.09	150 0	150 100.0%	150 0 150 100.0% 61 0 61 100.0%
7 Manuel de Jesus 8 Manuel de Jesus	26-Feb-09 08-39-43.7 26-Feb-09 08-39-43.9	125-30-43.1		0 0	0 8 100.0% 14	0 0 -	0	0 0 -	0 0 0 -		0 0	100.0%	0 0 0	- /	0 7 100.0%	0 0	0 - 0	0	0 -		100.0%	0 0 0 -	190 0	190 100.0%	61 0 61 100.0% 190 0 190 100.0%
9 Domingos Soares Belo	26-Feb-09 08-39-48	125-30-46.4		8 0	0 8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.			100.0%	0 0 0	- 17	7 0 17 100.0%	0 0	0 - 0	0	0 -) -	2 0 2 100.09		60 100.0%	113 0 113 100.0%
10 Domingos Soares Belo	26-Feb-09 08-39-35.1	125-30-55.7	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -		2 100.0%	0 0 0 -	0 0	0 -	42 0 42 100.0%
11 Jacinto Soares	26-Feb-09 08-39-22.9	125-30-53.6	0 0 0 -	1 0	0 1 100.0% 2	0 2 100.0%	4	0 4 100.0%	0 0 0 -	. 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	3 0	3 100.0%	2 0 2 100.09	% 200 0	200 100.0%	212 0 212 100.0%
12 Celestino da Conceica	26-Feb-09 08-39-24.1	125-30-55.2	0 0 0 -	0 0	0 - 10	0 10 100.0%	1	0 1 100.0%	0 0 0 -	. 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0) -	0 0 0 -	300 0	300 100.0%	311 0 311 100.0%
13 Celestino Meta	26-Feb-09 08-39-34.4	125-30-46.7	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	- 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
14 Lorenco Soares	26-Feb-09 08-39-33.1	125-30-45	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	0 -	0 0 0 -	175 0	175 100.0%	175 0 175 100.0%
15 Luis Ataide	26-Feb-09 08-39-40.7	125-30-53.3 125-30-42.4	2 0 2 100.0%	8 0	0 8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.	.0% 4	0 4	100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09	158 0	158 100.0%	57 0 57 100.0% 158 0 158 100.0%
16 Luis Ataide 17 Alberto Dias	26-Feb-09 08-39-35.5 26-Feb-09 08-39-37.6	125-30-42.4	2 0 2 100.0%	8 0	0 8 100 0% 19	0 19 100.0%	9	0 9 100.0%	1 0 1 100	0% 4	0 0	100.0%	0 0 0	- 0	7 0 7 100.0%	0 0	0 - 0	0	0 -	0, 0	3 100.0%	2 0 2 100.09		0 -	75 0 75 100.0%
18 Basilio Honoratus	31-Mar-09 N.A.	N.A.	2 0 2 100.0%	8 0	0 8 100.0% 19	0 10 100.0%	9	0 9 100.0%	1 0 1 100.			100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.0		0 -	57 0 57 100.0%
19 Basilio Honoratus	31-Mar-09 08-39-43.4	125-30-47.8	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -) -	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
20 Alarico Peidade	31-Mar-09 08-39-43.2	125-30-44.9	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	105 0	105 100.0%	105 0 105 100.0%
21 Alarico Peidade	31-Mar-09 08-39-33.2	125-30-41.1	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	- 0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -) -	0 0 0 -	43 0	43 100.0%	43 0 43 100.0%
22 Alarico Peidade	31-Mar-09 08-39-37.4	125-30-48.9	2 0 2 100.0%	14 0	0 14 100.0% 10	0 10 100.0%	14	0 14 100.0%	0 0 0 -	4		100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	2 0 2 100.09		0 -	67 0 67 100.0%
23 Antonio Fernandes	31-Mar-09 08-39-39.4	125-30-29.2	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	0 -	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
24 Jose Hoda Soares 25 Jose Hoda Soares	31-Mar-09 08-39-38.8 31-Mar-09 08-39-39.1	125-30-33.8 125-30-34.2	2 0 2 100.0%	0 0	0 8 100 0% 14	0 0 -	0	0 9 100.0%	1 0 1 100	. 0	0 0	100.0%	0 0 0	- 0	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	2 0 2 100.09	160 0 % 0 0	160 100.0%	160 0 160 100.0% 61 0 61 100.0%
26 Manuel Soares	31-Mar-09 08-39-38.7	125-30-34.2	2 0 2 100.0%	8 0	8 100.0% 14	0 10 100.0%		0 9 100.0%	1 0 1 100.			100.0%	0 0 0	- /	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.0		150 100.0%	207 0 207 100.0%
27 Agustoleki	19-May-09 08-39-42.9	125-30-51.9	2 0 2 100.0%	6 2	2 8 75.0% 9	1 10 90.0%	9	0 9 100.0%	1 0 1 100			100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		5 85.7%	2 0 2 100.0		0 -	70 8 78 89.7%
34 Agustoleki	3-Jun-09 08-39-15.1	125-30-47.2		0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -		0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -) -	0 0 0 -	195 0	195 100.0%	195 0 195 100.0%
35 Armando Soares	3-Jun-09 08-39-21.4	125-30-50.9	2 0 2 100.0%	8 0	8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.	.0% 4		100.0%	0 0 0	- 6	5 1 7 85.7%	0 0	0 - 0	0	0 -		4 85.7%	2 0 2 100.09	% 150 0	150 100.0%	204 3 207 98.6%
36 Manecas Cunha Gudinho	3-Jun-09 08-39-33.6	125-30-57	2 0 2 100.0%	8 0	8 100.0% 10	0 10 100.0%		0 9 100.0%	0 0 0 -	4		100.0%	0 0 0	- 17	2 19 89.5%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09		0 -	66 2 68 97.1%
37 Manecas Cunha Gudinho	3-Jun-09 08-39-18.6	125-30-45.9	0 0 0 -	0 0	0 - 0	0 0 -		0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	175 0	175 100.0%	175 0 175 100.0%
38 Francisco Soares	3-Jun-09 08-39-17.2	125-30-51.3	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	0 -	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
39 Jose Cunha Gudinho 40 Anastacio Luis Soares	3-Jun-09 08-39-11.6 11-Jun-09 08-39-31.3	125-30-46.8 125-30-44.9	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0) -	0 0 0 -	150 0 200 0	150 100.0% 200 100.0%	150 0 150 100.0% 200 0 200 100.0%
41 Adriano Soares	11-Jun-09 08-39-31.3 11-Jun-09 N.A.	N.A.	2 0 2 100.0%	6 2	2 8 75.0% 8	2 10 80.0%	8	1 9 88.9%	1 0 1 100	0% 4	0, 0,	100.0%	0 0 0	- 0	3 7 57.1%	0 0	0 - 0	0	0 -	0, 0	4 78.6%	2 0 2 100.0		0	46 11 57 80.7%
42 Adriano Soares	11-Jun-09 08-39-29.4		0 0 0 -	0 0	0 0 - 0	0 0 -	0	0 0 -	0 0 0 -	. 0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -		70.070	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
43 Hermenegildo Leva	11-Jun-09 08-39-25.8		2 0 2 100.0%	5 3	8 62.5% 8	2 10 80.0%	6	3 9 66.7%	1 0 1 100.	.0% 4		100.0%	0 0 0	- 5	2 7 71.4%	0 0	0 - 0	0	0 -		4 71.4%	1 1 2 50.09		0 -	42 15 57 73.7%
44 Hermenegildo Leva	11-Jun-09 08-39-27.4	125-30-41.2	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	. 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
45 Manuel da Graca	11-Jun-09 08-39-27.3	125-30-27.1		0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	- 0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -) -	0 0 0 -	50 0	50 100.0%	50 0 50 100.0%
46 Andrea Correia	11-Jun-09 08-39-29.6	125-30-40.4	2 0 2 100.0%	7 1	1 8 87.5% 8	2 10 80.0%	7	2 9 77.8%	1 0 1 100.	.0% 4	0 4	100.0%	0 0 0	- 5	5 2 7 71.4%	0 0	0 - 0	0	0 -	13 1 1	4 92.9%	2 0 2 100.09		0 -	49 8 57 86.0%
47 Andrea Correia	11-Jun-09 N.A.	N.A.	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	05.70	0 0 0 -	150 0 % 0 0	150 100.0%	150 0 150 100.0% 49 8 57 86.0%
48 Eduardo Ximenes 49 Eduardo Ximenes	11-Jun-09 08-39-34.6 11-Jun-09 08-39-37.6	125-30-40.4 125-30-52.1	2 0 2 100.0%	0 0	2 8 75.0% 10	0 10 100.0%	8	1 9 88.9%	1 0 1 100.	.0% 4	0 4	100.0%	0 0 0	- 4	3 / 5/.1%	0 0	0 - 0	0	0 -	12 2 1	4 85.7%	2 0 2 100.09		150 100.0%	49 8 57 86.0% 150 0 150 100.0%
50 Alberto Dias	25-Jun-09 08-39-37.9	125-30-52.1	2 0 2 100.0%	7 1	1 8 87.5% 16	3 19 84.2%	9	0 9 100.0%	1 0 1 100.	0% 4	0 4	100.0%	0 0 0	- 0	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	2 0 2 100.09	150 0 % 0 0	0 -	62 4 66 93.9%
51 Alarico Fernandes	25-Jun-09 08-39-37.6	125-30-49.4		6 2	2 8 75.0% 8	2 10 80.0%	9	0 9 100.0%	1 0 1 100.			100.0%	0 0 0	- 6	5 1 7 85.7%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.0		0 -	52 5 57 91.2%
52 Alarico Fernandes	25-Jun-09 N.A.	N.A.	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
53 Jacinto Soares	25-Jun-09 08-39-34.5	125-30-55.4	2 0 2 100.0%	7 1	1 8 87.5% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.	.0% 4	0 4	100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	2 0 2 100.09		0 -	56 1 57 98.2%
54 Jose Cunha Gudinho	25-Jun-09 N.A.	N.A.	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0		0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	0 -	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
55 Francisco Soares	25-Jun-09 08-39-28.2	125-30-57.3	2 0 2 100.0%	6 2	2 8 75.0% 10	0 10 100.0%	7	2 9 77.8%	1 0 1 100.	0% 4		100.0%	0 0 0	- 6	5 1 7 85.7%	0 0	0 - 0	0	0 -	11 3 1	4 78.6%	2 0 2 100.09		0 -	49 8 57 86.0%
56 Armando Soares 57 Ernesto Lear Gudinho	25-Jun-09 08-39-27.5 19-May-09 N.A.	125-30-57.1 N.A.	2 0 2 100.0%	16 0	0 16 100.0% 20	0 0 -	0	0 9 100.0%	1 0 1 100.	096 4	0 0	100.0%	0 0 0	- 0	7 0 7 100.0%	0 0	0 - 0	0	0 -	14 0 1	4 100.0%	20 0 20 100.09	150 0 % 150 0	150 100.0% 150 100.0%	150 0 150 100.0% 243 0 243 100.0%
58 Mario Luis Barreto	19-May-09 N.A. 19-May-09 08-39-25.2	125-30-26.7	0 0 0 -	0 0	0 0 - 0	0 0 -		0 0 -	0 0 0 -	. 0.0	0 0		0 0 0	- /	0 7 100.0%	0 0	0 - 0	0	0 -		100.0%	0 0 0 -	150 0	150 100.0%	150 0 150 100.0%
59 Mario Luis Barreto	19-May-09 08-39-24.9	125-30-20.7	2 0 2 100.0%	8 0	0 8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100.	.0% 4		100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09		0 -	57 0 57 100.0%
60 Joao Fernandes	19-May-09 08-39-23.4	125-30-26.4	2 0 2 100.0%	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	2		100.0%	0 0 0	- i	0 1 100.0%	0 0	0 - 0	0	0 -	0 0) -	2 0 2 100.09		0 -	7 0 7 100.0%
61 Joao Fernandes	19-May-09 08-39-24.9	125-30-26.3	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0) -	0 0 0 -	165 0	165 100.0%	165 0 165 100.0%
62 Marcelo Leva	19-May-09 08-39-38.3	125-30-28.6	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	- 0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	- 0	0 0 0 -	175 0	175 100.0%	175 0 175 100.0%
63 Marcelo Leva	19-May-09 08-39-33.9		2 0 2 100.0%	8 0	0 8 100.0% 10	0 10 100.0%	- 4	0 9 100.0%	1 0 1 100.	.070		100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09		0 -	57 0 57 100.0%
64 Horacio Leva	19-May-09 08-39-33.1	125-30-55.0	2 0 2 100.0%	8 0	0 8 100.0% 10	0 10 100.0%	- 4	0 9 100.0%	1 0 1 100.	.0% 4	0 4	100.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09		0 -	57 0 57 100.0%
65 Horacio Leva	19-May-09 N.A.	N.A. 125-30-52.3	0 0 0 -	0 0	0 - 0	0 0 -		0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -		0 -	0 0 0 -	187 0	187 100.0%	187 0 187 100.0% 220 5 225 97.8%
66 Alberto Dias 67 Jose Cunha Gudinho	29-Jul-09 08-39-37.6 29-Jul-09 08-37-47.7	125-30-52.3	2 0 2 100.0%	7 1	1 8 87.5% 8	2 10 80.0%	81	1 9 88.9%	1 0 1 100	0% 4	0 0	100.0%	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -		4 100.0%	2 0 2 100.09	220 5	225 97.8%	220 5 225 97.8% 46 4 50 92.0%
68 Anastacio Luis Soares	29-Jul-09 08-39-35.3	125-30-43.9		8 0	0 8 100.0% 10	0 10 100.0%	9	0 9 100.0%	1 0 1 100	.070		75.0%	0 0 0	- 7	7 0 7 100.0%	0 0	0 - 4	0	4 -		4 100.0%	2 0 2 100.0		0 -	60 1 61 98.4%
69 Domingos Barros	24-Aug-09 08-39-31.11	125-30-44.6		0 0	0 0 - 0	0 0 -		0 0 -	0 0 0 -	0	0 0		0 0 0	- 8	2 10 80.0%	0 0	0 - 0	0	0 -) -	0 0 0 -	0 0	0 -	8 2 10 80.0%
70 Celestinho Soares	24-Aug-09 08-39-35	125-30-52.0	2 0 2 100.0%	4 2	2 6 66.7% 8	2 10 80.0%	9	0 9 100.0%	1 0 1 100.	.0% 4		100.0%	0 0 0	- 1	1 3 4 25.0%	0 0	0 - 0	0	0 -		4 78.6%	2 0 2 100.09		0 -	42 10 52 80.8%
71 Celestinho Soares	24-Aug-09 08-36-32.1	125-30-52.0	0 0 0 -	0 0	0 - 0	0 0 -	0	0 0 -	0 0 0 -	0	0 0	-	0 0 0	- 0	0 0 -	0 0	0 - 0	0	0 -	0 0	-	0 0 0 -	138 12	150 92.0%	138 12 150 92.0%
Grand Total			58 0 58 100.0%	218 19	9 237 92.0% 317	16 333 95.2%	266 1	0 276 96.4%	26 0 26 100.	0% 113	1 114	99 1%	0 0 0	_ 100	20 219 90.9%	0 0	0 - 4	0	4 100.0%	430 23 45	3 94.9%	77 1 78 98,79	5912 17	5929 99.7%	7620 107 7727 98.6%
			55 100.0%	2.0	237 72.070 317	333 73.270	200	270 70.170	20 100.	213	14		ı v	1))	20 217 70.770	ŭ	, ,	, ,	100.070	1,50 25 45.	, 4., 7, 0	. , , , , , , , , , , , , , , , , , , ,	37.2 17	2727 77.770	107 7727 76.070

Note N.A.: Data not available



F-1



Appendix I-3-1 <u>Accomplishments made by the</u> <u>Sub-programs of the Pilot Projects</u>

Table 1-1-1 Accomplishments of TPP-SP at Tohumeta (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments	,							
1. Organization of the	Organized	- Three (3) beneficiaries' groups were formed with reg	istration of	111 member	s in April 20	08. The groups				
working group	groups	selected the group leaders, co-leaders and core men								
worming group	No of members	regulations defining the roles and responsibilities of t								
	of the groups	of the group.	ne group ieu	aci, core inc	moers and re	gaiar members				
	or the groups	- The group membership was revised in March 2009 in	consideratio	n of existence	e of inactive	members in the				
		groups. The number of the members was 54 member								
		willingness.	is for tinee ((3) groups an	itel leviewing	g the members				
2. Formulation of Work	1) Work plans	- The NGO organized the planning workshop on February	, om; 21, 200	O vvitla monti	singtion of 26	Smannhana fuana				
	, <u>1</u>									
plan	2) Workshops	three (3) groups. A work plan on the sub-program	from March	2008 to Aug	gust 2009 wa	s prepared as a				
	organized	result of the workshop.			13717					
3. Study Tour to Quinta	No. of	- The NGO took a total of 31 members to the nursery r	•		-	•				
Portugal in Aileu (Nursery	participants	Aileu to observe the existing nursery so that they	could deeper	n the unders	tanding of th	ne sub-program				
of PARDTL)		activities.								
4. Installation of water	No. of water	- Three (3) units of water systems or one water system	each for the	group were	installed by	the NGO in the				
system	systems	beginning of the sub-program.								
5. Development of	No. of nurseries	Likewise, a total of three (3) community nurseries were developed or one community nursery was								
nurseries	Size of nurseries	developed for each group. The size of the nursery was larger than it was originally planned. The locations of								
		the nurseries were decided based on the availability of water source.								
6. Hands on training on	No. of training	-Under the sub-program, two (2) packages of train	ing courses.	, namely, tr	aining cours	es on seedling				
seedling production	courses	production and those on tree planting, were organiz	ed so that the	e beneficiar	ies' groups o	could learn and				
	No. of	acquire the techniques necessary for planting trees b			•					
	participants in	courses conducted for techniques related to seedling p	•		0 0	C				
	the training	Training Courses organized between April 2008 and A		or Tochnique	s on Soodline	Production				
	courses	Training courses organized between April 2008 and A								
	(Participation									
	level)	Training on land preparation for nursery	22	25	13	60				
	ic very	Training on seedbed making	28	21	13	62				
		Training on roofing nursery	22	22	19	63				
		Training on fence making	17	13	8	38				
		Training on sowing seeds	4	8	6	18				
		Training on soil filling into poly bags	4	13	6	23				
		Training on watering Total	103	11 113	6 71	23 287				
		Source: Halarae Foundation	103	113	/1	201				

Major Activities	Indicators	Accomplisi	hments					
		- At the same	time, the NGO	provided the	following material	and technical assis	stance to the benefi	iciaries'
				•	gs in their communi			
		8 - 4	•		done by the NGO for	•	a in 2008	
		Period	Type of assistan			TFF-SF at Tollullet	Timing	
		Apr 08 -			of seeds and materials	for seedling production	April-May 08	
		Feb 09	Triaterial assistan		of materials for installa	0.1		
			Technical assista		ment of nurseries		April 08	
					paration for nurseries		May 08	
					on of seed beds		May-June 08	
					of the nurseries		June 08	
				Mixing o	f soils with compost and	l wood chips	June-August 08	
					mixed soils into ploy be	ags	June-August 08	
					of seeds in seedbeds		June-July 08	
					nt of seedlings into poly	bags	June-September 08 August–September	
			Planting of seeds into poly bags					
					, weeding, and maintena		July-December 08	
		Mar 09 –	Material assistan		of seeds and materials	for seedling production	Mar 09	
		Aug 09	Technical assista		nurseries		Mar – Apr 09	
					n of local materials for c	compost making	Mar- Apr 09	
				Sowing s			Mar – Apr 09	
					mixed soils into poly ba	ags	Apr – As of Sep 09	
				•	tation of seedlings		Apr – As of Sep 09	
				Maintena	nce of seedling		May – As of Sep 0)9
			~		7 seedlings in 200		_	_
		raised in the	nurseries (as of	October 200	9). The total number	er of seedlings prod	luced became lower	r as the
			oup members wa			5 1		
					eedlings produced in	2008		
					g- produced in		(Unit: Seedlings)	
		Seedl	ings Alde	ia I (41 HHs)	Aldeia II (41 HHs)	Aldeia III (29 HHs)	Total (111 HHs)	
		Calia	ndra	682	982	982	2,646	1

				(Unit: Seedlings)
Seedlings	Aldeia I (41 HHs)	Aldeia II (41 HHs)	Aldeia III (29 HHs)	Total (111 HHs)
Caliandra	682	982	982	2,646
L19	622	603	782	2,007
Clove	1,056	2,195	1,075	4,326
Teak	781	803	780	2,364
Sandalwood	442	318	272	1,032
Mahogany	1,257	2,083	1,524	4,819
Coconut	232	184	129	545
Breadfruit <2	41	41	29	111
Rambutan <2	82	82	58	222

Major Activities	Indicators	Acc	complishments							
_			Total	5,195	7,29	91	5,631	18,1	17	
				Seedlings p	produced in 2	009 (as c	of October 09)	/II '. (1111	
			Seedlings Al	deia 1 (20 HHs)	Aldeia II (17	HHs)	Aldeia III (17 HH		Seedlings)	
			Longan	150	18		127		459	
			Clove	287	50		390		177	
			Petai	150	15	1	162		463	
			Rambutan	193	14	1	210		544	
			Mahogany	1,310	93:		1,000		245	
			Teak	850	1,080		1,000		930	
			L 19	300	300		300		900	
			Total	3,240	3,28	9	3,189	9,	718	
			Source: Halarae Foundat							
7. Hands on training on	No. of training		addition to the traini	•	• •			•		
tree planting	courses		aining courses on techr			ng as of	August 2009. 1	In total, 253 p	participants	s took
	No. of	pa	art in the training course	es as shown belo	ow.					
	participants in			Support Activit	ies done by t	he NGO 1	for TPP-SP at To	humeta		
	the training		Training courses	Number of participa		level)				
	courses					Aldeia	ı I Aldeia II	Aldeia III	Total	
	(Participation		Training on hole digging fo			10	7	5	22	
	level)		Training on sticking (measu		hole digging	23	18	18	59	
	,		Training on filling soils into			23	23	24	70	
			Training on transportation a		llings	17	20	17	54	
			Training on weeding and m Training on maintenance of		ta.	9	13	6 7	28 20	_
		-	Total	demonstration pro	ıs	92	84	77	253	-
		L	Source: Halarae Foundat	ion)2	04	7.7	233	
8. Development of village	No. of	- Th	e NGO assisted the su		Cohumeta in	the rev	ival of Tara B	andu with for	mulation a	of the
regulations and	workshops /		lage regulations of the							
•			each aldeia were organi			iui uie s	uco councii and	one (1) cons	unamon m	eeting
	meetings	at t	each aideia were organi	zed as shown be	eiow.					
Bandu ceremony	organized									
	Village		M	leetings with the	Working Gro	oup for m	naking Village R	egulations		
	regulations		eting and date	Topic discuss	ed	-		Number of par	ticipants	
			neeting with the suco cound		of village regul		Tara Bandu	21 participants		
			October 2		of a working gr					
		2"	meeting with the council of	on Village regula	tions in the Por	tuguese ei	ra	21 participants		

Major Activities	Indicators	Accomplishments					
•		October 8					
		3 rd meeting with the coun October 13 and 14	cil on Dos and don'	ts on natural resource us	se	21 participants on Oct 13 21 participants on Oct 14	
		4 th meeting with the coun October 21 and 22	Organization		ations	15 participants on Oct 21 15 participants on Oct 22	
		5 th meeting with the coun October 30		draft village regulation	NS	19 participants	
		Consultation meetings with	n local Consultation	and socialization of	the draft village	39 participants from Alde	eia 1
		communities at each alde November 4 - 6	eia on regulations			43 participants from Alde 28 participants from Alde	eia 2
		- Tara Bandu ceremony representatives of Ma villages, on December announced the village	AF, sub-district ad 5, 2008. In the cer	ministrative office, remony, the village	, and the village committee on the	e leaders of the neig e village regulations	hboring
9. Assistance in	No. of	- Though the beneficiar					02 % or
		16,646 seedlings were					
distribution of seedlings	seedlings				or about 1,500 see	ednings were dead or t	aken by
	distributed	someone (the members	· · · · · · · · · · · · · · · · · · ·				
	No. of		Seedlings	distributed to the me	embers in 2008		
	households who	G W	A11 ' T (44 TTTT)	A11 ' TT (44 TTT)	A11 : HI (20 HII	(Unit: Seedlings)	
	received	Seedlings Caliandra	Aldeia I (41 HHs)	Aldeia II (41 HHs) 845	Aldeia III (29 HHs		
	seedlings	L19	660 601	622	612	2,364 1,835	****
		Clove	1,045	2,140	1,051	4,236	
		Teak	665	688	711	2,064	
		Sandalwood	360	199	248	807	
		Mahogany	1,230	1,993	1,290	4,513	
		Coconut	192	175	129	496	****
		Breadfruit	37	36	30	103	
		Rambutan	56	75	54	185	****
		Total	4,873	6,785	4,988	16,646	1
		Source: Halarae Fou	ndation				_
10. Validation of	No. of	- All the plantations pla		ciaries' groups were	e surveyed by the	NGO between Febru	ary and
plantations developed and	plantations /	August 2009. A total of	•	<u> </u>	• •		•
survey on survival	seedlings	confirmed alive in the					-0
sarvey on sarvivar	secumgs	commised anye in the	bui voy.				

Major Activities	Indicators	Accomplishments						
conditions	validated	Seedling	s confirmed al	ive in the plai	ntations devel	oped from No	ov 08 to Feb 09	•
	Survival rate			-			(Unit: Seed)	lings)
		Seedlings	Alde	eia1	Alde	eia 2	Aldeia	a Ai 3
			Seedlings	Seedlings	Seedlings	Seedlings	Seedlings	Seedlings
			planted	alive	planted	alive	planted	alive
		No. of plots	48 p	lots	46 p	lots	44 p	lots
		Caliandra	660	629	845	826	859	835
		L19	601	584	622	611	612	591
		Clove	1,045	834	2,140	1,913	1,051	881
		Teak	665	649	688	635	711	701
		Sandalwood	360	193	199	150	248	142
		Mahogany	1,230	1,125	1,993	1,838	1,290	1,196
		Coconut	192	189	175	169	129	125
		Breadfruit <2	40	37	41	36	30	30
		Rambutan <2	80	56	82	75	58	54
		Total	4,873	4,296	6,785	6,271	4,988	4,557
		Ave Survival rate	88.2	2 %	92.4	1 %	91.4	%
		Source: Halarae Found	lation					

Table 1-1-2 Accomplishments of TPP-SP at Tohumeta (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments	. ,	pa. 04 Wit		20200	346	<u></u>		
Objective	No. of tree	- As shown in Table 1	-1 a total of	f 138 planta	tions with 16	6 646 seedlir	igs were dev	eloped by th	e members of	
1. Expands the areas with	planted and	the beneficiaries' gre		•			•			
new seedlings in the	survive in suco	seedlings planted we		1 0	_			_		
village	as of Aug 09	the total areas with li			•	_	•		,	
Outputs	Level of			_				bers were as	ssessed by the	
1. Capacities of local	understandings	questionnaire survey							Ĭ	
communities to produce	and application				plication of t					
and plant seedlings are	of the	Level of understanding of the techniques	Compost making	Land preparation	Nursery establish.	Soil prep and soil	Seed preparation	Sawing seeds in seed	Transplant.	
enhanced.	techniques	•	making	preparation		filling	preparation	beds		
		Level of understanding (1-5) <1	3.7	3.6	3.5 (n=11)	4.1	3.2	3.8	4.2	
		Level of application (1-3)	2.3	2.1	2.1	2.4	2.0	2.1	2.5	
		Level of application of the techniques	Watering & weeding	Designing	Hole digging and refilling	Planting of seedlings	Weeding	Shading	Conventional irrigation	
		Level of understanding (1-5) <1	3.7	3.1	4.2	4.1	3.6	3.0	3.2	
		Level of application (1-3) 2.2 2.0 2.5 2.5 2.1 1.8 2.0								
	Level of application (1-3) 2.2 2.0 2.5 2.5 2.1 1.8 2.0 Note: The number of samples is 20, unless specified with "n.". <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand. <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied. Source: JICA Study Team (2009) - As shown in the tables above, the members considered that they were able to understand almost all the techniques except "seed preparation," "designing," and "shading". Likewise, the members judged that they									
2. Local regulations is properly implemented and maintained by the communities	Local regulations agreed on No. of cases / offences after Tara Bandu	-The local regulations in writing were developed by the members of the suco council in a participatory manner in December 2008. The regulations comprise of 11 chapters covering not only the rules on natural resource management but also those related to social norms in the village. -According to the members of the sub-program, the incidence of wildfire, cases of illegal activities (e.g., illegal cutting, steal of farm produce) and cases of violence in the village have been reduced since Tara Bandu ceremony. -However, the village committee has organized only two monitoring meetings since December 2008 though								

		Þ	>
١	(ゴ	
۲	ζ	J	
	L	ı	_
	•	ı	
	(١
	L	ı	
	-	ī	
	•	_	J

Objectives	Indicators	Accomplishments
		the monthly monitoring meeting was supposed to be organized every month as part of the activities for
		implementation of the village regulations. The village committee should periodically monitor the
		implementation of the regulations through the monthly monitoring meeting.
		- The level of the members' understandings about the village regulations and the monitoring system were
		also evaluated. The understanding level on the village regulations was rated rather high (4.2 points in 5
		rating), while that on the monitoring system was evaluated fair (3.2 in the same rating).

Table 1-2-1 Accomplishments of HG-SP at Tohumeta (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments				
1. Organization of the	Organized	- Three (3) beneficiaries' groups were formed with registr	ration of 89 1	members in l	February 200	8. The groups
working group	groups	selected the group leaders, co-leaders and core memb	ers among t	he members	and develor	ped the group
	No of members	regulations defining the roles and responsibilities of the	e group leade	er, core mem	bers and reg	gular members
	of the groups	of the group.		,	_	,
	3 1 7	- The group membership was revised in March 2009 in co	onsideration	of existence	of inactive m	nembers in the
		groups. The number of the members was reduced to 42				
		members' willingness.	- 111011100101	01 01100 (0)	groups area	io vio viing uno
2. Formulation of Work	1) Work plans	- The NGO organized the planning workshop on Februar	ry 22 2008 y	with particip	ation of 25 r	members from
plan	2) Workshops	three (3) groups. A work plan on the sub-program from				
piun	organized	result of the workshop.	om waten 2	ooo to maga	15t 2007 Was	prepared as a
3. Study Tour to the	No. of	- The NGO took a total of 19 members to sucos Lequitur	ra and Sarin	in Aileu wh	nich were sur	pnorted by the
project site of USAID	participants	USAID project in the production and marketing of vege				. 1
project site of OSAID	participants	tour observed farming practices and techniques used				•
		method. They were able to realize that they still need	ied to impro	ve men fam	ing practice	s in vegetable
4 11 ('C' (' 1	NI C	farming to produce quality vegetables.	C (1 1		1	, 1.1 C '
4. Identification and	No. of	- Each beneficiaries' group identified a potential site				
Development of	demonstration	considering the following criteria: i) availability of w				
demonstration plots	plots	watering is available.), ii) accessibility (The site is e	-			
		concurrence of land owner (A land owner agrees with the				
5. Hands on training on	No. of training	-Under the sub-program, a series of training courses	_	_	_	
seedling production	courses	beneficiaries' groups could acquire proper techniques			• •	of vegetables.
	No. of	The following training courses had been organized from	April 2008 t	to August 20	09.	
	participants in	Training Courses on Veg	getable Produ	ıction		
	the training	Training courses			ts (Participatio	
	courses	m · · ·	Aldeia I	Aldeia II	Aldeia III	Total
	(Participation	Training on compost making	9	11	11	29
	level)	Training on land preparation for vegetable farm, making a seedbed, and sowing vegetable seeds	17	16	18	51
		Training on transplanting vegetable seedlings into pots	7	7	4	18
		Training on application of compost and transplanting seedlings	5	9	9	23
		Training on preparation of organic pesticide	3	5	9	17
		Training on application of organic pesticide control	4	4	9	17
		Training on harvest of vegetable and collection of seeds	8	5	8	21
		Training on making of botanic pesticide and liquid fertilizer	11	7	11	29

Major Activities	Indicators	Accomplishr	nents									
		Total				64	64	79	207			
		Source: Halar	ae Foundation						_			
			he members' pa									
			ab-programs. One of the reasons for the limited participation is that many members just expected egetable seeds from the sub-program rather than technical training since they were used to such kind of trangement and/or they thought that they already had enough knowledge of vegetable farming. In fact, the significant number of the members seemed to have less interest in any training. Nevertheless,									
			•					•				
			who participated									
		the training co	urses, particularly	y techniques	on transplanting	g seedlings	into banana	leave pots a	and use of natura			
		pesticide.										
7. Technical Assistance in	Vegetable	- Simultaneous	ly with hands-or	n training, tl	he NGO provi	ded the fol	lowing assi	stance to tl	ne beneficiaries			
Vegetable Production	production	groups as we	ll as individual	members so	that they cou	ıld replicate	the techni	ques that t	hey had learne			
		through the tra	hrough the training courses.									
			Support Activities done by the NGO for TPP-SP at Tohumeta in 2008									
		Period	Type of assistance	Activities				Timing				
			Material assistance	Provision	of vegetable seeds	3		June 08				
		Feb 09			of farm tools			June 08				
			Technical assistance		of technical ass	istance direct	ly to individ	ual June – 0	Oct 08			
			to members of demand	on members								
		Mar 09 –	Material assistance	Provision	of seeds			May 09				
		Aug 09	Technical assistance	ce Provision	of technical ass	istance direct	ly to individ					
			to members	members								
		- From June 200	8 to February 20	09, the memb	pers had produc	ed seven typ	es of vegeta	bles as show	vn below.			
		Average	Production and I	Estimated Inc	come from Majo	or Vegetable	s in FY 2008	(from Jun (08-Feb 09)			
			No. of	Total	Volume for	Volume	Average	Sales	Total			
		Vegetable		Production	Consumption	for Sale	price	(income)	Effect*			
		36 1	harvested		_		_		'			
		Mustard Pechai	39 40	34 bundles 52 units	18 bundles 33 units	16 bundles 19 units	\$0.25 \$0.25	\$4.0 \$5.0	\$8.5 \$13.0			
		lettuce	35	30 bundles	20 bundles	10 bundles	\$0.23	\$2.0	\$6.0			
		Cabbage	10	48 units	46 units	2 units	\$0.5	\$1.0	\$24.0			
		Cowpea	54	25 bundles	10 bundles	15 bundles	\$0.25	\$3.8	\$6.3			
		Tomato	28	3.6 baskets	1.5 basket	2.1 baskets	\$ 8.5	\$17.8	\$30.6			
		Eggplant	27	3.8 baskets	2.1 basket	1.7 baskets	\$ 3.1	\$ 5.4	\$11.8			

Major Activities	Indicators	Accomplis	hments							
					n x average price	. \$				
			e: JICA Study T							
		- The following	ng table shov	vs the veget	able production	n from May to	August 2009	θ.		
		Avera	age Productio	on and Estir	nated Income	from Major Veg	jetables in F	Y 2009 (fron	n May - Aug	09)
		Vegetables	No. of Members planted	No. of Members harvested	Total Production	Volume for Consumption	Volume for Sale	Average price	Sales (income)	Total Effect*
		Cabbage	24	6	18 units	12 units	2 units	\$0.25	\$0.5	\$3.5
		Mustard	40	22	44 bundles	10 bundles	34 bundles	\$0.25	\$2.5	\$11.0
		Tomato	35	3	0.5 basket	0.5 basket	0.5 basket	\$5.0	\$1.0	\$2.5
		Kangkung	10	4	14 bundles	7 bundles	7 bundles	n.a.	n.a.	n.a.
		Long bean	54	0	-	-	-	-	-	_
		Carrot	28	0	-	-	-	-	-	-
		Pechai	27	2	38 bundles	0 bundles	38 bundles	\$0.25	\$ 9.5	\$9.5
8. Assistance in procurement of vegetable seedlings	Request letter prepared Vegetable seeds procured	- In FY 200 US\$ 32.0/fa - As most of the question not exactly - In order to the pilot pr	wegetables are tudy Team (2008), the members and save the vegetable anaire survey evaluated in a enable the boject, the NO	still growing. pers who he US\$ 38.2 es planted in August 2 a numeric meneficiaries GO helped esult, they we	ad grown veg /family from to the farms we 2009, the over- nanner. s' groups to p them to prepa vere able to ge	getables using the production of the still in the gall effect generated are a request left five (5) typesquested to / obtains	of all the veg growing stag ated by the sole seeds by tter to MAI s of vegetab	etables exce e when the sub-program themselves F for obtain tle seeds fro	ept cabbage ¹ Study Team activities i s even after ing seed su	n conducted n 2009 was the end of pport from
	procured		Se	eds requeste			Seeds obtaine		7	
			Type of veg		Volume of seed		vegetable	Volume		
			Cabbage	,cubic	0.1 kg	Green mu		0.21		
			Mustard		0.2 kg	Long bear		1.4		
			Kangkung		10.0 kg	Kangkung		2.8		
			Long beans		10.0 kg	Bitter mel		0.05		

Total sum of the sales from the vegetables expect cabbage is estimated at US\$38.0. Hence, the gross earnings from the same vegetables are calculated by deducing the production cost (cost of seeds) from the total sum. (US\$ 38.0 - US\$ 6.0 = US\$ 32.0). On the other hand, the total savings are estimated at US\$ 38.3 by the following formula: US 76.2 (the sum of the total values from the vegetables except cabbage) – US 38.0 (the sum of the total sales from the same vegetables) = US\$ 38.2.

Major Activities	Indicators	Accomplish	ments				
		Eg	gg plant	2.0 kg	Red kangkung	3.0 kg	
		To	omato	0.2 kg			
		Cł	hili	0.2 kg			
		Ca	arrot	2.0 kg			
		Le	ettuce	2.0 kg			
		So	ource: Halarae Foundatio	n			
		obtained were		what they propo	ne volume and types of osed. Hence, the NGO ose given by MAF.		

Table 1-2-2 Accomplishments of HG-SP (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments								
Objective	Volume of	- As shown in Table 1-2-1	, the members	of the beneficiar	ries' groups of	the sub-program	have produced			
1. Living conditions of	vegetables		en (7) types of vegetables during the sub-program. The average earning from the sales of vegetable							
households who	consumed		aced by the sub-program between June 2008 and February 2009 were estimated to be ove							
participate in the	Income	US\$ 32/family. In addition								
			m, annost the sc	une amount of v	egetables was e	stillated to be c	onsumed by the			
sub-program is improved.	generated by				. 2000 1	• .				
	sales of			•		•	•			
	vegetables	activities in Tohumeta wa	as estimated at U	JS\$ 211/famly/y	ear. Hence, it is	s estimated that	the sub-program			
		was able to generate about	t 33 % (US\$ 70/:	family/yr) of the	annual farm inc	ome in Tohumet	a.			
Outputs	Level of	- The levels of understandi	ngs and applicat	tion of the techn	iques among the	e members were	assessed by the			
1. Capacities of	understandings		•		1		•			
participating members to	and application	1 1	questionnaire survey conducted in August 2009.							
produce vegetables is	of the		Compost making	Land preparation	Seedling	Transplanting of	Transplanting of			
enhanced.	techniques	techniques			production.	seedlings to pots	seedlings to farm			
emanced.	techniques	Level of understanding (1-5) <1	3.5	3.3	3.4	3.8	3.9			
		Level of application (1-3) <2	2.0	2.4	2.1	2.1	2.3			
		Level of application of the techniques	Maintenance of farm	Natural pesticide application	Liquid fertilizer application.	Harvesting & seed collection	Preparation of request letter			
		Level of understanding (1-5) <1	3.3	3.0	3.6	3.1	2.8			
		Level of application (1-3) <2	2.1	2.4	2.0	2.0	1.6			
		Note:								
		The number of samples is 20,								
		<1: The level of understandi	-		-	y well understood,	4=well understood,			
		3=fairly understood, 2=le	ss understood, and 1	l-did not understand						

Objectives	Indicators	Accomplishments
		<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and
		3=fully applied.
		Source: JICA Study Team (2009)
		- As shown in the table above, the members consider that they have well to fairly understood all the farming techniques introduced by the sub-program. But some of the techniques, such as natural pesticide application and harvesting and seed collection, are given rather low rates maybe because they might not be able to fully acquire such techniques. The members also judged that they could apply all the techniques, though the rates given were not always high.
		- The members gave rather low rate to "request letter to MAF". It is therefore considered that it may be
		difficult for the members to coordinate with MAF without support from the NGO.

Table 2-1-1. Accomplishments of TPP-SP at Samalete (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishmen			
1. Organization of the	Organized	- Six beneficiaries'	groups were formed	d with registration of 228 members in the village in Fe	bruary 2008. The
working group	groups	groups selected ti	he group leaders, c	co-leaders and core members among the members ar	nd developed the
	No of members	group regulations	defining the roles	and responsibilities of the group leader, core mem	bers and regular
	of the groups	members of the gr	_		C
	3 1 7	_	*	n March 2009 in consideration of existence of inactive	e members in the
		0 1	*	s was reduced to 184 members for six (6) groups after	
		members' willing		was reduced to 101 memoris for shi (o) groups an	er reviewing the
2. Formulation of Work	1) Work plans			orkshop on February 19 and 20, 2008 with participation	n of 77 members
plan	2) Workshops	_	1 0	he sub-program from March 2008 to August 2009 w	
F	organized	result of the work			PF
3. Study Tour to Suco	No. of	- The NGO took 37	members to Suco I	Mertutu where PADTL has assisted in the developmen	t of a community
Mertutu in Aileu	participants in	nursery so that the	e members could de	epen the understanding of the sub-program activities.	•
	the tour	,			
4. Installation of water	No. of water	- The NGO installe	d six (6) units of w	ater system or one water system each for the group in	the beginning of
system	systems	the sub-program.			
5. Development of	No. of nurseries	- Likewise, a total	of six (6) comm	unity nurseries were developed or one (1) commun	nity nursery was
nurseries	Size of nurseries	developed for eac	h group. The size of	of the nursery was larger than it was originally planned	. The locations of
		the nurseries were	decided based on the	availability of water source.	
6. Assistance to the groups	Assistant	Under the sub-prog	gram, two (2) types	of assistance, material assistance and technical assistar	nce were made so
in seedling production	activities made	that the beneficiari	es' groups could pr	roduce seedlings by themselves. The supporting activ	ities done by the
	No. of seedlings	NGO for seedling p	production from Ma	rch 2008 to August 2009 are summarized below.	
	produced		Support A	Activities done by the NGO for TPP-SP at Samalete	
		Year	Type of assistance	Activities	Timing
		March 08 - Feb 09	Material assistance	Procurement and provision of seeds and materials for nursery	April-May
				development	M I
				Procurement and provision of materials for rehabilitation of watering systems	May-June
			Technical assistance	Establishment of nurseries	May-June
				Land preparation for nurseries	May-July
				Preparation of seed beds	May-July
				Roofing of the nurseries	June-July
				Mixing of soils with compost and wood chips Filling of mixed soils into ploy bags	June-September June-September
				Sowing of seeds in seedbeds	June-September June-September
				Transplant of seedlings in seedbeds into poly bags	June-September
				Transplant of seedlings in poly bags into other poly bags	September-Octob

Major Activities	Indicators	Accomplishme	nts		
				Watering, weeding, and mulching	er
					July 08-
					February 09
		March - Aug 09	Material assistance	Procurement and provision of seeds and materials for nursery	Feb – June
				development	
				Procurement and provision of materials for rehabilitation of	Mar - Apr
				watering systems	
			Technical assistance	Fixing nurseries including land preparation for seedbeds	April
				Collection of materials for seedbed preparation	March – August
				Sowing seeds in seedbeds	March – August
				Filling of mixed soils into ploy bags	April – August
				Maintenance of seedlings	April -
					September

The beneficiaries' groups produced 59,902 seedlings in 2008, while a total of 31,742 seedlings are being raised in the nurseries (as of October 2009). As the number of the members was reduced, the number of seedlings being produced in 2009 is lower than that of 2008.

Seedlings produced in 2008

(Unit: Seedlings)

Seedlings	Aldeia Lo	eburema	Aldeia l	Eraulun		i urlalan
	Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)
Petai	63	60	58	58	52	75
Albizia	776	191	350	305	168	291
Lamtoro L19	292	159	229	230	162	345
Caliandra	306	359	462	205	154	294
Rambutan	34	35	19	31	26	40
Mahogany	150	85	154	143	30	140
Clove	34	319	0	0	21	0
Jack fruits	246	213	275	316	303	252
Orange	96	170	0	260	211	4
Sandalwood	109	37	32	110	263	154
Tephorosia	510	170	258	619	867	471
Grevillea	89	64	136	77	51	80
Coffee	7,669	7,935	8,315	7,317	6,737	8,635
Total	10,374	9,797	10,288	9,617	9,045	10,781

Source: Halarae Foundation

Major Activities	Indicators	Accomplishments							
•		•		Seedling	s produced in	2009			
				3			(Ur	nit: Seedlings)	
		Seedlings	Aldeia L	eburema	Aldeia E	Eraulun		i urlalan	
		J	Naro (32	Lebsome	Haburas	Hadia (31	Morisfoun	Halibur (24	
			HHs)	(33 HHs)	(37 HHs)	HHs)	(27 HHs)	HHs)	
		Longan	134	140	161	193	193	138	
		Clove	700	366	283	430	286	305	
		Petai	428	304	364	339	300	238	
		Rambutan	211	208	316	329	210	230	
		Mahogany	2,185	1,674	3,023	2,107	1,631	1,355	
		Grivilia	42	73	87		28	5	
		Coffee	1,820	2,928	2,150	1,950	2,009	1,869	
		Total	5,520	5,693	6,384	5,348	4,657	4,140	
		Source: Halarae Four							
7. Hands on training on	No. of training	- In addition to technica							
tree planting	courses	courses on techniques i	related to pla	nting trees for	the regular r	nembers. As	of August 20	009, eight (8)	training
	No. of	courses were organized	with the par	ticipation of 8	355 members	in total.			
	participants in	C	•	1					
	the training	Training courses			Nur	nber of participa	ants (Participation	on level)	
	courses				Leburema		Aiulalan	Total	
	(Participation	Training on compo	st making		57	72	62	191	
	level)	Training on land pr	eparation, stick	ng, hole digging		28	48	131	
	level)	Training on filling			37	55	48	140	
		Training on hauling		edlings	32	19	19	70	
		Training on weeding			20	17	17	54	
		Follow-up training			33	55	21	109	
		Training on mainte			21	29	31	81	
		Training on prepara	ation of natural	pesticide	29	31	19	79	
		Total			284	306	265	855	
		Source: Halarae Four							
8. Development of village		- The NGO assisted the							
regulations and	workshops /	revival of Tara Bandu	. Four (4) m	eetings with	the council	of suco and	one consulta	tion meeting	g at each
Organization of Tara	meetings	aldeia were organized a	as shown belo	ow.					
Bandu ceremony	organized		Mootings v	vith the Worki	na Group for i	making Villag	e Pegulations		
1	Village	Meeting and date		discussed	ing Group for i	making villag		of participants	
	regulations	1 st meeting with council m		lization of villag	e regulations and	d Tara Bandu		oants on Oct 15	
	10guiations	on October 15 and 16		ization of a wor		a Tara Banda		pants on Oct 16	
				tives of village r		Γara Bandu	particip	222 000 10	
				ge regulations in					

Major Activities	Indicators	Accomplishments								
		members on October 23		s and don'ts on nat		e	26 particip	•		
		3 rd meeting with members on October 27 and	d 28 A sy	ganization of a villa ystem of implement	nting the regulat	ions		pants on Oct 27 pants on Oct 28		
			Fine	nagement of budge es and penalties						
		members on November 5 ar	nd 6	view of the draft vi		S	33 particip	pants		
		Consultation meetings communities as aldeia le November 10 and 12		draft village regula	ations		35 particip	pants from Ai Ul pants from Eraul pants from Lebre	lun	
9. Assistance in distribution of seedlings	No. of seedlings distributed No. of households who	of Coffee and Industr Administrator of Rail neighboring villages regulations announced anyone who live in or the representatives of N - In July 2009, Tara Ban neighboring sucos abou - Though the beneficiar seedlings were distribut (the members or non-ne	ara Bandu ceremony was held with the participation of Minister of MAF, Director of National Directorate of Coffee and Industrial Crops, Officer-in-charge (OIC) of National Directorate of Forestry, Sub-district administrator of Railaco, Resident Representative of JICA TL Office and the representatives of the eighboring villages on November 25, 2008. In the ceremony, the village committee on the village and supplied that the village would implement the regulations as the by-law of the village and supplied to representatives of NDF, Sub-district Administrative Office, and suco Samalete. In July 2009, Tara Bandu ceremony was re-organized to remind local communities in Samalete as well as the eighboring sucos about the village regulations. Though the beneficiaries' groups were able to produce 59,902 seedlings in 2008, about 90 % or 55,200 seedlings were distributed to 190 members. The rest or about 4,000 seedlings were dead or taken by someon the members or non-members) without notice. Seedlings distributed to the members in 2008							
	received	Seedlings	Aldeia	Leburema	Aldeia	Eraulun		nit: Seedlings) Ai urlalan]	
	seedlings		Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)		
		Petai	51	0	62	58	29	60		
		Albizia	693	191	329	266	153	264	_	
		Lamtoro L19	292	159	219	250	177	345		
		Caliandra	270	307	467	199	152	294		
		Rambutan Mahogany	26 116	30 85	17 124	28 143	25 30	26 120		
		Clove	32	290	0	0	11	0		
		Jack fruits	242	175	155	316	290	242	-	
		Orange	93	160	0	234	116	0	•	
		Sandalwood	31	28	18	86	58	4		

Major Activities	Indicators	Acco	mplishments						
			Tephorosia	473	170	252	611	423	471
			Grevillea	59	64	93	64	28	60
			Coffee	7,669	7,765	8,265	6,900	5,989	7,150
			Total	9,983	9,484	10,001	9,155	7,481	9,096
			Source: Halarae Four	ndation					_
9. Validation of	No. of	Out	of 55,200 seedling	gs, 91.3 % or 5	0,428 seedlii	ngs planted b	y the member	ers were surv	veyed by the
plantations developed and	plantations /		veen February and						
survey on survival	seedlings		Seedling	s confirmed su	rvive in the pl	antations dev	eloped from N	lov 08 to Feb	09
conditions	validated			•	•		•	(Unit: Seedl	
	Survival rate		Seedlings	Aldeia L	eburema	Aldeia l	Eraulun	Aldeia A	i urlalan
	Survivariate			Naro (30	Lebsome	Haburas	Hadia (31	Morisfoun	Halibur (37
				HHs)	(32 HHs)	(35 HHs)	HHs)	(29 HHs)	HHs)
			No. of plots	59 plots	60 plots	57 plots	44 plots	47 plots	65 plots
			Petai	48	42	68	62	32	58
			Albizia	661	163	325	274	157	218

Source: Halarae Foundation

Seedlings	Aldela Le	eburema	Aldeia i	=rauiun	Aldeia Ai uriaian		
	Naro (30 HHs)	Lebsome (32 HHs)	Haburas (35 HHs)	Hadia (31 HHs)	Morisfoun (29 HHs)	Halibur (37 HHs)	
No. of plots	59 plots	60 plots	57 plots	44 plots	47 plots	65 plots	
Petai	48	42	68	62	32	58	
Albizia	661	163	325	274	157	218	
Lamtoro L19	260	169	218	243	198	317	
Caliandra	232	311	469	205	167	266	
Rambutan	23	31	18	27	27	26	
Mahogany	101	84	129	151	39	113	
Clove	30	283	0	0	11	0	
Jack fruits	232	149	158	313	316	199	
Orange	90	159	10	235	127	0	
Sandalwood	31	29	0	82	59	4	
Tephorosia	446	162	248	597	541	430	
Grevillea	56	64	113	66	33	77	
Coffee	7,200	7,365	7,575	6,256	4,269	5,912	
Total	9,410	9,011	9,331	8,511	5,976	7,620	
Ave Survival rate	99.2%	98.9%	98.7%	99.6%	98.0%	98.6%	

Table 2-1-2 Accomplishments of TPP-SP at Samalete (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments							
Objective	No. of tree	- As shown in Table 2	2 1 1 a total	of 55 200 a	saadlings wa	ro distribute	d to the ma	mbore of the	sub program
1. Expands the areas with	planted and	As of August 2009.			_				1 0
new seedlings in the	survive in suco	Assuming that seed			0 /				
village	as of Aug 09	would be estimated a	•		a distance ()1	i, tile total a	icas with iiv	ing seedings
	Level of	- The levels of unders			n of the tech	migues emo	na tha mam	hara wara as	gaggad by the
Outputs 1. Capacities of local	understandings	questionnaire survey				iniques anio	ing the mem	ibers were as	ssessed by the
communities to produce	and application	questionnaire survey	conducted i	III August 20	009.				
and plant seedlings are	of the	Level of understanding	Compost	Land	Nursery	Soil prep	Seed	Sawing	Transplant.
enhanced.	techniques	of the techniques	making	preparation	establish.	and soil	preparation	seeds in seed	11umspaule
cimaneed.	teeninques	Level of understanding				filling	3.4	beds	
		(1-5) <1	4.0	3.8	3.9	4.2	(n=19)	3.9	4.2
		Level of application (1-3)	2.5	2.2	2.4	2.6	2.2	2.1	2.2
		Level of application of the techniques	Watering & weeding	Designing	Hole digging and refilling	Planting of seedlings	Weeding	Shading	Conventional irrigation
		Level of understanding (1-5) <1	4.3	3.3	4.1	4.2	4.1	4.2	4.1
		Level of application (1-3) <2 Note:	2.8	1.8	2.9	2.7	2.6	2.2 (n=19)	2.25
		The number of samples <1: The level of unde 3=fairly understoo <2: The level of appli 3=fully applied. Source: JICA Study Tea - As shown in the trechniques except sea considered fairly un fully apply all the tea - The questionnaire sechniques on seedlibeneficiaries' groups Study Team judges produce seedlings.	arstanding was d, 2=less under cation was evant (2009) able above, and preparation derstood by chniques excurvey in Aung productions. Based on the standard control of the st	the member on and designated the member on and designated the member on, since teed the physical	ers consider gning. Techrers. Likewise ing". did not covernical assistance or accomplishing and accomplishing and accomplishing and accomplishing accomplish	that they niques on see, the member the level ance was ments made	have well used preparations judge the of understanting provides the benefit at the control of th	pplied, 2=particular policy and designat they could andings/applied to core multicular growth and policy and the core multicular growth and policy and pol	ally applied, and almost all the gning are also departially or ication of the embers of the ups, the JICA
2. Local regulations is	Local	- The local regulation	s in writing	were develo	ped by the c	ouncil mem	bers of succ	in a particip	oatory manner

β	
ģ	
Ė	
φ	
1	
19	

Objectives	Indicators	Accomplishments
properly implemented and	regulations	in November 2008. The regulations comprise of 11 chapters covering not only the rules on natural resource
maintained by the	agreed on	management but also those on social norms in the village.
communities	No. of cases /	- According to the members of the sub-program, the incidence of wildfire, cases of illegal activities (e.g.,
	offences after	illegal cutting, steal of farm produce) and cases of violence in the village have been reduced since Tara
	Tara Bandu	Bandu ceremony in November 2009.
		- However, the village committee have just organized two (2) monitoring meetings so far though the monthly
		monitoring meeting was supposed to be organized every month by the committee as part of the activities
		for implementation of the village regulations. The village committee should periodically monitor the
		implementation of the regulations through the monthly monitoring meeting.

Table 2-2-1. Accomplishments of CPR-SP at Samalete (Outputs generated by the Activities)

			Accomplishments					
1	rganized	-Local communities in Samalete decided the same beneficiaries' groups would work for Tree Planting						
working group gro	roups	Promotion Sub-program (TPP-SP) and Coffee Plantation Rehabilitation Sub-program (CPR-SP). The total						
	o of members	membership of the groups was 228 when they were formed in February 2008 and were revised to 184						
	the groups	members in March 2009.		, J				
	Si Sups	- As described in the grid of TPP-SP, the groups selected	ed the group	leaders co-	leaders and	core members		
		among the members and developed the group regular	•					
		group leader, core members and regular members of the		g the roles a	and responsi	offices of the		
2 Francisco of West 1)	XX71 1			2000:41	4:	6.57		
I -	Work plans	- The NGO organized the planning workshop on Februar						
plan 2)	1	from six groups. A work plan on the sub-program fr	om March 20	008 to Augu	st 2009 was	prepared as a		
	ganized	result of the workshop.						
3. Study Tour to Suco No	o. of	-The NGO took 37 members to suco Mertutu in Erm						
Mertutu in Ermera par	rticipants in	rehabilitation of aged coffee plantations, to observe re	ejuvenated co	offee plantat	tions so that	the members		
the	e tour	could have a clear picture of the sub-program activities.						
4. Identification and No.	o. of	-One (1) demonstration plot each for aldeia or three (3	3) demonstra	tion plots in	total were	developed for		
Development of de	emonstration	demonstration of techniques on rejuvenation of aged co						
*	ots	I so if the same of the same o		8				
	o. of training	-Under the sub-program, a series of hands-on training c	ourses on im	provement o	of coffee prod	ductivity were		
	ourses	organized to enable the members of the beneficiaries'						
No.		coffee plantations. The following training courses had b						
	erticipants in	Training Courses on Coffee Plantati	•	•	•	Sust 2007.		
the	-	Training courses			s (Participation	level)		
	U	Training courses	Leburema	Eraulun	Aiulalan	Total		
	ourses	Training on compost making (part of training for TPP-SP)	57	72	63	192		
	Participation	Training on identification of demonstration plots	37	43	25	105		
lev	vel)	Training on rejuvenation of aged coffee plantation (1)	38	45	27	110		
		Training on rejuvenation of aged coffee plantation (2)	31	28	20	79		
		Training on pruning of young coffee trees (1)	28	33	17	78		
		Training on pruning of young coffee trees (2)	37	42	26	105		
		Training on seed selection	26	33	22	81		
		Training on preparation of natural pesticide*	29	31	26	86		
		Training on application of natural pesticide*	32 20	25 23	28 15	85 58		
		Training on pruning of productive coffee trees Training on planting new seedlings*	32	19	19	70		
		Total	367	394	288	1,049		
I I		Note*: The trainings were conducted both for TPP-SP and CPR-S		377	200	1,047		

		- As shown in table the total members techniques introdu pruning of young rejuvenation and p	Source: Halarae Foundation As shown in table above, the level of members' participation in training course ranges from 30~50 % of the total members on average. In general, the members seem to have doubted the effectiveness of the techniques introduced by the sub-program, particularly those related to rejuvenation of aged coffee and pruning of young or productive trees. However, many of them are appreciating the effectiveness of rejuvenation and pruning techniques as they see the rejuvenated coffee trees flowering. The NGO supported the individual members of the beneficiaries' groups in the replication of the					
6. Assistance to the groups	Assistant				•			
in coffee production	activities made	techniques that the	ney had learned ir	the demonstration plots by providing farm	tools and technical			
	No. of	assistance to the m	nembers.					
	households who		Support Ac	tivities done by the NGO for CPR-SP at Samalete				
	applied the	Year	Type of assistance	Activities	Timing			
	techniques	Oct 08 - Apr 09	Technical guidance	Application of rejuvenation and pruning	Sept-Oct			
	•	May/June 09	Technical assistance	Post harvest	May/June			
		-As of August 2009, only two members applied the rejuvenation practice and one member replicated pruning techniques in their own farms. Although almost all the members are still in a wait-and-see attitude and only few members actually have practiced the techniques, many of them seem to have been realizing the effect of the rejuvenation and pruning as they see the results of the demonstration plots.						

Table 2-2-2 Accomplishments of CPR-SP at Samalete (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments							
<u>Objective</u>	No. of area of	- As shown in Table 2-2-1, or	- As shown in Table 2-2-1, only two members have applied the rejuvenation technique in their own farms,						
1. The area of rehabilitated	rehabilitated	while the pruning technique	was replicated by o	one member as of A	August 2009. To con	clude, the objective			
coffee plantation expands	coffee	of the sub-program has not	been achieved dur	ing the project. It	is judged that the p	project period of 20			
in Samalete	plantation	months was too short to gain	the members' appre	eciation and change	their practices.				
Outputs	Level of	- The levels of understandings	s and application of	f the techniques am	ong the members w	vere assessed by the			
1. Capacities of local	understandings	questionnaire survey conduc	ted in August 2009.						
communities to	and application	Leve	l of Understanding a	and Application of Te	echniques introduced	d			
rehabilitate aged coffee	of the	Level of understanding of the	Compost making	Rejuvenation	Pruning of coffee	Planting of coffee			
plantations is enhanced.	techniques	techniques		Rejuvenation	trees	seedlings			
•	•	Level of understanding (1-5) <1	3.9	3.9	4.1 (n=17)	4.0			
		Level of application (1-3) <2	2.3	2.1	2.1	2.7			
		Level of application of the	Maintenance of	Harvesting of	Processing of coffee	Seed selection			
		techniques	plantation	coffee cherries	cherries	Seed selection			
		Level of understanding (1-5) <1	4.1	4.1 (n=17)	3.7	4.1			
		Level of application (1-3) <2	2.5	2.0	2.1	2.2			

Ą	
p -]	
Ξ	
÷	
22	

Objectives	Indicators	Accomplishments
		Note:
		The number of samples is 18, unless specified with "n.".
		<1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=well understood, 3=fairly understood, 2=less understood, and 1=did not understand.
		<2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=partially applied, and 3=fully applied.
		Source: JICA Study Team (2009)
		- As shown in the tables above, the members consider that they have well understood all the techniques except "processing of coffee cherries" and they could fully to partially apply the techniques in their own
		farms.
		-Many members are likely afraid of losing their opportunity to earn cash income by cutting coffee trunk or
		branches. It is not easy for the members to make a trial in their own farms without having any assurance
		that they can get the same amount of harvest or more in a short period of time after cutting.

Table 3-1-1 Accomplishments of PULP-SP at Faturasa (Outputs generated by the Activities)

		JLP-SP at Faturasa (Outputs generated by the Activ	rities)				
Major Activities	Indicators	Accomplishments					
1. Organization of the	Organized	- The working group composed of 15 members, who are Chef de Suco, Chef de Aldeia, Representatives of					
working group	groups	women's group, Youth leaders, Lia Nain (Traditional leader	and large land ov	wners, was formed by the			
	No of members	sub-program. The group developed the group regulations an	d defined the roles	and responsibilities of the			
	of the groups	group members.		1			
	32 to 192	8					
2. Formulation of Work	1) Work plans	- The NGO organized the planning workshop in February, 2008	with participation	of all the members of the			
plan	2) Workshops	working group. A work plan on the sub-program from Ma					
pian		result of the workshop.	cii 2006 to Augus	t 2009 was prepared as a			
2 M (11 1	organized		1 ' 1 '	1			
3. Meetings with the	No. of meetings	-Under the sub-program, six (6) workshops and meetings have					
working group to prepare	organized	August 2009 to develop the future land use map with t	he village regulati	ions on natural resource			
future land use map and	No. of	management in the village.	T				
village regulations	participants in	Workshops / Meetings	Date of meeting	No. of participants			
	the meetings	Workshop on present land use mapping	March 3-5, 2008				
		Workshop on future land use options	June 17-19, 2008				
		Workshop on future land use mapping and outlines of village regulations	July 3-4, and 10 200				
		Workshop on the draft village regulations Meetings with communities members for socialization of the draft village	July 10, 2009 July 16 at Fakulao	13			
		regulations at each aldeia	July 17 at Remehe				
		regulations at each aldela	July 19 at Kaitaso				
			July 20 at Bereliso				
		Workshop on revision of present and future land use maps	May 22 & 25, 200	9 19 and 25			
		Source: USC Canada					
4. Organization of Tara	Ceremony	-Tara Bandu to announce the village regulations to the public					
Bandu ceremony	organized	Representatives from MAF, Ministry of Environment, and ND	F, ii) Representativ	es from Aileu District and			
		Remexio Sub-district, iii) Priest from church in Remexio, iv	Representative from	om PNTL of Remexio, v)			
		village leaders of the neighboring villages, and vi) JICA Study	Team on July 28, 2	2009.			
5. Assistance in the	No. of meetings	- The working groups has organized five (5) monthly meet					
implementation and	organized	assistance of the NGO to monitor the implementation of the	0	-			
monitoring of the Village	No. of	handled at suco level.					
Regulations Regulations	participants in						
Regulations	the meetings	Monthly Monitoring Meetings for Impleme					
	•	Monthly Monitoring Meetings Date		mber of participants participants			
	Topics	of the regulations in September		participants			
	discussed	Meeting for monitoring of the implementation October 31	16	participants			
	l .			A			

Major Activities	Indicators	Accomplishments	.					
		of the regulations in Octo	ber					
		Meeting for monitoring	of the implementation	December 2		14 participants		
		of the regulations in Nov						
		Meeting for monitoring		January 21		21 participants		
			of the regulations in December					
		Meeting for monitoring		February 26		14 participants		
		of the regulations in Janu	ary					
		Malandania dad d		1 1	41		1 1	
					•	i) issues on crop damage caused	•	
		C			•	lagers in the neighboring sucos,	111)	
		disputes among con						
		•		~ ~	•	d suco leaders have deepened th		
		understanding of the	e village regulations	and develop	ed their capacity t	to cope with the issues in the villag	ge.	
6. Assistance in fencing	Animal fences	- One of the issues th	at local communitie	es have faced	l was to control st	ray animals in the village. In order	r to	
the selected grazing land	installed	reduce crop damage	caused by animals	, the working	group demarcate	d the area for grazing from perman	nent	
to separate free-grazing		1 0	•			and use map clearly allocated seve		
animals from farmlands						on made on the ground. In response		
						iture land use map, the sub-progr		
		\mathcal{C} 1				signed as grazing land and perman		
		farm.	o kin felice on the t	soundary oct	ween the areas ac	signed as grazing land and perman	iciit	
		1441111	mbor 2000 local n	aanla in Ald	oie Veitage and I	Fakulau had engaged in hole maki	ina	
		1	0.	g. A total of 2	2,820 noies and 2,	735 meters wiring were made by lo	ocai	
		communities as sho	wn below.					
				Results	of Fence Making			
		Date	Activities		Results	Number of participants		
		July 24, 09	Collection and prepara	ation of sticks	1,410 wood sticks	61 participants from Fakulao and Kaitaso	Ю	
					1,410 iron sticks			
		T1 24 00	II-1- dii		65 trees	40		
		July 24, 09 Aug 3 – Aug 21, 09	Hole digging Sticking		2,820 holes 2,820 sticks	48 participants from Fakulao and Kaitaso 315 participants in total	0	
		Aug 3 – Aug 21, 09 Sticking 2,820 sticks 315 participants in total Aug 27 – Sep 18, 09 Wiring <1						
		Source: USC-CTL	** II III 5 < 1		2,133 meter	122-13) participants in total		
			eters of wiring is vet to	be finalized sin	ce communities need	to displace animals (cow and buffalo) to	o the	
		grazing area first.				(10 miles) to		
	1							

Table 3-1-2 Accomplishments of PULU-SP at Faturasa (As compared with the Objectives of the Sub-program)

Objectives/Outputs	Indicators	Accomplishments					
Objective	No. of forest	- No forest fire has taken p	olace since Tara	Bandu ceremor	ny on July 28, 20	008, when the v	village regulations
1. Enable the village to	fires	were officially announced	to the public.				
manage and use natural	No. of cases or	- No illegal cutting or har	rvest of forest	and other natur	al resources has	been made b	y the community
resources within its	offences	members. However, there					•
territory in a proper	Level of	neighboring villages.				J	1 1
manner	understanding	- There have been several c	ases of crop dar	mage caused by f	free grazing anim	als.	
	and application	- The levels of understandi					ers were assessed
	of the village	by the questionnaire surve	•	•	5 6		
	regulations	by the questionnaire surve	oy conducted iii	1148451 2009.			
		Level of understanding and	Rules on NRM	Guidelines for	Future land use	Monitoring	Roles &
		application of the techniques		land use	map	system	responsibilities of
		Level of understanding (1-5) <1	4.0	4.0	4.0	4.0	the committee 4.0
		Level of application (1-3) <2	3.0	3.0	3.0	3.0	3.0
		Note:					
		<1: The level of understand				ry well understood	d, 4=well understood,
		3=fairly understood, 2=le					
		<2: The level of application	was evaluated in	accordance with th	e following rating:	1=not applied, 2=	partially applied, and
		3=fully applied.	00)				
		Source: JICA Study Team (20	09)				
		- As shown in the tables ab	ove the membe	ers consider that	they have well u	nderstood and a	annlied the village
		regulations along with the			•		
Outputs		regulations along with the	ruture rand use	map to regulate	activities of foca	i people in the	village.
	T and	The land was man was	Cast danialanad	in Index 2000 a	and Grandban 1	TO F	of all
1. A future land use map	Land use map	- The land use map was					
and local regulations on	with village	revised in May 2009 by the	ne working grou	ip. The revised v	map map		
natural resource	regulations	is shown right.					
management are					W.		
developed.					12		
					home	W -	Chan lest
						2	
O. I. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Α 1	701 111 1 1	1 1	1.1 .1 .1.	· v i	2000 1	ke
2. Local regulations will	Agreed-upon	- The village regulations		•		•	
be implemented with Tara	local regulations	communities in the villag	e in the same n	nonth. The villag	ge regulations de	veloped compr	ise of 11 chanters
Bandu.	among local	indicating the prohibited			, ,		

Objectives/Outputs	Indicators	Accomplishments								
	communities	the regulations, and fines and penalties imposed on a violator.								
	Monitoring	- Several monthly monitoring meetings have been organized after the Tara Bandu ceremony to monitor the								
	system installed	implementation of the	village regulations and disco	ass any issues to be hand	dled by the committee. The					
		-	2 2	——————————————————————————————————————	o months to share the results					
			in the monthly meetings with community members in each aldeia.							
		•	•		ent monitoring system of the					
		village regulations. The members intend to continue the implementation of the village regulations with the								
		current monitoring system. However, they may need more guidance on the necessity of information sharing								
		with local communities on an aldeia level.								
		THE TOTAL COMMISSION OF THE WARRING TO THE								
		Level of willingness To continue the implementation To continue the monthly To organize bi-monthly meeting								
		of the village regulations monitoring meeting at aldeia level								
		Level of willingness (1-5) <1 4.7 4.3 3.6								
		Note:								
		<1: The level of understanding was evaluated by using 5-point rating, namely 5=very much, 4=very, 3=fairly, 2=less, and 1=does								
		not want to.								
		Source: JICA Study Team (2009)								

Table 3-2-1. Accomplishments of GCPBWPR-SP (Outputs generated by the Activities)

_		Accomplishments									
_	Organized	- Four (4) working groups were organized in suco Faturasa at a rate of one group per aldeia. Each group has									
beneficiaries groups g	groups	five (5) members except in Kaitaso. The group of aldeia Kaitaso selected 9 members. Each group									
0 1	No of members	appointed one group leader and secretary and developed the group regulations defining the roles and									
	of the groups	responsibilities of the group members.									
	1) Work plans	The NGO organized the planning workshop on February 21 and 22, 2008 with participation of 20 members									
	2) Workshops	from four (4) groups. A work plan on the sub-program from March 2008 to August 2009 was prepared as									
*	organized		the sub-program from March 2008 to August 2009 was prepared as								
	0	•	a result of the workshop.								
- · · · · · · · · · · · · · · · · · · ·	No. of	- The NGO took eight (8) members to Suco Dare and Suco Tibar on February 22, 2008 to observe the									
	participants in	production of fodder crops at Suco Dare									
tì	the tour	insectaries of MAF at Suco Tibar. Through	the exposure	visit, the men	ibers were abl	e to obtain a	to obtain a whole picture				
		of the sub-program activities.									
•	No. of training										
protein banks and c	courses	August 2009 with total participation of 270	members.								
biological control of N	No. of										
Chlomoraena p	participants in		Bereliso	Fakulau	Raimerhei	Kaitaso	Total				
the training		Training on compost making	6	7	5	6	24				
c	courses	Training on identification of demonstration plots	6	5	5	8	24				
	(Participation	for protein bank and biological control against Chlomoraena									
1 2	level)	Training on making temporary fences	6	7	5	6	24				
	ic voi)	Training on land preparation with terrace making	15	7	7	14	43				
		Training on seed preparation of fodder trees and	5	8	5	6	24				
		crops									
		Training on maintenance of the demonstration	6	7	5	5	23				
		plots for protein banks									
		Training on planting fodder trees and crops	10	3	6	10	29				
		Training on collection of larvae and application of	10	6	5	12	33				
		bunches of Chlomoraena to the demo-plot Follow-up training on compost making	5	5	5	8	23				
		Follow-up training on terrace making	5	5	5	8	23				
		Total	74	60	53	83	270				
		Source: USC Canada	7-1	00	33	03	270				
		boureer ede cumuuu									
		The members of CBSE-SP also participated in training sessions for GCPBWPR-SP, and vice-versa. Since									
		securing animal feeds in the dry season was one of the critical issues in the village, the members' expectation									
		were apparently high and therefore their partic					спресшион				

Major Activities	Indicators	Accomplishme	nts						
5. Assistance in the	Type of	Although the original aim of the sub-program was to demonstrate the models, the NGO decided to provide							
conducts management of	assistance	the planting materials since the participants had high interest in the replication of the techniques.							
crop farming and	provided								
biological control		Period							
		Apr 08 – Feb	Material assistance	Provision of farm tools Provision of seeds of fodder trees and crops				June 08 Sep-Oct 08	
		09							
			Technical assistance	Land preparation	Sep 08-	Feb 09			
			to members on demand	Fencing Planting king grasse	and				
			Gemana	caliandra (seeds)	os (sueks), ge	and (cattings)			
				Replanting king grasse					
				Maintenance of the de		ots			
		March-Oct 09	Technical assistance	Protection of the plots Maintenance of the de		te	May-Oc	ot 00	
		Water-Oct 09	to members	Monitoring of demons	May-Oc	1 09			
				8	<u>,</u>		· · ·		
6 Daising awareness	No of tachnical	In and an to anh an	aa tha arramanaa af	the mustain healt o	nd higheries	1	at Chlaman	2000 00000	
6. Raising awareness about protein bank and	No. of technical		ce the awareness of			i control again	st Chiomora	aena among	
about protein bank and biological control against	guidance organized.	the communities,	the NGO carried ou	t the following activ	ities.				
Chlomoraena	No. of	i) Provision of too	hnical guidance on	hath taahniayaa					
Chlomoraena	signboard set up		w, two sessions of t		n nrotain ha	ak and arazina	control wor	o organizad	
	signocaru set up		m, two sessions of the nembers were partic			ik and grazing	control wer	e organized	
		and a total of of h	nembers were partie	ipated in both sessi	ons.				
		Session			Number of pa	articipants (Partici	nation level)		
				Bereliso	Fakulau	Raimerhei	Kaitaso	Total	
		Technical guidance		11	4	7	11	33	
		Technical guidance	on biological control	5	7	4	12	28	
		Total		16	11	11	23	61	
			ssemination about th						
			ted the posters and	prochures of the big	ological conti	ol methods in	coordinatior	n with MAF	
		and provided then	n to the members.						
						. 1			
		iii) Set-up of sign boards at demonstration plots for the biological control against Chlomoraena.							
		With an aim to attract the attention of local communities and remind them not to burn the areas around the							
		demonstration farms, a total of 4 sets of sign boards were set up at each demonstration plot.							

Table 3-2-2. Accomplishments of GCPBWPR-SP (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Acc	omplishments						
<u>Objective</u>	No. of	- Eac	- Each group established one demonstration plot each for the protein bank and biological control. In total,						
1. A model for controlling	demonstration	eight	eight (8) demonstration plots, two (2) plots each for a group were developed.						
Chlomoraena and	plot established	- The	e demonstration plots for b	ooth technique	es in the four	(4) aldeias hav	e not showed	significant result	ts yet
reducing free grazing is	in suco	so fa	r. In those for the protein	bank, the fo	dder crop (kii	ng grass) and t	rees (caliandr	a and gamal) di	d not
developed in Suco		grow	grow well due to the lack of rain in the rainy season, poor soil condition in the demo plots, and poor planting						
Faturasa.		mate	rials procured.		_		_		
		- In t	the demo plots for biologi	cal control, th	ne growth con	dition of Chlo	moraena did n	ot apparently ch	nange
		durin	g eight (8) months after in	noculation of p	parasite galls.	The nine (9) m	nonths may be	not enough to ex	xpect
		to ha	we the clear results from	the biological	control altho	ugh there are	many signs th	at larvae eclosed	dand
		laid e	eggs to other Chlomoraena	ı .			•		
		- Fro	om the point of view of o	developing a	model for co	ntrolling Chlor	moraena, it is	hard to say tha	at the
		sub-p	program was able to archi	ive its target	within the giv	en time. Furth	nermore, the a	ppropriateness of	of the
		techn	iques may need to be reco	onsidered since	e it might be o	difficult to keep	the attention	of local commu	nities
		if sig	nificant visible results can	not be expecte	ed.				
<u>Outputs</u>	Level of	- Th	- The levels of understandings and application of the techniques among the members were assessed by the						
1. Develop the capacity of	understanding	quest	tionnaire survey conducted	l in August 20	009. The result	s of the survey	are summariz	ed below.	
the members of control of	and application								_
Chlomoraena and			Level of understanding and application of the techniques	Compost making	Making and use of	Application of soil	Planting of fodder	Control of chromoralena	
development of protein			application of the techniques	making	A-frame	conservation	trees/grasses	using biological	
bank						measures		control measure	
			Level of understanding (1-5) <1 Level of application (1-3) <2	4.6 2.8	4.6 2.8	3.0	3.0	3.6	1
		No		2.0	2.0	3.0	3.0	2.0	
		<1:	The level of understanding v				very well unders	stood, 4=well under	rstood,
			3=fairly understood, 2=less un				1 1 1	2	
		<2:	The level of application was 3=fully applied.	evaluated in acc	cordance with th	ie following ratin	g: 1=not applied	, z=partially applied	a, and
		Sou	arce: JICA Study Team (2009)						
			•						
			shown in the above table	e, the membe	ers considered	l that they un	derstood all t	he techniques ex	xcept
		biological control measure.							
		-Likewise, the members also judged that they could apply fully to partially all the techniques. Among							
			ers, more guidance and pra						
2. Enhance Awareness	No. of wild fire		wild fire has been observe			_		1 1 3	
raising of the effectiveness	at the		seemingly effect not only because of awareness raising activities done by the sub-program but also of the						
of the biological control	demonstration	inst	allation of village regulation	ons.					
measure among the community members	plots								
	_								

Table 3-3-1. Accomplishments of CBSE-SP (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments							
1. Organization of the	Organized	- Two beneficiaries' groups were organized in two aldeias, aldeia Berliso and aldeia Kaitaso, of suco Faturasa.							
beneficiaries groups	groups	The group of aldeia Bereliso consists of 44 members, while the group of aldeia Bereliso selected 40 members Each group appointed one group leader, secretary and treasurer of the group and developed							
<u> </u>	No of members								
	of the groups	regulations defining the roles and responsibilities of the group members.							
	3- 3 8- 3- 4- F-3	- In March 2009, the group of aldeia Kaitaso divided the group into three (3) sub-groups to enable more members to participate in the group activities. In 2008, the participation of the members in the sub-program activities were not always high since many of them lived far from the demonstration plots.							
ļ									
2 Formulation of Work	1) Weds alone					£ 72			
2. Formulation of Work	1) Work plans	- The NGO organized the planning workshop on Februa	•						
plan	2)Workshops	from two groups. A work plan on the sub-program	from March 2	008 to Augu	st 2009 was	prepared as a			
	organized	result of the workshop.							
3. Study Tour to Quinta	No. of	- The NGO took 15 members to Quinta Portugal in Dist	rict Aileu on F	February 14 a	nd 15, 2008	to observe the			
Portugal in District Aileu	participants in	test plots of improved varieties developed and manage	ed by Seed of	Life with M.	AF. Throug	h the exposure			
	the tour	visit, the members were able to deepen the understanding	of the sub-progr	ram activities.					
4. Hands on training on	No. of training	-Under the sub-program, a total of 12 training courses have been conducted between March 2008 and August							
development and	courses	2009 with total participation of 786 members as shown below.							
management of	No. of	Training courses	Bereliso	Kaitaso	Total				
demonstration plots for	participants in	Training on land preparation	40	25	65				
improved seeds	the training	Training on compost making	44	44	88				
improved seeds	\mathcal{C}	Training on soil conservation	49	31	80				
,	courses	Training on compost application	22	35	57				
	(Participation	Training on sowing seeds and planting	44	22	66				
	level)	Training on preparation for liquid fertilizer	40	20	60				
		Training on farm maintenance	48	20	68				
		Training on planting seedlings	48	25	73				
		Training on application of liquid fertilizer	37	15	52				
		Training on harvest and post harvest Follow-up training on compost making	37	38	78 49				
		Follow-up training on soil conservation	39	38	50				
		Total	488	298	786				
		Note*: Data is not available	100	270	700				
		Source: USC Canada							
ļ									
	-The members of GCPBWPR-SP of the same aldeia also participated in the above-listed training sessio								
,		vice-versa.							
		-As shown in the table above, the participation level an	nong the mem	bers of Kaita	so were low	er than that of			
		Berliso since many of them lived far from the demonstra	•						

Major Activities	Indicators	Accompli	shmen	ts									
5. Assistance in the	Crop production										stance to t		
conducts management of					l membe	rs so that th	ney could	replica	ate the tec	hniques th	nat they had	l learned t	hrough
crop farming		the trainin	g course	es.									
		Period		Type of a	ssistance	Activities	<u> </u>				Tim	ing	
			8 – Mar	Material a		Provision	Provision of farm tools Provision of seeds					08	
					assistance nbers on	Assistance FFSs at th	nent and man e to the mer neir own farn f crops in the	nbers to ns	replicate te	chniques lea		08-Mar 09 08-Mar 09	
		April-A	April-Aug 09 Material assistance Installation of corm mill						Apri				
		•			assistance		nce of the de			lomoraena		-Aug 09	
			Crop		iple No.	ventional pr Local Ave. volume of seed (kg)	Ave.Prod	uction	tional prac Yield/ S Volume	Seed A	Average Vol. secured for ext year (kg)		
			Corn		3	26.7	325	·	12.2		27.5		
			Peanuts	3	2	5	35		7.0		5		
			Cassava	a				et harve					
			Red bea	an	3	1	N.A	*	N.A	*	2		
			Sweet Poteto	1	N.A*	$\mathbf{N.A}^*$	N.A	*	N.A	*	$\mathbf{N.A}^*$		
			Source: J	nta not avail IICA Study T	Team (2009								
		2) Crop	Crop Production of local and improved varieties in the demonstration plots under the improved Local Improved							ved practi	ces<1		
				Ave.		Viold/	Average		Ave.		Yield/	Average	
		Crop	Sam ple No.	volume of seed (kg)	Ave.Pro duction (kg)	book	Vol. secured for next	Sam ple No.	volume of seed (kg)	Ave.Pro duction (kg)	Seed Volume (kg)	Vol. secured for next	

Major Activities	Indicators	Accomplis	Accomplishments										
							year (kg)					year (kg)	
		Corn	2	5	362.5	72.5	112.5	2	5	400	80.0	87.5	
		Peanuts	2	15	412.5	27.5	62.5	2	10	391.5	39.2	41.5	
		Cassava	2		Not yet	t harvested		-	-	-	-	-	
		Soy bean	2	4.5	157.5	35.0	27.5	-	_	-	-	-	
		Red bean	2	6.5	232.5	35.8	25	-	-	-	-	-	
		Sweet Potato	2	7.5 bunches		Damaged		2	7.5 bunches		Damageo	ı	

Note: Improved practices meas the farming practices introducing line planting, application of compost, and application of liquid fertilizer.

3) Crop Production of local and improved varieties in the individual plots

			Loca	ıl				Improv	ved	
Crop	Sam ple No.	Ave. volume of seed (kg)	Ave.Pro duction (kg)	Yield/ Seed Volume (kg/ kg or cutting)	Average Vol. secured for next year (kg)	Sam ple No.	Ave. volume of seed (kg)	Ave.Pro duction (kg)	Yield/ Seed Volume (kg)	Average Vol. secured for next year (kg)
Corn	17	12.4	419	33.8	46	6	5.1	278.3	54.6	15
Peanuts	16	6.5	100.6	15.5	42.7	9	1.55	23.88	15.4	6.6
Cassava	8		Not ye	t harvested		-	-	-	-	-
Soybean	11	3.5	45.9	13.1	8.6	-	-	-	-	-
Red bean	12	3.5	176.7	49.8	10.73	-	-	-	-	-
Sweet Potato	10	325	796	2.4	508.3	-	_	-	-	-

Source: JICA Study Team (2009)

- All the crops grown under the improved farming practices in the demonstration plots showed good results.
- -The yields of improved corn and peanut are higher than those of their local ones in both demonstration and individual plots.
- The results reveal that using the improved varieties along with the introduction of the improved farming practices could bring about the higher returns that would allow local communities to secure enough seeds for the next cropping.
- -Sweet potato planted in the demonstration plots was damaged due to lack of rain.

Major Activities	Indicators	Accomplishments
		- It is also speculated that some members may have applied the improved farming techniques in farming the upland crops along with the improved seeds as the yields of the crops grown in the individual plots are significantly higher than those under the conventional farming.
6. Construction of check dams	Size of gully erosion covered by the check dams	-There was a gully 10 meter long and 2~3 meter wide between the demonstration plots for the protein bank and community-based seed extension in Kaitaso. Since it might have further developed in the rainy season if it had been left as it was, the NGO together with the working group of GCPBWPR-SP and the group of CBSE-SP in Kaitaso constructed four (4) wattles in the gully using dead wood/trees in November 2008. The check dams installed have worked well on stopping the expansion of gully erosion.
7. Establishment of guidelines on the use of corn mill	C	 -From April to May 2009, the beneficiaries' groups and other community members of Faturasa had a series of discussions on how to operate and manage two units of corn mill provided by the sub-program. The communities decided to place one unit each at Berliso and Fakulao. The former unit has been used by communities in Berliso and the neighboring villages, while the latter has been used by communities in Fakulao, Remehei and Kaitaso. Furthermore, the communities in Berliso and Fakulao developed the rules and guidelines on corn mill operations. -The rules and guidelines on corn mill operations stipulates 1) composition of management body of corn mill, 2) roles and functions of the management body, 3) regular operating hours of the mill, 4) milling fees, and 5) allocation of earnings from the operations. -It was reported in the evaluation workshops in September, 2009 that the group of Berliso was able to generate USD 14 from the operations of corn mill.

Table 3-3-2. Accomplishments of CBSE-SP (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments
<u>Objective</u>	Volume of seeds	- As shown in Table 3-3-1, the members could secure seeds of six (6) and seven (7) types of crops for the next
1. Participating farmers as	deposited	cropping season at the demonstration plots and individual farms respectively.
well as the community can		- However, non-members have not received the improved seeds yet, since the sub-program only assisted the
secure seeds of staple		members of the groups. The JICA Study Team judges that the original objective defined in the Interim Report
crops for the next		is rather unrealistic or beyond the scope of the sub-program.

Objectives	Indicators	Accomplish	ments										
cropping season.													
Output	Level of	- The levels of	f understa	ındings ar	nd applicat	ion of the	techniques	among th	ne member	s were asse	essed by the		
1. Develop capacities of	understanding	questionnaire	survey co	onducted i	n August 2	2009. The	results of	the survey	are summa	rized below	7.		
the members to produce	and application												
staple crops		Level of	Level of Compost Making Applicatio Land Selection Mono-cro Farm Harvest Storage of understandin making and use n of soil preparatio of seeds pping in manageme and seeds										
		g and											
		application											
		of the techniques	the measures plot niques										
		Level of	4.1	3.9	3.9	4.1	4.2	4.1	4.1	4.3	4.2		
		understanding (1-5) <1											
		Level of	2.9	2.9	2.9	2.9	2.9	2.7	2.8	3.0	3.0		
		application (1-3) <2											
		Note:											
					valuated by u id 1=did not u		atıng, namel	y 5=very we	ll understood,	4=well unde	rstood, 3=fairly		
							ne following	rating: 1=no	t applied, 2=r	partially appli	ed, and 3=fully		
		applied.					8	6	1	J	,		
		Source: JICA S	Study Team	(2009)									
		As shown sh	ova tha n	ambara a	onsider the	t thay have	wall unda	rotood all t	tha taabnia	uas Lilzanyi	so thay also		
		- As shown ab				•			me techniq	ues. Likewi	se, mey also		
			judged them to be able to apply all the techniques in their own farms.										
			However, the JICA Study Team believes that the groups still need the external support for them to acquire enough skills to follow what they have learned in the demonstration plots and to produce enough seeds for the										
		_		what the	y mave lear	neu m me u	emonstrati	ion piots a	na to produ	ice enough	seeus for the		
		next cropping	3.										

Table 4-1-1. Accomplishments of SUFP-SP (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments									
1. Organization of the	Organized	- Four (4) beneficiaries' groups were organi	zed in suco E	Batara to esta	blish one gro	up each in al	deia (Fatuha,				
beneficiaries groups	groups	Wer-Ulun, Are-Ain, aldeia Balulin). Each			_	•	•				
8 1	No of members	secretary and treasurer of the group. The									
	of the groups	responsibilities of the group members.	8 - 1			8					
2. Formulation of Work	1) Work plans		n on Februar	v 20 and 21	2008 with na	rticination of	72 members				
plan	2)Workshops		The NGO organized the planning workshop on February 20 and 21, 2008 with participation of 72 members from the four (4) groups. A work plan on the sub-program from March 2008 to August 2009 was								
pian	organized	repared as a result of the workshop.									
2 Study Town to Suga											
3. Study Tour to Suco			The NGO took 40 members of the groups to Suco Manelima in District Manatuto on February 15, 2008 to observe the farms with soil conservation measures and talk to farms who applied the techniques. Through								
Manelima in District	participants in										
Laclubar	the tour	the exposure visit, the members were able									
		members tried to apply the soil conservation	<u>*</u>								
4. Hands on training on	No. of training	- Under the sub-program, each group has de									
sustainable upland	courses	conducted between March 2008 and Aug	ust 2009 at 6	each demons	tration plot v	with total par	rticipation of				
agriculture and	No. of	1,467 members as shown below.									
development of	participants in				o.of Participan						
demonstration plot	the training	Training courses	Are-Ain	Fatuha	Wer-Ulun	Balulin	Total				
1	courses	Training on how to make and use A-frame	30	30	30	30	120				
	(Participation	Training on making bench terraces and contour	28	32	19	31	110				
	level)	composting systems Training on land preparation (making bench	20	30	25	30	105				
	10 (01)	terrace and contour compost systems)	20	30	23	30	103				
		Training on planting annual crops	32	36	34	37	139				
		Training on weeding, planting pineapple, fodder	25	32	29	30	116				
		trees and peanuts, and digging hole									
		Training on planting potato, talo and preparation	28	29	26	30	113				
		of materials for temporary fences									
		Training on pest management	25	30	25	28	108				
		Training on second weeding, planting seedlings	30	30	30	30	120				
		such as orange and mahogany and harvesting red									
		Training on harvesting and post harvesting	17	30	30	30	107				
		Training on compost making	29	29	26	30	114				
		Follow-up training on soil conservation	24	26	24	28	102				
		Follow-up training on how to make and use	26	29	24	27	106				
		A-frame									
		Follow-up training on terrace making	27	28	23	29	107				
		Total	341	391	345	390	1,467				
		Source: USC Canada									

Major Activities	Indicators	Accomplishme	nts													
		-Based on the re February, 2009, organized.	the foll	low-up train	ing cours	ses on the u	se of A-fr	ame and ter	rrace maki	ing were ad	ditionally					
5. Assistance in the conducts management of upland crop farms	Crops produced at 1) the demonstration	- Simultaneously groups as well a through the train	as indiv	vidual mem												
aprana crop rams	plots and 2)	Period		of assistance	Activitie	es				Timing						
	Individual farms	June 08 – Mar 09		al assistance	Provision	n of farm tool n of seeds	S			June 08 Nov-Dec. 0	8					
			Technical assistance to members on demand Development and management of demonstration plots Assistance to the members to replicate techniques learn fers at their own farms Harvest of crops in the demonstration plots													
		April-Aug 09							Feb-April.09 April-Aug 09							
		-The beneficiarie 2008 to August 2		ith the assist	ance of the	he NGO.		•								
		Crops		Fatul		Wer-i		Are-		Balu						
				Product.	Yield**	Product.	Yield**	Product.	Yield**	Product.	Yield**					
		Corn (bench terrace)		50 kg	39 kg	50 kg	44 kg	75 kg	68 kg	50 kg	29 kg					
	1	Corn (compost terra		100 kg	66 kg	100 kg	87 kg	30 kg	23 kg	90 kg	57 kg					
			200)	40.1												
		Soybean (bench terr		40 kg	33 kg	-	-	64 kg	52 kg	-	-					
		Soybean (compost to	errace)	80 kg	33 kg 45 kg	75 kg	- 66 kg	80 kg	68 kg	75 kg	- 45 kg					
		Soybean (compost to Red bean (bench ter Red bean (co	errace)			75 kg - 50 kg	66 kg - 35 kg			75 kg - 25 kg	45 kg - 5 kg					
		Soybean (compost to Red bean (bench ter Red bean (co terrace)	errace) race)	80 kg	45 kg	-	-	80 kg 26 kg	68 kg 7 kg	-	-					
		Soybean (compost to Red bean (bench ter Red bean (conterrace) Sweet potato terrace) Sweet potato (conterrace)	errace) race) ompost (bench ompost	80 kg - 50 kg	45 kg - 25 kg	50 kg N.A.* 30 kg	35 kg N.A.* 1.5kg/bu nch	80 kg 26 kg 40 kg	68 kg 7 kg 28 kg	25 kg	5 kg					
		Soybean (compost to Red bean (bench ter Red bean (conterrace) Sweet potato terrace) Sweet potato (conterrace) Sweet potato (conterrace) Peanut (bench terrace)	errace) race) ompost (bench ompost	80 kg - 50 kg N.A.* N.A.*	45 kg - 25 kg N.A.* N.A.*	50 kg N.A.* 30 kg N.A.*	35 kg N.A.* 1.5kg/bu nch N.A.*	80 kg 26 kg 40 kg N.A.* 40 kg 75 kg	68 kg 7 kg 28 kg N.A.* 2.0kg/bu nch 40 kg	25 kg 30 kg 15 kg	5 kg 1.5kg/bu nch 1.5kg/bu nch 7 kg					
		Soybean (compost to Red bean (bench terrace) Sweet potato terrace) Sweet potato (conterrace) Sweet potato (conterrace) Peanut (bench terrace) Peanut (compost terrace)	errace) race) ompost (bench ompost ee) race)	80 kg - 50 kg N.A.* N.A.* 18 kg 100 kg	45 kg - 25 kg N.A.* N.A.*	50 kg N.A.* 30 kg	35 kg N.A.* 1.5kg/bu nch	80 kg 26 kg 40 kg N.A.*	68 kg 7 kg 28 kg N.A.* 2.0kg/bu nch	25 kg 30 kg 15 kg	5 kg 1.5kg/bu nch 1.5kg/bu nch					
		Soybean (compost to Red bean (bench terrace) Sweet potato terrace) Sweet potato (conterrace) Sweet potato (conterrace) Peanut (bench terrace) Peanut (compost terrace) Note: * Data was noted.	cerrace) race) compost (bench compost race) race) ot available e product ation pl	80 kg - 50 kg N.A.* N.A.* 18 kg 100 kg le. tivity against the	45 kg - 25 kg N.A.* N.A.* 10 kg 60 kg	50 kg N.A.* 30 kg N.A.* 50 kg One of seeds used.	35 kg N.A.* 1.5kg/bu nch N.A.* 35 kg	80 kg 26 kg 40 kg N.A.* 40 kg 75 kg 15 kg	68 kg 7 kg 28 kg N.A.* 2.0kg/bu nch 40 kg 3 kg	25 kg 30 kg 15 kg 15 kg 20 kg	5 kg 1.5kg/bu nch 1.5kg/bu nch 7 kg 15 kg					

Major Activities	Indicators	Accomplishments
		 -This tendency may be caused by the difference in soil fertility between the parcels. The sub-surface soils were often mixed with the surface soils when bench terraces were made. In addition, the parcels of contour composting are located in the bottom of slope in general. Therefore, the soil fertility in contour composting parcels is considered higher than that in bench terrace parcels. -According to the NGO, 12 members have developed bench terraces and another 32 members have also introduced the contour composting method in their own farms as of August 2009.

Table 4-1-2 Accomplishments of SUED-SD (As compared with the Objectives of the Sub-program)

Table 4-1-2. Accomplishments of SUFP-SP (As compared with the Objectives of the Sub-program)												
Objectives	Indicators	Accomplish	nents									
<u>Objective</u>	- No. and area	- A total of four	r (4) dem	onstration	plots wit	th applica	tion of be	nch terrac	ce and co	ntour con	nposting p	oractices
1. Develop a model for	of farms with	in four (4) ald	eias. They	are used	as venue	s for hand	ls-on train	ing for th	e member	rs of the g	groups and	d also as
sustainable upland crop	soil	the models for	soil cons	ervation 1	measures	(or upland	d farming	technique	es) for nor	n-member	s in the vi	illage.
production in the village	conservation	- As mentioned	As mentioned in Table 4-1-1, a total of 12 bench terrace farms and 32 contour composting farms have been									
	measures	developed by	developed by the members as of August 2009.									
			t would take more time for many members of introduced the techniques in their own farms, but it is safe to									
		say that the su	ıb-prograi	m were al	ble to dev	elop the	model for	sustainab	ole upland	l farming	technique	es in the
		village.										
<u>Output</u>	Level of	-The levels of		_			techniqu	ies among	g the men	nbers wer	e assessed	d by the
1. Develop the capacity of	understanding	questionnaire	survey co	nducted in	n August	2009.						
the members to introduce	and application	Level of understanding	Compost	Use of	bench	contour composti	Land prepara-	Selection	Mono-cr opping	Farm manage	Harvest and post	Storage
sustainable upland		and application	making	A-frame	terracing	-ng	tion	of seeds	in line	ment	harvest	of seeds
farming technologies		Level of	4.2	4.4	4.4	4.4	4.1	4.0	4.4	4.2	4.2	4.2
		understanding (1-5) <1	4.3	4.4	(n=23)	4.4	4.1	4.8	4.4	4.3	4.3	4.3
		Level of	2.3		2.4		2.1					
		application (1-3)	(n=23)	2.5	(n=23)	2.4	(n=23)	2.8	2.4	2.4	2.4	2.4
		Note: The number	of samples	is 24, unless	s specified v	with "n".				<u> </u>	<u> </u>	
		<1: The level	of understa	nding was	evaluated b	y using 5-j		, namely 5	every well	understood	, 4=well ur	nderstood,
					stood, and 1						11. 1	10 6 11
		<2: The level of applied.	application	i was evalua	ated in acco	rdance with	the follows	ng rating: 1:	=not applied	a, 2=partiall	y applied, a	nd3=fully
			he tables	above th	e membe	rs conside	ered that t	they unde	rstood alr	nost all th	ne technic	mes and
			As shown in the tables above, the members considered that they understood almost all the techniques and would be able to apply them in their own farms.								1	
		- In spite of the					eam iudo	es that it v	vould not	be easy fo	or them to	develop
		in spice of the	1000100 011	o 11 400 V	-, me ore	1 Stady 1	Jung Jung	16 7		or ous, re		as, crop
	<u> </u>	1										

Table 4-2-1. Accomplishments of IG/CS-SP (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments									
1. Organization of the	Organized	- Four (4) women's groups were organized	l in suco Bat	ara at a rate	of one grou	p per aldeia.	Each aldeia				
beneficiaries groups	groups	selected 10 women as members and appoin									
	No of members	group. At the same time, the groups									
	of the groups	responsibilities of the group members.	•	\mathcal{E} 1	C						
	5 8F-	- The regulations of the group were reviewed	ed and revise	d in June 20	09 to enable	the groups to	manage the				
		group funds and assets in a proper and transparent manner.									
2. Formulation of Work	1) Work plans		Fine NGO organized the planning workshop on February 27 and 28, 2008 with participation of 37 members								
plan	2) Workshops		from four groups. A work plan on the sub-program from March 2008 to August 2009 was prepared as a								
pian	organized	result of the workshop.	io-program n	om waten 2	ooo to Mugu.	st 2007 was p	repared as a				
3. Study Tour to Suco	No. of	- The NGO took of 25 members to Suco Ma	onorimo to ob	scorno the he	ndiaraft makir	na (manyina)	and vagatable				
•						•	•				
Manerima	participants in	gardening that are presently carried out by members were able to deepen the understand				ign the expos	ure visit, the				
4 77 1	the tour	-	-			N. 1.000					
4. Hands on training on	No. of training	Under the sub-program, a total of 13 trainin		e been cond	ucted between	n March 2008	and August				
vegetable farming, tais	courses	2009 with participation of 664 members in t	otal.								
making, food processing,	No. of	Training courses	A .		rticipants (Partic		T 1				
use of sewing machine,	participants in	Training on compost making	Areain 10	Balurin 10	Werlulun 10	Fatuha 10	Total 40				
and business/financial	the training	Training on compost making Training on land preparation	10	10	10	10	40				
management	courses	Training on seed selection and seedbed making	12	12	10	11	45				
	(Participation	Training on transplanting seedlings using pots	N.A.	N.A.	N.A.	N.A.	34				
	level)	Training on planting	10	11	10	11	42				
		Training on business/financial management	N.A.	N.A.	N.A.	N.A.	41				
		Training on use of sewing machine	10	10	10	10	40				
		Training on food processing	10	10	10	10	40				
		Training on tais making	12	12	10 15	11 9	45 52				
		Follow-up training on compost making Follow-up training on use of sewing machine	11 47	17 42	42	42	173				
		Training on land preparation with compost	10	8	12	8	38				
		application	10	Ü	12	O	30				
		Follow-up training on financial management	7	10	9	8	34				
		Total	-	-	-	-	664				
		Source: USC Canada									
5Marketing survey	No. of	- The market survey was carried out with pa									
	participants	29, 2008. The participants interviewed the	following m	arket outlets	(organization	s and person	s) to identify				
	involved in the	the current market conditions of the produc	cts/goods that	the groups p	lanned to pro	duce in the si	ıb-program.				
	survey	- Middlemen at bazaar at Laclubar	-		-						
	Organizations	- Church / Sub-district Administrative Off	ice								

Major Activities	Indicators	Accomp	olishments								
	visited	- Super	market in Dili								
			narket in Dili								
			ol at Laclubar								
6. Assistance in the	1) Vegetables		men's groups have produ	and more the	on gight type	of vocatabl	as at the dame	netration nl	ote from		
	_					es of vegetable	les at the define	nistration pr	ots mom		
conducts of the income	produced	May 20	08 to August 2009 with the	ie assistance	of the NGO.						
generating activities, i.e.,	2) Tais made										
vegetable farming, tais						Aldeia					
making, food processing,			Vegetable produced	Areain	Balurin	Werlulun	Fatuha	Total			
and dress making			Green Mustard (bunch)	40	35	NA	45	120			
			Mustard (bunch)	422	498	260	343	1,523			
			Lettuce/Green salad (unit)	300	80	NA 200	8	388			
			Broccoli (units)	NA NA	NA	208	NA	208			
			Pechai (pechai)	NA NA	14 NA	NA 30 bundles	NA 0.5l	12 NA			
			Cowpeas Red beans		NA NA	NA NA	0.5 sacks	NA NA			
			Cabbage	35 cups 15	10	NA NA	20 bundles NA	25			
				13	Tomato	Bitter melon	Water spinach	2.5			
			Others*1	NA	1 bucket	6 bundles	4 bundles	NA			
			Note*1: Others are chilli, ton	nato hitter gourd							
			ion to vegetables, the grues that they have learned	oups have al	so produced	tais, clothes,		l foods appl	ying the		
			IG activities	Areain	Balurin	Werlulun	Fatuha	Total			
			Tais making								
		<u> </u>	Small tais	3 pcs	4 pcs	4 pcs	3 pcs	14 pcs			
			Clothes								
			- Table cloths	2 pcs	1 pc	1 pc	2pcs	6 pcs			
			- Shirt (repair)	2 pcs	1 pc	1 pc	2 pcs	6 pcs			
			- Shirt (new)	2 pcs 2	1 pc	1 pc	2 pcs	6 pcs			
		}	- Trouser (repair) Processed foods	2	1 pc	1 pc	2 pcs	6 pcs			
			- Banana chips	45 pcs	50 pcs	65 pcs	45 pcs	205 pcs			
			- Cassava chips	25 packs	45 packs	60 packs	25 packs	155 packs			
			- Sweet potato chips	30 packs	40 packs	35 packs	25 packs 25 packs	130 packs			
			- Fried peanut with egg	30 packs	30 packs	40 packs	30 packs	130 packs			
		<u> </u>	1 08			1		•			

Table 4-2-2. Accomplishments of IG/CS-SP (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishments							
1. Develop the capacity of	Level of	- The levels of understanding	- The levels of understandings and application of the techniques among the members were assessed by the						
the members of the	understanding	questionnaire survey conducted in August 2009. The results are summarized as follows.							
women's groups	and application	a. Vegetable Farming							
women's groups	and approducts	Level of understanding and application of the techniques making preparatio n n Seedling production ing ce of farm pesticide and Seed application collection							
1		Level of understanding (1-5) <1	4.8	4.8	4.8	4.5	4.5	1.3	4.9
!		Level of application (1-3) <2	2.9	3.0	2.9	2.9	2.9	1.1	3.0
!		b. Tais making							
		Level of understanding and application of the techniques	Making weaving tools	Spinning	Color coordinatio n	Rolling	Designing of letters	Designing of motifs	Material setting
1		Level of understanding (1-5) <1	2.9	4.6	4.5	4.6	2.5	3.8	4.1
1		Level of application (1-3) <2	2.5	2.9	2.9	2.9	1.9	2.6	2.6
!		b. Food processing							
		Level of understanding and application of the techniques	Cassava chips	Steam cassava	Taro chips	Sweet potato chips	Banana chips	Fried peanut with eggs	Fried mash potato
!		Level of understanding (1-5) <1	4.1	4.4	4.6	4.6	4.6	3.3	2.6
!		Level of application (1-3) <2	2.6	2.5	2.6	2.6	2.7	1.7	1.4
1		b. Use of sewing machine							
		Level of understanding and application of the techniques	Threading	Initial seesawing	Measuring and cutting	Sewing	Fixing sewing machine		
!		Level of understanding (1-5) <1	4.8	4.6	3.9	4.3	3.9		
!		Level of application (1-3) <2 Note:	3.0	2.9	2.5	2.5	2.3		
	 <1: The level of understanding was evaluated by using 5-point rating, namely 5=very well understood, 4=3=fairly understood, 2=less understood, and 1=did not understand. <2: The level of application was evaluated in accordance with the following rating: 1=not applied, 2=parti 3=fully applied. Source: JICA Study Team (2009) - As shown in the tables above, the members consider that they have understood almost all except "natural pesticide application" in vegetable farming, "designing of letters and m making, "making of fried peanut with eggs and fried mach potato" in food processing, and "cutting cloths" and "fixing of sewing machine" in the use of sewing machine. - The same tendency is shown in the level of application of the techniques. The members have application of the above-mentioned techniques. In particular, many members expressed that training on making and application of natural pesticide. 							lly applied, and ne techniques otifs" in Tais neasuring and difficulties in	
2. Generate income of the	Income	-The women's groups hav				7 IICO 1	62 fma 11.	1 f	the made at
1.2. Generate income of the	Income	L - The Women's grouns hav	e earned c	ach income	\ \tau + \ \ \ \		by trom th		

Objectives	Indicators	Accomplishments									
group members	generated by the	produced by the groups	produced by the groups from April 2008 to August 2009, though actual amounts may be different from the								
	activities	figures reported here du	e to some missing dat	a.			•				
		IG activities									
		Vegetables farming 129 111 50 62 343									
		Tais making	8	12	10	8	38				
		Clothes making/re	pairing 15	12	8	15	50				
		Food processing	11	15	19	11	56				
		Total	163	150	87	96	487				
		Source: JICA Study	Team (2008)(2009)								
		 The groups decided not to merely share the earnings among the members, but to wisely use the money in sustainable manner. In line with such an agreement, the women's groups have used parts of the earnings to run micro cred schemes and kiosks at the village, so that the group members could enjoy the benefit of the group activities. The members can borrow money with low interest (10 % for three months) from the micro credit scheme. 									
		and purchase grocery at									
3. Contributed to saving	Cost saved	- The interview survey al	so revealed that parts	of vegetables	produced w	ere also used	for home co	onsumption			
expenditures and time		as summarized below.									
		Vegetable produc		Balurin	Werlulun	Fatuha	Total				
		Green Mustard (b		5	NA	5	10				
		Mustard (bunch)	22	208	100	105	435				
		Lettuce (units)	150	NA	NA	NA	150				
		Broccoli (units)	NA NA	NA	200	NA	200				
		Others NA NA NA NA NA NA NA NA Source: JICA Study Team (2009) Note: NA: Data not available -The women's groups also reported that food processing and cloth repairing were also effects their expenses. - Micro credit and kiosk operations have contributed to stabilizing of household economy. The activities, the members do not need to sell their livestock or assets even under unfavourable cor as crop failure, or in case of emergencies, since they can either borrow money from the mit purchase groceries at kiosk on credit.									

Table 5-1-1 Accomplishments of PAC-SP (Outputs generated by the Activities)

Major Activities	Indicators	Accomplishments
1. Organization of the	Organized	- Two target groups were organized in Suco Samalete for implementation of PAC-SP. One group consists
beneficiaries groups	groups	of 63 children of primary school of the village, namely, 20 from grade III and 43 from grade IV. And the
	No of members	other group was composed of 30 adults, such as members of suco council and core members of TPP-SP of
	of the groups	the same village.
2. Awareness Survey	Survey conducted	 The Study Team together with the counterparts from NDF and district MAF, conducted a questionnaire survey to grasp the awareness level among the members of target groups in July, 2008. The Study Team interviewed a total of 33 children and 21 adults using questionnaire form. The result of the survey is highlighted below. The adults replied that the conditions of forests and springs in the village have been getting worse for the last decade, pointing out that the area covered with forests in the village has diminished and the volume of water from the springs has become scarce. Also, many students replied that the conditions of forest and springs in the village would be negatively changed 10 years later from now. Specifically, they expected that the number of trees and plans in forest would decrease. Although almost all the adults were aware of their responsibility of reserving forests and protecting water resources for their descendants, they considered that it was not easy for them to fulfill their responsibility due to ineffectiveness of Tara Bandu as well as limited knowledge and experience of any environmentally protective measures. The children gain most of information related to environmental issues at school from teachers and informative materials. The adults recommended that the PAC workshop targeted on children should focus on the following topics: such as 1) how to plant trees, 2) importance of Tara-bandu Regulations and 3) importance of protection of forest and water resources. Based on the results of the awareness survey, the topic focused by the sub-program was selected as importance of forest and water resources.
3. Presentation of work schedule of PAC to the community	Meeting organized	- The Study Team organized a meeting on July 23 to present the overall work schedule of PAC activities to target adults. A total of 22 adults participated in the meeting and agreed to the proposed activities of PAC and its work schedule.
4. Development of the PAC materials (1)	Material prepared	- In October 2008, the Study Team developed a picture book on the importance of forest and water resources. And the Team presented the picture book to ten of the target children on trial on October 23, 2008 to validate its effectiveness.

Major Activities	Indicators	Accomplishments							
5. Organization of	Workshops	-Under the sub-program, five workshops were organize	ed during Ju	ine and Au	gust, 2009 w	ith 480			
workshops for awareness	implemented	participants in total as shown in the following table.							
raising	and No. of	Number of participants a	t workshops						
8	participants	Workshops organized	Children	Adults	Total				
	participants	Workshop on Picture Show and Drawing Festival	63	-	63				
		Workshop on Presentation of Drawings	55	22	77				
		Workshop on Village Regulation-1	63	59	122				
		Dialogue between the children and council members of							
		the village							
		Workshop on Village Regulation-2	63	46	109				
		Participation in Tara Bandu ceremony presenting							
		children's drawings							
		Workshop on Village Regulation-3	63	46	109				
		Recapturing of the Tara Bandu ceremony							
		Total	307	173	480				
		Source: JICA Study Team							
		- As shown above, the 1 st workshop on picture show and d		al targeted o	nly the childre	en while			
		remaining workshops involved both children and adult grou	ps.						
		- The participation level among the target members has been	en high throu	ghout the wo	orkshops impl	emented			
		by the sub-program.	C	C	1 1				
6. Development of the	Material	- Between October and December 2009, the Study Team p	renared a cal	endar for 20	10 using the d	Irawings			
PAC materials (2)	prepared	prepared by the children at the workshop on picture show and drawing festival. The calendar was to be							
		_	distributed to the target members of PAC and the entire house holds in Suco Samalete so that the villagers						
		can share the idea of children about natural resources in the	community	and remind t	their responsil	oility for			
		the next generation to make rational use of natural resources	s.						
		č							

Table 5-1-2 Accomplishments of PAC-SP (As compared with the Objectives of the Sub-program)

Objectives	Indicators	Accomplishmen	ts					
<u>Objective</u>	Perception of	- The sub-program	aimed to facilitate t	arget members to con	sider present and futur	re condition of natural		
1. Foster awareness	condition of	resources, especial	resources, especially forest and water resources in the community and necessary measures to be taken to					
among villagers on	natural	realize sustainable	natural resource mana	gement based on unde	rstanding of the value of	of natural resources.		
sustainable natural	resources	- The perception of	f future condition of	forest and water resou	rces by the target men	bers were assessed by		
resources management	among the		irvey conducted in Au		,	•		
	target groups	_	•					
			Ch	ildren	Adu	lts		
		Topics	Answers (Percentage of respondents)	Reason	Answers (Percentage of respondents)	Reason		
		Condition of forest area after 10 years	plants (100%)	- Can start tree plantation from now Already prepared nurseries for plantation of trees NGO/JICA supported the adults to prepare nurseries and plant trees Protection of environment is understood.	- More trees and plants (100%)	- Can plant trees in the bare land - Can protect trees - Can stop firing land		
		Condition of water in the spring after 10 years	springs (83%)	- Water can be conserved by planting trees	- More water in the springs (100%)	- Water can be conserved by planting and protecting trees		
			- No change (17%)	- More villagers will use the water due to increase of population in the village.		around the spring, and stopping firing land		
		shown in the Table the village after important after important and the Table the village after important after the village after the villa	5-1, the children hav plementation of the su embers consider that	e positive image of fut ab-program. the condition of fores	ture condition of forest	of the sub-program as and water resources in anged positively in 10 the land.		

Objectives	Indicators	Accomplishments					
Output	Level of	- The activities under the sub-program cov	vered topics such as	s i) importance of forest and water resources, ii)			
1. Enhance understanding	understanding	future condition of forest and water reso	urces in the village	e, and iii) village regulation as a measure for			
on importance of natural	of topics	natural resources management in the villag					
resource management				valuated if the target members could understand			
among the villagers		1 7 11	aches taken in the	workshops organized under the sub-program.			
		The results are summarized below.					
		1) Results of understanding among the chil	ldren				
		Topics	Answers (Percentage of respondents)	Reason/findings at the workshops in the sub-program			
		Could understand the importance of forest to conservation of water resources by the picture show?	Yes (100%)	-Picture book helped understanding on the function of forest - Picture book implied not to cut trees to protect water			
		Could have more interest in future condition of natural resources such as forest and water in the village through preparation of the drawing?	Yes (100%)	- Could draw future of the village - The drawing activity facilitated them to understand importance of forest and water in the village - The activity helped them to understand importance to protect natural resources			
		Could understand the village regulation through explanation by the adults?	Yes (100%)	- Regulation will support the community Regulation will conserve natural resources - The village needs to have the regulation The villagers should follow the regulation - The regulation can impose a penalty to the violator.			
		Note: The number of samples is 12.		,			
		2) Results of understanding among the adu	llts				
		Topics Answers (Percentage of respondents) Reason/findings at the workshops in the sub-program					
		Could understand the future vision of natural resources by the children through presentation of the drawings?	Yes (100%)	- The activity reminded adults to protect natural resources, stop cutting trees and firing in the village At the session, the adults realized that children could express about their future			

Objectives	Indicators	Accomplishments					
		The presentation of drawings and following		- The activities made them to think about the			
		discussion with children helped you to	Yes (100%)	measures to be taken such as planting trees,			
		consider the necessary measures for natural		protection of trees and compliance with the			
		resource management for future?		village regulation.			
		Note:					
		The number of samples is 6.					
		- As shown in the tables above, the member discussed at the workshops.	rs consider that the	ey could deepen understanding on all the topics			
		- Although the workshops mainly targeted the children, the adults attended the workshops also deepened their understanding on importance of natural resources and realized the necessity of taking proper measures					
		for natural resource management.					

Appendix I-4-1

Results of Evaluation

of the Sub-programs of the Pilot Projects

in accordance with DAC's five Evaluation Criteria

and Implementation Process of the Sub-programs

Table 1-1-1 Appropriateness of the Implementation Process

Objectives	Accomplishments						
Appropriateness o	of -The members evaluated the process of the sub-program implementation from the viewpoints of satisfaction level						
the process	courses, approaches taken in the sub-program implementation and work relationship with the NGO and Study Te						
ane process	the members were satisfied the implementation	•	•				
	regulations." Feeling of unfairness caused by exist						
	yet demanded their shares is considered the major	reason why the members evaluated such topics (g	roup organization				
	group regulation) unsatisfactory.						
	Agnest	Evaluation by members	Note				
	Aspect	(Score <1 and % of Positive Ans.<2)	Note				
	Training courses	3.9					
	Content	Fully satisfied					
	Time frame	Fully satisfied	n=10				
	Timing	Fully satisfied					
	Techniques	Fully satisfied					
	Frequency	Fully satisfied					
	Management	Fully satisfied					
	Facilitator	Fully satisfied					
	Food	Fully satisfied					
	Techniques introduced / demonstrated	3.9					
	Compost making	Fully satisfied					
	Land preparation	Fully satisfied					
	Nursery establishment	Fully satisfied					
	Soil prep and soil filling	Fully satisfied					
	Seed preparation	Fully satisfied					
	Sawing seeds in seed beds	Fully satisfied					
	Transplanting	Fully satisfied					
	Watering & weeding	Fully satisfied					
	Designing	Satisfied					
	Hole digging and refilling	Fully satisfied					
	Planting of seedlings	Fully satisfied					
	Weeding	Fully satisfied					
	Shading	Fair	n=11				
	Conventional irrigation	Fair	n=5				
	Village regulations	Fully satisfied	n=9				
	Monitoring of VRs	Fully satisfied	n=9				
	Approaches taken	3.3					
	Participatory planning	Satisfied					

Objectives	Accomplishments		
	Time for planning	Satisfied	
	Group organization	Rather unsatisfied	
	Making regulations	Unsatisfied	
	FFS	Fully satisfied	
	Deployment of staff	Fully satisfied	
	No cash payment	Fully satisfied	n=11
	Work relationship	3.8	
	- with local staff of NGO	Satisfied	
	- with field staff of NGO	Fully satisfied	
	- with MAF	Fully satisfied	
	- with JICA Study Team	Fully satisfied	
			ss, and 1= was not satisfied.

Table 1-1-2 Evaluation of the Performance of TPP-SP (based on the five criteria, such as relevance, effectiveness,

efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	- The sub-program was selected by local communities, especially male members, in November 2007. The major aims of the communities were to recover the forest cover to ensure stable flow of quality water in natural spring in the village and to expand the potential areas for coffee production. Hence, planting trees is considered relevant to the needs of local communities, though it may not directly meet the needs of the communities.
1.2 Relevance with the watershed management plan	- Deforestation or forest degradation is the main phenomenon of the watershed degradation. Tree planting can rehabilitate the deforested areas and will directly contribute to the improvement of the target watersheds.
2. Effectiveness	
2.1 Achievement of sub-program objectives	- The main objective of the sub-program is to expand the forest cover in the village through the capacity development of local communities to produce and plant seedlings and the protection of planted seedlings by introduction of the local regulations. As described in Table 1-1-2, the beneficiaries' groups were able to plant 16,646 seedlings, of which 15,124 seedlings were confirmed alive as of August 2009.
	- The seedlings planted under the sub-program have been protected from wildfire and illegal cutting owing to the revival of Tara Bandu with the written village regulations.
	- It is safe to say that the sub-program were able to achieve its objective at a certain level. But there is still a need to develop the capacities of the beneficiaries' groups to enable them to produce seedlings sustainably even after the end of the pilot project.
2.2 Logical relation	- The sub-program comprises of the following activities:
between the activities and	 Installation of watering systems Hands-on training courses (FFSs) on seedling production and planting trees
sub-program objectives	 Frankis-on training courses (FFSs) on seeding production and pranting trees Technical assistance to individual members
	 Provision of farm tools for planting seedlings
	Development of the village regulations in writing and revival of Tara Bandu
	In the design of the sub-program, the members can go through all the processes for seedling production and planting seedlings. It is expected that the members who participate in the sub-program actively could develop their capacities to establish new plantations.
2.3 Any external factors	- The following activities or external factors affected the participation of the group members in the project and eventually
that affected the project	affected the progress of the project.
implementation	Traditional activities, such as Koremetan and Uma lulic
	> Government projects

Objectives	Evaluation						
	➤ Weak leadership of the village						
	- Furthermore, the following factors	directly affected the accor-	mplishment of the project.				
	Shortage of rainfall						
	Stealing of seedlings in the nu	ırseries					
	Land dispute						
	Straying animal						
3. Efficiency	TELL CC (' 1 CC' '	C 1 1	d NGO C : 1				
3.1 Inputs made by NGO	evaluated as follows.	of major inputs made by	the NGO for implement	ation of the sub-program were also			
	Inputs	Timing	Cost	Remarks			
	1. Staff allocation	Allocated as planned, but the number of staff was not sufficient in a certain period.	Half as much as planned	Amount of basic salary was lower than estimated in accordance with the work experiences of staffs recruited.			
	2. Installation of watering system	Behind the schedule	Twice as much as planned	Some materials were procured additionally.			
	3. Provision of farm tools	Provided as planned	Slightly lower than planned	Inactive members were not given the farm tools.			
	4. Training	Organized as planned	Half as much as planned	Some training courses were integrated into one course.			
	5. Assistance in nursery operations	Provided as planned	Three times as much as planned	Consumptions for members working in the nurseries were borne by the NGO.			
	6. Development of the village regulations and Tara Bandu ceremony	Organized as planned	As planned	-			
	Source: JICA Study Team (2009)	alayad sinca the contract b	patwaan tha NCO and UC	A Study Team in 2008 was delayed.			
	Such delay partially caused the de-	lay in seedling production		ctivities other than the installation of			
	water system were carried out as o		oo omioinolly -lo	non como tucinina como a successiva de			
	conducted at aldeia level but integr			nce some training courses were not			
				s much as planned. The NGO had to			
				as, though it was agreed by both the			
	beneficiaries' groups and the NGO						
3.2 Level of achievement				d skills of participants. However, not			

Objectives	Evaluation							
of outputs and	all the members were	all the members were able to acquire the skills needed for seedling production and tree planting, since the significant						
sub-program objectives as	number of the members	did not acti	vely participate in the hands-on tra	aining courses.				
compared with the inputs	- Limited participation o	f the membe	ers in the nursery operations also	caused some loss of se	edlings in the nurseries. Such			
	loss could have been av	oided if the	members had periodically maintai	ned the seedlings.	-			
			ovement of members' participation. The encouragement by the village					
	been limited during the			e readers to racintate a	re memoers participation has			
			orogram has faced in facilitation	of the members' part	icination in the sub-program			
			of seedling production, the Stud					
	been necessarily impler			y ream juages that the	marsery operations have not			
4. Impact	J P							
4.1 Positive impact	- A series of hands-on to seedlings.	raining cour	ses enabled the members to acqu	ire techniques and skil	ls on producing and planting			
	C	village regul	ations and/or revival of Tara Ban	du has contributed to it	mproving the peace and order			
			ng the individual assets of local ho		and the same same			
4.2 Negative impact			ed in the project activities have lo		earn cash income from other			
	government projects.	-						
5. Sustainability								
5.1 Government support			e target village in seedling produc					
		_	vernment initiatives are still uncer	rtain since there is no cl	lear plan in the government to			
	support the target villag							
5.2 Capacity of the groups		•	nembers, of the groups have gone		O 1			
			bed their capacity to produce and					
			quire knowledge and skills, especia					
			in August 2009, the members	showed their willingn	ess to continue the seedling			
	production by either a g	group or indi	viduals as shown below.					
	Willingness	Rate <1	Why willing to continue	Any hindrance	Necessary assistance			
	g		Useful for the future	Lack of support from chef	· ·			
	Production by group	3.6	Continue to complete and attain the	de suco	Poly bags, Seeds, and Techniques			
			results	Overlap with other works				
	Production by individuals	3.5	Prepare for the future	Lack of fund, manpower or location	Poly bags, Seeds, and Water			
	Note: "n" means the num							
	<1: The level of 1	mpact was eval	uated by using 5-point rating, namely 5=v	very well 4=well, 3=fair, 2=le	ess, and 1= no impact			

Objectives	Evaluation
	Source: JICA Study Team (2009) - Since many members of the beneficiaries' groups have interest in working with other projects for earning cash, it would
	not be easy for the beneficiaries' groups to continue the project activities without having any external support and facilitation. Such tendency will be maintained under the current leadership of the village.
	- On the other hand, the members evaluated that they have understood almost all the techniques on planting trees except designing and seed preparation as shown in Table 1-1-2. Based on the field observation, the JICA Study Team judges that the members would have less difficulty in planting seedlings in their own farms, through many of them may not adequately tend seedlings after planting.
	- It is considered that the beneficiaries' groups might not continue the sub-program activities as a group without any external assistance, though some of them showed their willingness to keep continuing the sub-program activities. In fact, many members seem to regard the nursery operations as laborious and time consuming.
5.3 Coordination with the NGO	- The NGO, Halarae Foundation, has no plan to provide technical and managerial assistance to local communities in the target village after the pilot project.
5.4 Coordination with other organizations	- There is no coordination or linkage with other organizations made so far.
5.5 Financial aspect	- It would be rather difficult for the beneficiaries' groups to undertake the same activities without financial support after the pilot project. In particular, the groups may need support in the procurement of seeds of trees and poly bags.

Table 1-1-3 Lessons learned

Lessons learned	Stage	Descriptions	
Participatory planning	Planning	- The participatory planning was effective in deepening the members' understanding of the sub-program	
		activities. The process of the participatory planning was good opportunity for the communities and the	
		NGO to share the ideas of the sub-program.	
Low participation	Implementation	- The level of participation of the members in the project activities was not always high. In particular, the	
		participation in nursery operations, such as filling soils in poly bags, watering and weeding, was limited.	
		Many members preferred to engage in other government projects that pay for the work. Strong leadership	
		or support from the village leaders is necessary for improvement of the such situation.	
Combination with the	Implementation	- Incorporation of the implementation of the village regulations into the sub-program activities was effective	
formulation of Tara		in protecting the seedlings planted from wildfire, stealing, and animal damage. The sub-program should be	
Bandu regulations		combined with the formulation of the village regulations.	
Deployment of field	Implementation	- Deployment of the field staff was effective in building a trustful relationship with local communities. Filed	
staff		coordinator/s should be posted in the field during the implementation of the sub-program.	
Hands-on training / FFS	Implementation	- By hands-on training courses or FFSs, the members were able to practice and go through all the techniques	

Lessons learned	Stage	Descriptions	
approach		on seedling production and tree planting in the field.	FFS approach should be employed as a main scheme
		to develop the capacity of the members.	

Table 1-2-1 Appropriateness of the Implementation Process

Objectives	Accomplishmer	nts			
Appropriateness	- The members eva	aluated the process of the sub-program	implementation from the viewpoints of	satisfaction level	of training o
of the process		1	nd work relationship with the NGO. In g		_
P		1 0 1	roup organization and making group re		
			by the members evaluated group organization		
	1	project activities is the major reason w	my the members evaluated group organiz	zation and making	g group regu
	unsatisfactory.				
		Aspect	Evaluation by members (Score <1 and % of Positive Ans.<2)	Note	
		Training courses	3.9		
		Content	Fully satisfied		
		Time frame	Satisfied		
		Timing	Satisfied		
		Techniques	Fully satisfied		
		Frequency	Fully satisfied		
		Management	Fully satisfied		
		Facilitation	Fully satisfied		
		Food	Fully satisfied		
		Others (training material)	Fully satisfied	n=1	
		Techniques introduced / demonstrated	4.1		
		Compost	Fully satisfied		
		Land Preparation	Fully satisfied		
		Seedling & Nursery	Fully satisfied		
		Transplanting	Fully satisfied		
		Maintenance of farm	Fully satisfied		
		Natural pesticide	Fully satisfied		
		Liquid feritlizer	Fully satisfied		
		Harvesting & seeds colection	Fully satisfied	n=7	
		Approach taken	3.5		
		Participatory planning	Satisfied		
		Time for planning	Fair		
		Group organization	Rather unsatisfied		
		Making regulations	Rather unsatisfied		
		FFS	Fully satisfied		
		Deployment of staff	Fully satisfied		
		No cash payment	Fully satisfied	n=7	
		Work relationship	3.8		
		- with local staff of NGO	Fully satisfied		
		- with field staff of NGO	Fully satisfied		
		- with MAF	Fully satisfied		

Objectives	Accomplishmer	nts			
	_	- with JICA Study Team	Fully satisfied		
		-Church	Fully satisfied	n=1	
		Note:			
		The number of sample is 8, unless specified with "n.".			
		<1: The level of satisfaction was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and			
		1= was not satisfied.			
		<2: The proportion of the positive answ	er against the total number of the positive and n	egative answers.	
		Source: JICA Study Team (2009)			
Any changes in	None				
the sub-program					
implementation					

Table 1-2-2 Evaluation of the Performance of HG-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives	
Objectives	Evaluation
1. Relevance	
1.1 Relevance to the needs of the target groups	- Vegetable production is one of the main agricultural activities in the village, in which women or housewives are mainly engaged. Therefore, the sub-program was selected by local communities, especially female participants, in 2007. As for stabilization and improvement of household income is one of the main concerns of local communities in the village. The sub-program activities, provision of technical and material support in vegetable production, are considered consistent with the needs of the target groups, especially women members, in the village.
1.2 Relevance with the watershed management plan	- One of the major constraints on forest and watershed protection is the limited livelihood opportunities in hilly and mountainous areas. Due to the lack of livelihood opportunities combined with limited knowledge of sustainable farming methods, local communities tend to heavily explore forest resources and/or practice shifting cultivation in an unsustainable manner. Hence, the improvement of livelihoods of local communities can help local communities to break out of the vicious cycle of poverty and environmental degradation as shown right.
2. Effectiveness	
2.1 Achievement of	- The main objective of the sub-program is to improve the living conditions of local communities through diversification and

Objectives	Evaluation					
sub-program objectives		increase of vegetable production in their own vegetable farms. As described in Table 1-2-2, the sub-program generated additional income for the members as high as US\$ 32 /family/year on average in addition to the increase of vegetable supply for daily consumption. - However, the number of the members who received the vegetable seeds decreased by half from the original members. It is hard to say that the sub-program achieved the target of the sub-program objective at a full scale, but the Study Team considers that the sub-program was able to achieve a certain level of the objective.				
	hard to say that the sub-					
2.2 Logical relation	- The sub-program comprise	ed of the following activities:	-			
between the activities and		urses (FFSs) on vegetable farming				
sub-program objectives		ls for vegetable farming				
	Provision of vegetabl					
		to the individual members in vegetable				
	1	paration of a request letter for MAF's s	11 4 11	rk of vegetable production. Hence, the		
				ng as long as the members take part in a		
	series of hands-on training		s for vegetable farmi	ing as fong as the members take part in a		
			sarily increase or st	abilize household income since it is not		
				e to poor road conditions and limited		
	transportation services in t		J	1		
2.3 Any external factors	- The following activities of	or external factors affected the partici	pation of the group	members in the project and eventually		
that affected the project	affected the progress of th					
implementation		such as Koremetan and Uma lulic				
		or other projects with cash payment				
	Weak leadership of the	<u> </u>	. 1			
	Furthermore, the followingShortage of rainfall	g factors directly affected the accompli	ishment of the project	Ct.		
	į	ders for the work/business in Dili				
3. Efficiency	7 Mosence of group lea	dets for the work business in Din				
3.1 Inputs made by NGO	- The following table shows	s the evaluation of major inputs made f	or implementation o	f the sub-program.		
	Inputs	Timing	Cost	Remarks		
	1. Staff allocation	Allocated as planned, but the number of staff was not sufficient in a certain period.	Half as much as planned	Amount of basic salary was lower than estimated in accordance with the work experiences of staffs recruited.		
	2. Provision of farm tools	As planned	As planned	-		
	3. Training	As planned	Higher than planned	Additional training courses were organized.		

Objectives	Evaluation					
	Source: JICA Study Team (2009)	9)				
	- Expenditures for training activities were beyond the amount originally planned. The NGO needed to repeat the same training courses sometimes to provide training as many members as possible. Limited participation of the members in training courses incurred the additional costs. Other inputs were almost the same with what were originally estimated.					
3.2 Level of achievement	- Hands-on training courses v	were consid	lered effective in enhancement of kno	owledge and skills	of the participants.	
of outputs and sub-program objectives as compared	- However, not all the memb not participate in the trainin		ble to acquire the skills provided by	the training, since	significant number of them did	
with the inputs	the sub-program spent the b groups likely learned the tec	oudget for l chniques a	in the training courses adversely after nands-on training more than expected and skills for vegetable farming.	l, only half the nun	nber of the total members of the	
		ldeia). The	ement of members' participation lev encouragement by the village leader he pilot project.			
4. Impact						
4.1 Positive impact	 - A series of hands-on training courses enabled the members to acquire techniques and skills on vegetable production. - On average, the members who received vegetable seeds were able to earn more than US\$ 30/family/year and to consume vegetables valued at about US\$ 40/family/year by the support from the sub-program. - Increase of vegetable consumption might improve the nutritional status of children in the members' households. 					
4.2 Negative impact	- The members who have pengaging in the government	•	in the project activities have lost t	the opportunities t	o earn cash income gained by	
5. Sustainability						
5.1 Government support	- There is no definite plan in the government to support the beneficiaries' groups or the village in vegetable production at present. However, the beneficiaries' groups might be able to tap the extensionist, which has been recently assigned to assist local people in Tohumeta for agricultural production, for having technical and material support in vegetable farming.					
5.2 Capacity of the groups	- Some members, particularly core members, of the groups have gone through the whole processes of producing a variety of vegetables. They have likely developed their capacities to produce vegetables in both dry and wet seasons, although they may still need to enhance their knowledge and skills especially on natural pesticide and liquid fertilizer application. - In the questionnaire survey done in August 2009, the members showed their willingness to continue the vegetable farming especially in the dry season.					
	Willingness	Rate <1	Why willing to continue	Any hindrance	Necessary assistance	
	to continue vegetable farming in dry season	4.1	It does not take long time to see results. To increase family income	Lack of time, workers, seeds,	Seeds, transportation of markets, and technical staff	

Objectives	Evaluation			
	water and fund.			
	to continue vegetable farming in wet season 2.8 Long beans are suitable for rainy seasons. lack of funds Seeds and shading materials			
	Note: The number of samples is 12. <1: The level of impact was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and 1= no impact Source: JICA Study Team (2009)			
	- As the production of vegetables in the wet season was lower than that in the dry season, the members preferred to continue the vegetable farming in the dry season.			
	- The JICA Study Team expects that the members likely continue the vegetable farming in their own farms even without at external support since many of them had grown vegetables by themselves even before the pilot project. However, the typ of vegetables and volume of products might not be as same as what they produced in the sub-program.			
5.3 Coordination with the NGO	- The NGO, Halarae Foundation, has no plan to provide technical and managerial assistance to local communities in the target village after the pilot project.			
5.4 Coordination with other organizations	- There is no coordination or linkage with other organizations made so far.			
5.5 Financial aspect	- The members were able to earn cash income enough to buy vegetable seeds for next cropping. Logically, it would not muc difficult for the members to continue the activities from the financial point of view.			

Table 1-2-3 Lessons learned

Lessons learned	Stage	Descriptions		
Participatory planning	Planning	- The participatory planning was effective in deepening the members' understanding of the sub-program		
		activities. The process of the participatory planning was good opportunity for the communities and the		
		NGO to share the ideas of the sub-program.		
Low participation	Implementation	- The level of the members' participation in the sub-program was not always high. Many members preferred		
		to engage in other projects that pay for the work. Strong leadership or support from the village leaders is		
		necessary for improvement of such situation.		
Deployment of field	Implementation	- Deployment of the field staff was effective in building a trustful relationship with local communities. Field		
staff		coordinator/s should be posted in the field during the implementation of the sub-program.		
Hands-on training / FFS	Implementation	- By hands-on training courses or FFSs, the members were able to practice and go through all the techniques		
approach		on vegetable production in the field. FFS approach should be employed as a main scheme to develop the		
		capacity of the members.		

Table 2-1-1 Appropriateness of the Implementation Process

Objectives	Accomplishments		
Appropriateness of	f - The members evaluated the process of the sul	p-program implementation from the viewpoints of	f satisfaction le
the process	courses, approaches taken in the sub-program	implementation and work relationship with the	NGO. The n
1	appreciated the sub-program activities as shown	*	
	Aspect	Evaluation by members	Note
	120,000	(Score <1 and % of Positive Ans.<2)	11000
	Training courses	3.9	
	- Contents of training	Fully satisfied	
	- Timeframe of training	Fully satisfied	n=10
	- Timing of training	Fully satisfied	
	- Techniques introduced	Fully satisfied	
	- Frequency of training	Fully satisfied	
	- Management of training	Fully satisfied	
	- Food provided	Fully satisfied	
	- Contents of training	Fully satisfied	
	Approach taken	3.3	
	- Participatory planning	Satisfied	
	- Sufficient time allocation for planning	Satisfied	
	- Organization of beneficiaries' groups	Rather unsatisfied	
	- Formulation of group regulations	Unsatisfied	
	- Field Farmers' School (FFS)	Fully satisfied	
	- Deployment of staff to the village	Fully satisfied	
	- No cash payment / Voluntary work	Fully satisfied	n=11
	Techniques introduced / demonstrated	4.3	
	- Compost making	Fully satisfied	
	- Land preparation	Fully satisfied	
	- Nursery establishment	Fully satisfied	
	- Soil prep and soil filling	Fully satisfied	
	- Seed preparation	Fully satisfied	
	- Sawing seeds in seed beds	Fully satisfied	
	- Transplanting	Fully satisfied	
	- Watering & weeding	Fully satisfied	
	- Designing	Fully satisfied	n=17
	- Hole digging and refilling	Fully satisfied	
	- Planting of seedlings	Fully satisfied	
	- Weeding	Fully satisfied	
	- Shading	Fully satisfied	n=19
	- Conventional irrigation	Fair	
	- Village regulations	Fully satisfied	n=8
	- Monitoring of VRs	Fully satisfied	n=8

Objectives	Accomplishments		
	Work relationship	3.8	
	- with local staff of NGO	Satisfied	
	- with field staff of NGO	Fully satisfied	
	- with MAF	Fully satisfied	
	- with JICA Study Team	Fully satisfied	
Ann about and in the	Note: The number of sample is 12, unless specified with "n.". <1: The level of satisfaction was evaluated by using 5-poin <2: The proportion of the positive answer against the total Source: JICA Study Team (2009) - Since the beneficiaries' groups have had difficulties i evaluated the aspects related to group organizations, in regulations," unsatisfied.	number of the positive and negative answers. n involving all the members of the groups	in the project activities, they
Any changes in the	None		
sub-program			
implementation			

Table 2-1-2 Evaluation of the Performance of TPP-SP at Samalete (based on the five criteria, such as relevance,

effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	 Coffee is the main source of income in Samalete and many community members in the village intend to expand their coffee plantations to increase their cash income. In order to expand the coffee plantations, they need to first expand the areas covered with shade trees since there is no existing forest except coffee plantations in Samalete. In addition, the leaders of the village intend to reforest the village to secure and increase the flow of water sources in the village since a shortage of water is one of the critical issues in the village, especially during the dry season. It is, therefore, judged that the project activities are consistent with the needs of the village.
1.2 Relevance with the watershed management plan	- Deforestation or forest degradation is the main phenomenon of the watershed degradation. Tree planting can rehabilitate the deforested areas and will directly contribute to the improvement of the target watersheds.
2. Effectiveness 2.1 Achievement of sub-program objectives	 The main objective of the sub-program is to expand the forest cover in the village through the capacity development of local communities to produce and plant seedlings and the protection of planted seedlings by introduction of the local regulations. As described in Table 2-1-2, the beneficiaries' groups were able to plant 50,428 seedlings, of which 49,859 seedlings were confirmed alive as of August 2009. The seedlings planted under the sub-program have been protected from wildfire and illegal cutting owing to the revival of Tara Bandu with the written village regulations. It is safe to say that the sub-program were able to achieve its objective at a certain level. But there is still a need to develop the capacities of the beneficiaries' groups to enable them to produce seedlings sustainably even after the end of the pilot project.
2.2 Logical relation between the activities and sub-program objectives	 The sub-program comprised of the following activities: Installation of watering systems Hands-on training courses (FFSs) on seedling production and planting trees Technical assistance to individual members Provision of farm tools for planting seedlings Development of the village regulations in writing and revival of Tara Bandu In the design of the sub-program, the members can go through the whole processes of producing and planting seedlings. It is expected that the members who would participate in the sub-program actively could develop their capacities to expand forested areas.
2.3 Any external factors that affected the project implementation	 The following activities or external factors affected the participation of the group members in the project and eventually affected the progress of the project. Traditional activities, such as Koremetan and Uma lulic

Objectives	Evaluation						
-	Government projects						
	- Furthermore, the following factors	directly affected the accomplis	hment of the project.				
	Shortage of rainfall						
	Stealing of seedlings in the nu	rseries					
	Land dispute						
	Straying animal						
3. Efficiency							
3.1 Inputs made by NGO	- The following table shows the evaluation of major inputs made for implementation of the sub-program.						
	Inputs	Timing	Cost	Remarks			
	1. Staff allocation	As planned but there were several months when only one field staff had worked in the field.	Beyond the planned budget	The employment of local staff was not planned in the second contract.			
	2. Installation of watering system	Behind the schedule	Slightly higher than planned	Delay in contract with JICA caused the delay in installation of water systems.			
	3. Provision of farm tools	As planned	Slightly higher than planned	_			
	4. Training	As planned	Increased by 50 %	There was a need to organize the same training courses several times.			
	5. Development of the village regulations and Tara Bandu ceremony	Slightly behind the schedule	As planned	The suco leaders decided to organize Tara Bandu ceremony in December.			
	Source: JICA Study Team (2009) - Installation of water system was a delayed. Such delay partially car installation of water system were care. There were some weeks or months sub-program, though there were sub-program to consider the source of the sub-program though the sub-program though the sub-program to consider the sub-	used the delay in seedling pro- arried out as originally planned in which only one field staff of pposed to be two field staffs as ses were beyond the budget or wer as many members as pos- ts.	duction in 2008. Almost. If the NGO was assigned signed during the whole iginally planned. The National sible. Limited participa	during the implementation of the sub-program period. NGO needed to repeat the same tion of the members in training			
3.2 Level of achievement of outputs and sub-program objectives as compared with the inputs	 Hands-on training courses were However, not all the members were significant number of the members Limited participation of the members loss could have been avoided if the 	re able to acquire the skills ne did not actively participate in t ers in the nursery operations a	eded for seedling produ the hands-on training co- also caused some loss of	ction and tree planting, since the urses.			

Objectives	Evaluation				
	· ·	the process of	ogram has faced in facilitation of the of seedling production, the Study Tea		1 0
4 Transat	been necessarily impier	nemed emicie	nuy.		
4. Impact	P . 1 .		1 1		
4.1 Positive impact	Owing to such feeling,	d periodical the frequency	meeting among the group members not disputes or conflicts between/among gulations and/or revival of Tara Band	g community me	mbers has been reduced.
	- The peace and order si	tuation of the	village have been improved.		
			evest has been found in the village.		
			of illegal cutting have been reduced.		
	- The water systems inst eased the burden of loca		sery operations have been also used for	or drinking purp	oses. The water systems have
	Impact to other villages				
	- The neighboring villag revive the Tara Bandu s	•	privilege of Samalete. Other villages	also want to im	plement the sub-program and
4.2 Negative impact	- The members who havengaging in the government	• •	I in the project activities have lost the	e opportunities to	earn cash income gained by
5. Sustainability					
5.1 Government support		ever, the gove	target village in seedling production be ernment initiatives are still uncertain si pilot project.		
5.2 Capacity of the groups	- Core members of the g developed their capacit especially on how to co - On the other hand, the	roups have go y to produce pe with diseas members eva	one through the whole processes of see seedlings though they still need more ses of seedlings. aluated that they have understood alm	field practices to ost all the techni	acquire knowledge and skills ques on planting trees except
	the members would have design the plantations p	ve less difficul roperly.	own in Table 2-1-2. Based on the field lty in planting seedlings in their own f	arms, though ma	ny of them may not be able to
	- In the questionnaire s production as shown be	•	n August 2009, the members showe	ed their willingn	ess to continue the seedling
	Willingness	Rate <1	Why willing to continue	Any hindrance	Necessary assistance
	Production by group	4.1	Useful for future	funds, man	Poly bags and other planting

Objectives	Evaluation				
_	(n=14)		Good for income	power and	materials
			Working together makes things easier	location	
	Note: "n" means the numb				
		•	ated by using 5-point rating, namely 5=very wel	l 4=well, 3=fair, 2=l	less, and 1= no impact
	Source: JICA Study Team (20	· ·			
			willingness to keep implementing the		
	continue the sub-progra	m as a grou	p without any external assistance. In	n fact, many me	embers of the groups seem to
	regard the nursery opera	tions as labor	rious and time consuming.	•	
5.3 Coordination with the	- The NGO, Halarae Fou	ndation, has	no plan to provide technical and man	agerial assistanc	e to local communities in the
NGO	target village after the pi	lot project.			
5.4 Coordination with other	- There is no coordination	or linkage w	with other organizations made so far.		
organizations					
5.5 Financial aspect	- It would be rather diffic	ult for the be	neficiaries' groups to undertake the sar	ne activities with	hout financial support after the
	pilot project. In particula	r, the groups	s may need support in the procurement of	of seeds of trees	and poly bags.

Table 2-1-3 Lessons learned from TPP-SP at Samalete

Lessons learned	Stage	Descriptions
Participatory planning	Planning	- The participatory planning was effective in deepening the members' understanding of the sub-program
		activities. The process of the participatory planning was good opportunity for the communities and the
		NGO to share the ideas of the sub-program.
Low participation	Implementation	- The level of participation of the members in the project activities was not always high. In particular, the
		participation in nursery operations, such as watering and weeding, was limited. The collective activity as
		a group was not necessary accepted by all the members. Some did not prefer to work for others.
		- Without an obvious incentive given in the subprogram, it would not be easy for the sub-program to
		maintain the level of participation of the community members in the sub-program activities.
Combination with the	Implementation	- The development and implementation of the village regulations were effective in protecting the seedlings
formulation of Tara		planted from wildfire, stealing, and animal damage. The sub-program should be combined with the
Bandu regulations		formulation of the village regulations.
Deployment of field	Implementation	- Deployment of the field staff was effective in building a trustful relationship with local communities. Filed
staff		coordinator/s should be posted in the field during the implementation of the sub-program.
Hands-on training / FFS	Implementation	- By hands-on training courses or FFSs, the members were able to practice and go through all the techniques
approach		on seedling production and tree planting in the field. The FFS approach should be employed as a main
		scheme to develop the capacity of the members.

Table 2-2-1. Appropriateness of the Implementation Process of CPR-SP at Samalete

Objectives	Accomplishments					
opropriateness of	The members evaluated the process of the sub-prog	gram implementation from the viewpoints of	satisfaction le			
e process	courses, approaches taken in the sub-program imp	lementation and work relationship with the	NGO. The n			
•	appreciated the sub-program activities as shown below	· ·				
	1 3					
	Aspect	Evaluation by members	Note			
	-	(Score <1 and % of Positive Ans.<2)	Note			
	Training courses	4.3				
	- Contents of training	Fully satisfied				
	- Timeframe of training	Fully satisfied	n=10			
	- Timing of training	Fully satisfied				
	- Techniques introduced	Fully satisfied				
	- Frequency of training	Fully satisfied				
	- Management of training	Fully satisfied				
	- Food provided	Fully satisfied				
	- Contents of training	Fully satisfied				
	Techniques introduced / demonstrated	4.2				
	- Compost making	Fully satisfied				
	- Rejuvenation	Fully satisfied				
	- Pruning of coffee trees	Fully satisfied				
	- Planting of coffee seedlings	Fully satisfied				
	- Maintenance of plantation	Fully satisfied				
	- Harvesting of coffee cherries	Fully satisfied				
	- Processing of coffee cherries	Fully satisfied				
	- Seed selection	Fully satisfied				
	Approach taken	3.8				
	- Participatory planning	Fully satisfied				
	- Sufficient time allocation for planning	Fully satisfied				
	- Organization of beneficiaries' groups	Fully satisfied				
	- Formulation of group regulations	Fully satisfied				
	- Field Farmers' School (FFS)	Fully satisfied				
	- Deployment of staff to the village	Fully satisfied				
	- No cash payment / Voluntary work	Fully satisfied	n=11			
	Work relationship	4.5				
	- with local staff of NGO	Fully satisfied				
	- with field staff of NGO	Fully satisfied				
	- with MAF	Fully satisfied				
	- with JICA Study Team	Fully satisfied				
	Note:	,				

Objectives	Accomplishments
	The number of sample is 12, unless specified with "n." <1: The level of satisfaction was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and 1= was not satisfied. <2: The proportion of the positive answer against the total number of the positive and negative answers. Source: JICA Study Team (2009)
	- The framework of the training courses, approaches taken, and work relationship with the NGO as well as JICA Study Team were highly accepted and appreciated by the beneficiaries' groups. Considering the results of the training courses given to the members, the Study Team considers that the process of the sub-program is generally appropriate for development of the capacity of the members to rehabilitate aged coffee and improve the productivity of existing coffee plantations.
Any changes in the sub-program implementation	- None

Table 2-2-2 Evaluation of the Performance of CPR-SP at Samalete (based on the five criteria, such as relevance,

effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	 Coffee is the main source of income in Samalete. However, many existing coffee trees in the village are over-aged and under poor management as well, and therefore, the productivity of coffee in the area is estimated to be as low as less than 0.1 ton/ha according to the results of RRA survey carried out in 2007. Consequently, the improvement of productivity of the existing coffee plantation is one of the major concerns of local communities in the village. Therefore, the capacity development of local communities for improving the productivity of the existing coffee plantation is closely related to the needs of local households in the village.
1.2 Relevance with the watershed management plan	- Existing coffee plantations are generally covered with a thick canopy of shade trees (alvizia trees) in the Comoro river watershed. Proper management and protection of the existing coffee plantations in the village directly contributed to sustainable management and protection of the target watershed since local people likely covert unproductive coffee plantations into other land uses, such as upland farms. Furthermore, the improvement of coffee productivity also contributed to the increase and stabilization of cash income of local households in the village.
2. Effectiveness	
2.1 Achievement of sub-program objectives	 Given the fact that only two members have applied the rejuvenation practice in their own farms so far, it is difficult to say that the sub-program has achieved its objective. It would take a few years more for local communities to start replicating the techniques of rejuvenating and pruning in their farms. In general, farmers tend to hesitate to apply any techniques/practices newly introduced until they see the actual results of such techniques.
2.2 Logical relation between the activities and sub-program objectives	 The sub-program comprised of the following activities: Hands-on training courses (FFSs) on rehabilitation of aged coffee trees and improvement of productivity of existing productive trees
out program objectives	 Provision of farm tools for application of the techniques introduced in the hands-on training Technical assistance to individual members Logically, the above-listed activities are considered appropriate for development of the capacity of the members to improve their own coffee plantation on their own initiatives. However, there should have been a scheme to support the members financially if the sub-program needed to achieve its objective within the 20 months.
2.3 Any external factors	- Traditional activities, such as Koremetan and Uma lulic, and the other government projects had affected the participation
that affected the project	of the group members in the sub-program and eventually affected the progress of the sub-program.
3. Efficiency	
3.1 Inputs made by NGO	- The effectiveness and efficiency of major inputs made by the NGO for implementation of the sub-program were also evaluated as follows.

Objectives	Evaluation				
_	Inputs	Timing	Cost	Remarks	
	1. Staff allocation	As planned but there were several months when only one field staff had worked in the field.	Beyond the planned budget	The employment of local staff was not planned in the second contract.	
	2. Provision of farm tools	As planned	Slightly lower than planned	Farm tools were not given to inactivity members.	
	3. Training	As planned	Increased by 45 % from the original budget	NGO needed to organize the same training twice or trice for absent members.	
	Source: JICA Study Team (2009)				
3.2 Level of achievement of outputs and sub-program objectives as compared with the inputs	training courses due to the lo incurred the additional costs for the NGO coordinated with allowed the NGO not to hire at Hands-on training courses were However, not all the members improvement of existing production training courses organized the results of the inputs/inter-	ow participation of the members or training. Other inputs were alread PARDTL and MAF in the consult expert/s from external sources re considered effective in enhances might be able to acquire the skill uctive coffee trees since signification anized in the sub-program.	s. Limited participation of most the same with what will duct of hands-on training for training. The most the same with what will duct of hands-on training for training. The most training is for training to the member of the member of the member or	g courses. Such an arrangement	
4. Impact	1	1			
4.1 Positive impact	 Working as a group and periodical meeting among the group members made the solidarity among the member strong Owing to such feeling, the frequency of disputes or conflicts between/among community members has been reduced. The members have acquired new knowledge and skills that can improve the productivity of their coffee plantations. 				
4.2 Negative impact	- The members who have participated in the project activities may have lost the opportunities to earn cash income gained by engaging in the government project.				
5. Sustainability					
5.1 Government support		apport coffee farmers in rehability vever, the area covered by the go		tions by rejuvenating old trees and very limited.	

Objectives	Evaluation				
5.2 Capacity of the groups	improvement of coffee p coffee plantations.In fact, as shown in Ta sub-program. Considering	olantations. The ble 2-2-2, the graph the nature	have gone through the field application. They have developed their capacity to in the members consider that they have under the techniques, the JICA Study Tea	nprove their coffee derstood all the am also judges the	ee plantations, especially aged techniques introduced by the
			in their own farms from a technical point of ford to take a risk of leading the or		anata in aoma by auttina turnl
	or branches of existing of slower pace as the members.	offee trees. Ders observe	not afford to take a risk of losing the op It is expected that the application of suc the rejuvenated or pruned coffee trees b August 2009, the members were willing	ch techniques mig ear coffee cherric	ght be expanded gradually at a es.
	- in the questionnaire surv		/illingness of the Members to continue th		inques that they have rearnt.
	Willingness	Rate <1	Why willing to continue	Any hindrance	Necessary assistance
	To continue compost making	4.3 (n=15)	To make the crops grow well To improve soil composition	Worker, Material, Locations	EM4 and Materials
	To continue rejuvenating of old coffee trees	4.3 (n=17)	To make harvest easy To improve production and quality of coffee To use cut trees for firewood	Worker, Time Fund, Materials	Materials including saw, machete, and iron sticks
	To continue pruning coffee trees	4.8 (n=17)	To make harvest easy	Worker, Fund, Materials	Scissor, Saw
	- Though the members co would not be much dif sub-program has already	mpact was evalue (199) mmented the ficult for the provided the	at they need material support like scisson members to replicate the techniques e same tools to the members.	or and saw for aps without having	opplication of the techniques, is additional support since the
5.3 Coordination with the NGO	- The NGO, Halarae Foundation, has no plan to provide technical and managerial assistance to local communities in the target village after the pilot project.				
5.4 Coordination with other organizations	 Many members have the membership of CCT. Hence, it is also possible for them to have a certain support from CCT. Application of the rejuvenation and pruning techniques does not require cash expenses. But many of them can not afford to take a risk of losing a source of cash income. 				
5.5 Financial aspect					

Table 2-2-3 Lessons learned from CPR-SP at Samalete

Lessons learned	Stage	Descriptions
Participatory planning	Planning	- The participatory planning was effective in deepening the members' understanding of the sub-program
		activities. The process of the participatory planning was good opportunity for the communities and the
		NGO to share the ideas of the sub-program.
Low participation	Implementation	- The level of the members' participation in the project activities was not always high. The collective activity
		as a group was not necessary accepted by all the members. Some did not prefer to work for others.
		- Without an obvious incentive given in the subprogram, it would not be easy for the sub-program to
		maintain the members' participation in the sub-program activities.
Deployment of field	Implementation	- Deployment of the field staff was effective in building a trustful relationship with local communities. Filed
staff		coordinator/s should be posted in the field during the implementation of the sub-program.
Hands-on training / FFS	Implementation	- By hands-on training courses or FFSs, the members were able to practice and go through the techniques on
approach		coffee rejuvenation and pruning. The FFS approach should be employed as a main scheme to develop the
		capacity of the members.

Table 3-1-1 Appropriateness of the Implementation Process of PULP-SP at Faturasa

Objectives	Accomplishments		
Appropriateness of	- The members of the working group evaluated the process of the sub-program im	plementation from the viewpoints of sati	sfaction
the process	level of the meetings, approaches taken in the sub-program and work relationship	with the NGO. In general, the members	s highly
•	appreciated the sub-program activities as shown below.		
	Aspect	Evaluation by the members	
	Meetings	·	
	- Contents of meeting	Satisfied	
	- Timeframe of meeting	ditto	
	- Timing of meeting	ditto	
	- Topics discussed	ditto	
	- Frequency of meeting	ditto	
	- Management of meeting	ditto	
	- Food provided	ditto	
	Approaches taken		
	- Present land use mapping	Satisfied	
	- Future land use mapping	ditto	
	- Rules on natural resource uses	ditto	
	- Guidelines on land management	ditto	
	- Monitoring of implementation of the village regulations	ditto	
	- Roles and responsibilities of the village committee	ditto	
	- Importance of the village regulations to the village	ditto	
	- Importance of the village regulations to watershed management	ditto	
	Work relationship		
	- with local staff of NGO	Satisfied	
	- with field staff of NGO	ditto	
	- with MAF	ditto	
	- with JICA Study Team	ditto	
	Source: JICA Study Team (2009)		
Any changes in the	- None		
sub-program			
implementation			

Table 3-1-2 Evaluation of the Performance of PULU-SP at Faturasa (based on the five criteria, such as relevance,

effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	 Sustainable natural resource management along with reduction of forest fire can directly contribute to the security of livelihoods of local communities since they are significantly dependent on natural resources for their livelihoods. Since the main aim of the sub-program is to enable the local communities to manage and use natural resources in the village in a proper and sustainable manner, the sub-program is considered consistent with the needs of the local communities. In fact, the participation level of local communities in the sub-program activities has been kept high. This tendency must be evidence that the sub-program activities are in line with the needs of local communities.
1.2 Relevance with the watershed management plan	- Incidence of forest fire, shifting cultivation, and over-grazing along with improper land use are the direct causes of forest and land degradation in the target watersheds. The sub-program aims to minimize wildfire caused by human activities, reduce the areas used for shifting cultivation, and restrict free grazing in agricultural production and ecologically important areas through introduction of the village regulations with a future land use map. Consequently, the implementation of the sub-program is expected to contribute to the improvement of the watershed environment.
2. Effectiveness	
2.1 Achievement of sub-program objectives	 The main objective of the sub-program is to enable the local communities in the target village to manage and use natural resources in their locality in a proper and sustainable manner. As described in Table 3-1-2, the incidence of wildfire and illegal extraction of forest resources have been drastically reduced after the village regulations were publicized in the Tara Bandu ceremony. Though the communities still seem to need the assistance of the NGO in the implementation of the village regulations, the sub-program activities revealed that the formulation of the village regulations with future land use mapping was quite effective in developing the capacities of the village leaders and reducing the human activities causing the forest and land degradation. The results of the questionnaire survey made by the JICA Study Team also revealed that the members' understandings of the village regulations and implementing system introduced were apparently high. Although it would take some times more for local communities to be able to revise the village regulations as the environment of the village changes, it is safe to say that the members of the working group have digested the village regulations and can use them for sustainable resource management in the village.
2.2 Logical relation	- The sub-program comprises of the following activities:
between the activities and	Preparation of a present land use map of the village;
sub-program objectives	Discussion of land and resource use options;
	Preparation of a future land use map;
	 Determination of rules and regulations on natural resource management; Determination of fines and penalties, roles and responsibilities of the village committee, and a system/mechanism for
1	> Determination of thies and penalties, foles and responsibilities of the vinage committee, and a system/mechanism for

Objectives	Evaluation					
	implementation of the village regulations;					
	 Organization of a traditional ceremony (Tara Bandu ceremony) 					
	Organiza					
	Facilitat	ion of discussions among the	committee and as	sistance in resolvi	ing the issues discussed in the r	neetings
					roup to manage the natural res	
					issues in the village. It is ju	
		activities directly contribute				
2.3 Any external factors					egulations. In combination v	vith the strong
that affected the project		h among the local communiti				C
implementation					raged the local communities to	be responsible
		tions as well as the future lan		Ž		•
	_			oring villages are	still prevailing. Such external	influence may
	•	the people's confidence in the	•	6 6	1 6	J
3. Efficiency		•				
3.1 Inputs made by NGO	- The following	g table shows the original bud	dget and actual ex	penses of the sub-	program.	
			Inputs ma	de by NGO		
		Inputs	Timing	Cost	Remarks	
		1. Staff allocation	As planned	As planned Beyond the	Socialization meetings were	
		2. Workshops for formulation	As planned	Beyond the planned budget	Socialization meetings were organized at aldeia level.	
		3.Tara Bandu ceremony	As planned	As planned	-	
		-	Not organized as	_	Monthly meetings were not	
		4. Monitoring meeting	planned	As planned	always organized every month	
				A 1 1	due to busyness of the NGO.	
	Source: JICA Stud	5. Fence making	As planned	As planned	-	
			are considered and	propriate and reason	onable as compared with the re	esults made by
	the activities.		are considered upp	oropriate and reas	ondore as compared with the re	esaits made by
			implemented as	schedule but mo	onthly monitoring meetings we	ere not always
		ery month due to the busynes		senedare, our mo	many momentum meetings we	ore not arways
3.2 Level of achievement		<u> </u>		tions and future la	and use map in a participatory r	nanner and has
of outputs and						inamici and mas
sub-program objectives as	•	implemented the regulations according to the implementation system stipulated in the regulations. The implementation of the village regulations along with Tara Bandu ceremony has reduced the incidence of wildfire and				
compared with the inputs		tation of forest and natural re			, y	
and the state of t				the village regul	lations and meetings for mor	nitoring of the
					ers for governing the village in	
			6p			

Objectives	Evaluation
	resource management. It is, therefore, judged that workshops and meetings organized contributed to the achievement of the outputs and purpose of the project effectively. - A large scale investment was made for fence making on the 2 km boundary between the grazing land and permanent farm to separate free-grazing animals from farms. The Study Team judges that it was necessary input for the project to realize the future land use map in a short period of time, but it is also true that such scale of investment might not be reasonable from the viewpoint of applicability.
4. Impact	
4.1 Positive impact	 Economic and socio-economic impact to the members - As series of activities for making and implementing the village regulations has improved the governing ability of the village leaders and made other community members serious about observing the regulations, and eventually resulted in improving the peace and order situation of the village and protecting individual right to protect their own assets from illegal capture. - Reduction of wildfire, crop damage caused by animals, and illegal exploitation of natural resources and agricultural products can contribute to reducing the risk of food shortage. - Present and future land use mapping helped local leaders to realize the present and possible future conditions of forests in the village and improved a sense of ownership of natural resources among village leaders. Impact to other villages - Leaders of the neighboring villages showed their willingness to develop their future land use maps and village regulations
	to protect and manage natural resources in their localities.
4.2 Negative impact	- In Faturasa, most of the lands belong to the limited number of land owners and many community members have used part of their lands under an unwritten-cum-conventional agreement between the owner and user. Since the village regulations define that no one can use anyone's land without permission of the owner, there have been some disputes over land use between the land owners and those who have used the owners' lands for long time. It was agreed among the community members that the vested tenure right should be protected though it was not clearly mentioned in the village regulations.
5. Sustainability	
5.1 Government support	- There is no government clear plan to support the sub-program activities after the pilot project. Although the forest policy states that sustainable forest management supported by forest protection and community participation is the policy goal. However, there is no actual physical activity planned in the government.
5.2 Capacity of the groups	 The village leaders have comprehended the village regulations and been capable to solve issues in the village by themselves in accordance with the village regulations. Although they still need external assistance to adjust and revise the village regulations with the changes in the conditions of the village, the group leaders are expected to be capable of managing natural resources in the village according to the village regulations.
5.3 Coordination with the	- The NGO, USC Canada Timor-Leste, was committed to supporting the village in the implementation and monitoring of

Objectives	Evaluation
NGO	the village regulations even after the end of the pilot project. In fact, the NGO already programmed the post-pilot project activities in its work plan in 2009. Hence, the village regulations are expected to be implemented in the same manner that they have implemented during the project period.
5.4 Coordination with other organizations	- There is no coordination or linkage with other organizations made so far.
5.5 Financial aspect	- Implementation of the village regulations does not require money expenditure. Only some snacks and tea/coffee may be needed for the monthly monitoring meeting. In terms of financial aspect, it would not be difficult for local communities to continue the sub-program activities.

Table 3-1-3 Lessons learned from the Implementation of PLUP-SP at Faturasa

Lessons learned	Stage	Descriptions
Mapping	Planning stage	 - Present and future land use mapping was effective for having the working group and village leaders comprehend the present conditions and possible future of the village. - Aerial photo was an effective tool for making present and future land use map on a village level.
Series of meetings	Planning stage	 Series of meetings and workshops helped the village leaders to come up with the village regulations suitable for the village. Through the process of making the village regulations, the leaders were able to digest the contents of the regulations. Sufficient length of time should be allocated for socialization of the village regulations to local communities at aldeia level.
Tara Bandu ceremony Implementation stage		- Involvement of church in Tara Bandu ceremony or endorsement from priest in Tara Bandu ceremony was effective in giving credence to the village regulation among local communities.
Monitoring and implementation	Planning stage	 Monthly monitoring meeting enhanced the capacity of the village leaders to solve issues in the village. Monitoring meeting should be organized not only at the suco level but also at the aldeia level. Coordination with the sub-district office and MAF district office should be made for effective implementation of the village regulations.

Table 3-2-1 Appropriateness of the Implementation Process

Objectives		Accomplishments			
Appropriateness	of t		aluated the process of the sub-program in	mplementation from the viewpoint	s of satisfaction level
process		training courses,	approaches taken in the sub-program in	nplementation and work relations	hip with the NGO.
-		members highly a	ppreciated the sub-program activities as sh	own below.	
			Aspect	Evaluation by members (Score <1 and level of satisfaction<2)	
			Training courses	4.2	
			Content	Fully-satisfied	
			Time frame	ditto	
			Timin	ditto	
			Techniques	ditto	
			Fequency	ditto	
			Management	ditto	
			Facilitator	ditto	
			Food	ditto	
			Techniques introduced / demonstrated	4.0	
			Compost making	Fully-satisfied	
			Use of A-frame	ditto	
			Soil conservation measures	ditto	
			Protein bank	ditto	
			Control of chromoralena	ditto	
			Approach taken	4.0	
			Participatory planning	Fully-satisfied	
			Time for planning	ditto	
			Group organization	ditto	
			Making regulations	ditto	
			FFS	ditto	
			Deployment of staff	ditto	
			No cash payment	ditto	
			Work relationship	3.8	
			- with local staff of NGO	Fully-satisfied	
			- with field staff of NGO	ditto	
			- with MAF	ditto	
			- with JICA Study Team	ditto	
			- Church, Health and teacher	ditto	

Objectives	Accomplishments					
	Source: JICA Study Team (2009)					
	Note:					
	The number of samples is 17, unless specified with "n".					
	<1: The level of satisfaction was evaluated by using 5-point rating, namely 5=fully satisfied, 4=satisfied, 3=fair, 2=rather unsatisfied, and 1= unsatisfied.					
	<2: The portion of positive answers to the total is also used in evaluation of the satisfaction level. And the classification was given to the range of the portion, such as, 0-20% =unsatisfied, 20-40% =rather unsatisfied, 40-60% =fair, 60-80%= satisfied, and 80-100%=fully satisfied.					
Any changes in the sub-program implementation	- None					

Table 3-2-2 Evaluation of the Performance of GCPBWPR-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the	- Animal diseases caused by the lack of edible grasses or herding places due to expansion of Chlomoraena is one of the
needs of the target groups	major concerns in the village. Furthermore, the lack of herding places is also one of the causes of the extensive free grazing
	in the village, which often cause the crop damage in the farms. Hence, the aims of sub-program, namely, biological control of Chlomoraena and development of protein bank, have high consistency with the necessity of the community.
1.2 Relevance with the	- Improving the land productivity for animal raising by producing fodder crops/trees and replacing Chlomoraena with edible
watershed management	grasses for animal is effective in reducing the uncontrolled free grazing practices and improving the livelihood conditions
plan	by keeping animals healthy. Hence, the intervention of the sub-program will contribute to the achievement of the
	objectives of the watershed management plan.
2. Effectiveness	
2.1 Achievement of sub-program objectives	- The main aim of the sub-program is to develop a model for reducing free animal grazing by reducing areas with Chlomoraena and producing fodder crops/trees. It is difficult to say that the sub-program was able to develop and demonstrate the model for controlling animal grazing. Time allocated for the pilot project might be too short for the sub-program to show its results clearly. In particular, the biological control, which will take five (5) years or more to show its effect, may not always be accepted by local communities. As shown in the Table 3-2-2, the members apparently have understood the techniques of grazing control through the training sessions.
2.2 Logical relation	- The sub-program comprises of the following activities:
between the activities and	➤ Hands-on training courses (FFSs)
sub-program objectives	Management of demonstration plots for the protein bank and biological control against Chlomoraena

Objectives	Evaluation						
	These a technique	Raising public awareness of the need to protect the demonstration plots for the biological control from forest/wildfire. These activities were effective in enhancing the capacities of the groups to implement the grazing control, although the techniques introduced in the sub-programs might be reconsidered to make them applicable/acceptable to local communities.					
2.3 Any external factors that affected the project implementation	sub-pro - The act the men - A shorta	 Churches at Faturasa as well as the district administrator of Aileu district has encouraged the members to participate in the sub-program activities actively. The activities of PLUP-SP, such as the preparation of the future land use map and village regulations in the village helped the members to deepen their understandings of the objectives of GCPBWPR-SP. A shortage of rainfall in the dry season in 2009 negatively affected the growth of fodder trees and crops. The government projects, so-called 3-dollar-project, affected participation level of members. 					
3. Efficiency							
3.1 Inputs made by NGO	- The foll	lowing table shows the origina Cost items	al budget and actual exp Timing	enses of the sub-programmer Cost	ram. Remarks		
		1. Staff allocation	As planned	As planned	-		
		2. Training	-	•			
		2.1 Protein bank	Some activities delayed	Increased	 Training on planting fodder trees and crops was postponed due to the lack of rain. Training cost increased as the number of participants increased with participation of the members of CBSE-SP. 		
		2.2 Biological control of chlomoraena	Some activities delayed	Increased	 Training on collection and releasing larvae of fly was delayed due to busyness of the facilitator of MAF. Training cost increased as the number of participants increased with participation of the members of CBSE-SP. 		
		3. Provision of materials					
		3.1 Seeds	As planned	Twice as much as planned	The planting materials of fodder crops/trees were also distributed to the members since they were willing to develop the protein bank in their own plots.		
		3.2 Agricultural tools	As planned	As planned			
		3.3 Materials for fence making	As planned	Increased	The total length of constructed fences was longer than that in the original plan since the size of demonstration plot was larger		

Objectives	Evaluation							
					based on the strong request from the members.			
		3.4 Sign board	As planned	As planned	-			
		4. Meetings, e.g., evaluation workshops	As planned	As planned	-			
		Source: JICA Study Team (20)	The state of the s					
	- In gener		GO are considered app	ropriate and reasonab	le as compared with the results made by			
	- Some o	of the training courses were	postponed due to but	syness of the trainer	s and unfavourable climate conditions.			
		er, such delays did not influen						
3.2 Level of achievement		on training courses were consi			skills of the members.			
of outputs and					embers' participation in the sub-program			
sub-program objectives as	activitie	activities.						
compared with the inputs								
4. Impact								
4.1 Positive impact	Impact to	the members						
					der crops/trees to the own farms.			
		as been no wild fire caused by						
		g cultivation practice may be r	eplaced with the practic	ce of contour compost	ing.			
	_	other community members						
				sub-program also star	rted to plant fodder crops/trees following			
1.237	+	the techniques introduced in the demonstration plots.						
4.2 Negative impact	- Demons	stration plots of the biological	control of Chlomoraen	a apparently became a	habitat for rodents.			
5. Sustainability								
5.1 Government support	deploye	- There is no government clear plan to support the sub-program activities after the pilot project. Since the government deployed extensionists at the suco level, the communities in Faturasa might be able to tap the technical support from extensionists. But there has been no coordination made with the extensionist who is in charge of Faturasa.						

Objectives	Evaluation						
5.2 Capacity of the groups	protein bank and biological cont	According to the Table 3-2-2, almost all the members judged that they could apply the grazing control techniques, namely, protein bank and biological control of Chlomoraena. The members showed their willingness to continue the activities of grazing control as shown below.					
	Willingness	Rate <1	Why willing to continue	Why not willing to continue	Any hindrance	Necessary assistance	
	to apply protein bank in the or	wn 4.2	To use for individual animal grazing can save food for animal for long term period, good way to replicate, gives additional income, reduce the existing Chlomoraena	N.A.	N.A.	N.A.	
	to manage the demonstration p for biological control	lot 3.8	To kill Chlomoraena	N.A.	N.A.	N.A.	
	to apply the biological conti measure to the own farms	3.6	N.A.	N.A.	N.A.	N.A.	
	Source: JICA Study Team (2009) - Although the members are wil activities without any external scrops/trees.	ling to con support, esp	g 5-point rating, namely 5=very well 4=well atinue the sub-program activities, it pecially without the provision of man	t would be o	difficult for the as seeds and	hem to continue the I seedlings of fodder	
5.3 Coordination with the NGO	- The NGO, USC Canada Timor-Leste, was committed to continuing its assistance to the beneficiary groups even after the end of the pilot project. In fact, the NGO already programmed the post-pilot project activities in its work plan in 2009 Hence, the groups can still have technical assistance from the NGO.						
5.4 Coordination with other organizations5.5 Financial aspect	exposure visit, preparation of ma	- The NGO has been coordinating with NDRSS of MAF for biological control of Chlomoraena in the organization of exposure visit, preparation of materials for awareness raising, and provision of training. - It would be difficult for the members to continue the activities of the sub-program without external support especially for					
5.5 Financial aspect			nd seedlings of fodder crops/trees	•			

App-1-4-1-3:

Table 3-2-3 Lessons learned

Lessons learned	Stage	Descriptions
Selection of techniques	Planning stage	-It is necessary to consider the time scale required for the introduced techniques to show its effect in the
introduced		selection of techniques introduced for controlling Chlomoraena.
Preparation of work plan	Planning stage	- The work plan should be developed in due consideration of busyness of the members (availability of
		members) and traditional / customary activities in the village, so that the planned activities could be
		implemented as planned.
Exposure visit	Planning stage	-The exposure visit to the similar project sites should be organized prior to the implementation of the
		sub-program so that the members could get a clear picture of the outputs from the sub-program.
Design of training	Planning stage	- The biological control may not always be acceptable to local communities, since it would take more or less
		five (5) years to show its visible results. The introduction of this technical option should be determined after
		due consideration of the situation of the village, such as land availability, relationship with MAF or NGOs,
		and severity of Chlomoraena issue.
Combination with the	Implementation	- As mentioned in Table3-2-4, PLUP-SP was effective in raising awareness of the effectiveness of the
PLUP-SP		sub-program activities among members as well as the necessity to control wild fire in the village.
Management of the	Implementation	- The progress of the sub-program should be reviewed annually or biannually in a participatory manner. The
sub-program		more involved they are in planning and monitoring of the sub-program, the more clearly they could
		understand the sub-program.

Table 3-3-1 Appropriateness of the Implementation Process

Objectives	Accomplishments					
Appropriateness of the	- The members evaluated the process of the sub-program implementation from the viewpoints of satisfaction level of tr					
process	courses, approaches taken in the sub-program impleme	ntation and work relationship with the N	GO. The mem			
•	appreciated the sub-program activities as shown below.	•				
	A	Evaluation by members	NI.4.			
	Aspect	(Score <1 and % of Positive Ans.<2)	Note			
	Training courses	4.1				
	Content	Fully-satisfied				
	Time frame	ditto				
	Timing	ditto				
	Techniques	ditto				
	Frequency	ditto				
	Management	ditto				
	Facilitator	ditto				
	Food	ditto				
	church, health and education	ditto	n=2			
	Techniques introduced / demonstrated	4.0				
	Compost making	Fully-satisfied				
	Use of A-frame	ditto				
	Soil conservation measures	ditto				
	Land preparation	ditto				
	Selection of seeds	ditto				
	Mono-cropping in line	ditto				
	Farm management	ditto				
	Harvest and post-harvest	ditto				
	Storage of seeds	ditto	n=1			
	Approach taken	4.1	11-1			
	Participatory planning	Fully-satisfied				
	Time for planning	ditto				
	Group organization	ditto				
	Making regulations	ditto				
	FFS	ditto				
	Deployment of staff	ditto	1			
	No cash payment					
	Church and health	ditto	n-1			
		4.2	n=1			
	Work relationship - with local staff of NGO	4.2 Fully-satisfied				
	- with field staff of NGO	ditto	1			
	- with MAF	ditto				

Objectives	Accomplishments				
		- Local authority, church and health	ditto	n=5	
		Note:			•
		The number of samples is 17, unless specified with "i	1".		
		<1: The level of satisfaction was evaluated by using	5-point rating, namely 5=very well 4=well, 3=f	air, 2=less, and	
		1= was not satisfied.			
		<2: The portion of positive answers to the total			
		classification was given to the range of the portion, s	•	tisfied, 40-60%	
		=fair, 60-80%= satisfied, and 80-100%=fully satisfied	d.		
		Source: JICA Study Team (2009)			
Any changes in the	- None				
sub-program					
implementation					

Table 3-3-2 Evaluation of the Performance of CBSE-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives

Evaluation

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	- Low productivity of upland staple crops is one of the major concerns in the village. It has forced them to live on a subsistence level and made them vulnerable to environmental changes. Hence, the aim of the sub-program, which is to increase and stabilize the productivity of the major upland crops through introduction of the improved seeds and the improved farming techniques, is highly consistent with the communities' needs.
1.2 Relevance with the watershed management plan	- Limited livelihood caused by low agricultural productivity is considered one of the factors that have accelerated shifting cultivation and firewood collection in the target watersheds. Shifting cultivation and firewood collection are considered direct causes of deforestation as well as land degradation, and more importantly, they often cause forest fires which result in severe forest degradation. Hence, the improvement of livelihoods of local communities through increase and stabilization of upland crops can minimize human pressure on forests in the watershed.
2. Effectiveness	
2.1 Achievement of sub-program objectives	 The main aim of the sub-program is to increase the productivity of upland staple crops in the village through introduction of the improved seeds of the major crops as well as the improved farming practices. As described in Tables 3-3-1 and 3-3-2, the yields of the crops produced by the members in the last rainy season were significantly higher than those produced by non-members and they are confident of replicating the farming techniques introduced in the demonstration plots. Although the sub-program just benefited the members of the sub-program, it is judged that the sub-program was able to achieve its objective on a certain level. In order to fully achieve the original objective, there is a need to involve non-members in the hands-on training and to develop a scheme to distribute the improved seeds among local communities.
2.2 Logical relation	- The sub-program comprised of the following activities:
between the activities	Hands-on training courses (FFSs)
and sub-program	Provision of the improved seeds with farm tools
objectives	Assistance to the group members to apply the techniques which they learnt at FFSs at their farms
	Establishment of rules / regulations on the use of corn mill

Objectives	Evaluation					
_	members of the	They are logically related to one another in the framework for improving the productivity of upland crops produced by the members of the beneficiaries' groups.				
2.3 Any external factors			inistrator of Aileu d	istrict has encour	raged the members to participate in th	e sub-program
that affected the project	activities activ	•				
implementation	- The interview	v by the community radio pro	gram gave the mem	bers of the group	s incentive to actively participate in the	e sub-program
	activities.					
		f rainfall or fluctuated rainfal				
	- The governm	ent projects, so-called 3-dolla	ar-project, negatively	y affected the me	mbers' participation in the sub-progra	m activities.
3. Efficiency						
3.1 Inputs made by NGO	- The following	g table shows the original bu		nses of the sub-p	rogram.	
		Cost items	Timing	Cost	Remarks	1
		1. Staff allocation	As planned	As planned		1
		2. Training	Some trainings	Higher than	Some training course were delayed or	1
		3. Tools/materials provided	delayed	planned	rescheduled.	1
		•		Higher than	Procurement of seeds was delayed due to	1
		3.1 Seeds/seedlings	Delayed	planned	the delay of procurement.	1
		3.2 Agricultural tools	As planned	Slightly higher than planned	-	1
		3.3 Corn sheller	As planned	As planned	-	1
		4. Workshops organized	As planned	As planned	-	1
		rce: JICA Study Team (2009)				
		he inputs made by the NGC	are considered app	propriate and rea	sonable as compared with the result	s made by the
	activities.					
	- Some of the training courses were postponed due to the difficulty of procurement of necessary materials. However, such delays did					
	not influence the overall sub-program implementation.					
3.2 Level of	- Hands-on training was considered effective in enhancing the knowledge and skills of the members.					
achievement of outputs	- Deployment	of local staff was also consid-	ered effective in faci	litating members	' participation in the sub-program acti	vities.
and sub-program						
objectives as compared						
with the inputs						
4. Impact						
4.1 Positive impact	Impact to the n	<u>nembers</u>				
_	- The members	s were able to increase the pro-	oduce of upland crop	os and obtain eno	ough harvests for self consumption and	l next cropping
	as well.	•	•		•	11 0
	- The member:	s learned to improve the pr	oductivity of uplan	d crops by apply	ying the soil conservation measures	as well as the
					and application of liquid fertilizer.	
		ere already applied in the ind				
		r community members	·			
			participated in the s	ub-program also	started to replicate some techniques, s	uch as contour
L			1 1 1 1 1 1 1 1 1 1	1 6		

Objectives	Evaluation						
	composting, introduced in the demonstration plots.						
4.2 Negative impact	- The members lost their opportunities to engage in other economic activities by spending much time for the sub-program.						
5. Sustainability							
5.1 Government support	- There is no clear government plan to support the sub-program activities after the pilot project. Since the Government deployer extension workers (so-called extensionists) to each suco in 2008, local communities in Faturasa might be ale to tap the technical assistance from extensionists. However, there has been no connection or support made by extensionists so far.						
5.2 Capacity of the groups	 The members judged that they were able to understand the techniques introduced by the sub-program and it would not difficult for them to apply them in their own farms. The questionnaire survey done by the JICA Study Team in August 2009 also revealed that they were willing to continue the 						
	farming practices, namely, compost making, application of soil conservation measures, mono cropping (line sowing), and use of improved varieties, as shown below.						
	Willingness Rate <1 Why willing to continue willing to continue Any hindrance Necessary assistance						
	Continuation of compost making 4.1 Increase of productivity N.A. N.A. N.A. N.A.						
	Application of soil conservation measures Increase of productivity, efficient use of the land Increase of productivity, efficient use of the land						
	Continuation of using improved varieties Increase of productivity Increase of N.A. N.A. N.A. N.A.						
	Continuation of mono cropping Easiness to N.A. N.A. N.A. N.A.						
	Note: The number of samples targeted is 17 while "n" means the number of samples actually collected. N.A. means "no answer." <1: The level of impact was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and 1= no impact Source: JICA Study Team (2009) - However, the JICA Study Team judges that they still need technical and material support for them to continue the sub-program						
	activities.						
5.3 Coordination with the NGO	- The NGO, USC Canada Timor-Leste, was committed to continuing its assistance to the beneficiary groups even after the end of the pilot project. In fact, the NGO already programmed the post-pilot project activities in its work plan in 2009. Hence, the groups can still have technical assistance from the NGO.						
5.4 Coordination with other organizations	- The NGO has been coordinating with MAF and Seeds of Life in the procurement of the improved seeds.						
5.5 Financial aspect	- Although the members of the beneficiaries' groups were able to secure the improved seeds for the next cropping, it is still to small for them to share the seeds with non-members in the village. The same assistance should be continued to enable the members as well as non-members to achieve the reasonable production of upland crops sustainably.						

Table 3-3-3 Lessons learned

Lessons learned	Stage	Descriptions
Preparation of work plan	Planning	 The work plan should be developed in due consideration of the busyness of the members (availability of members) and the traditional/customary activities in the village, so that the planned activities could be implemented as planned. The exposure visit to similar project sites should be organized prior to the implementation so that the members could get a clear picture of the outcomes of the sub-program.
Selection of location for demonstration plots	Planning	- Accessibility to the demonstration plot should be considered in determination/identification of the site for the demonstration plot.
Land preparation	Implementation	- Introduction of soil conservation measures, such as bench terracing and contour composting, should be considered when the demonstration plot is developed in sloping land.
Materials for compost making	Implementation	- It may be difficult to collect animal manure for compost making in the site. Other materials available in the locality, such as leaves, branches, top soils, etc. should be used as substituted materials so that local communities can produce by themselves.
Application of the techniques learnt to the individual farms	Implementation	- Demonstration plots applied techniques shown in the training is useful for the members to remind what they learned to apply the techniques at their own farms.
Management of the sub-program	Implementation	 The progress of the sub-program should be reviewed annually or biannually in a participatory manner. The more involved they are in planning and monitoring of the sub-program, the more clearly they could understand the sub-program. In the meeting, the members shall review their performance and accomplishments made in the past 12 or 6 months and discuss improvements/action to be taken for the next 12 or 6 months. Then, the participants shall prepare an/a annual or bi-annual work plan based on the discussions. The work plan should be flexibly revised whenever necessary. At the same time, the work plan should be flexibly implemented on the basis of the situation of the village.

Table 4-1-1 Appropriateness of the Implementation Process

Objectives	Accomplishments		
Appropriateness of	-The members of the beneficiaries' group	ps of the sub-program evaluated the proce	ess of the sub-prog
the process	viewpoints of satisfaction level of training	ing courses, approaches taken in the sub-	program implemen
	with the NGO. The members highly appr	reciated the sub-program activities as show	n below.
	Aspect	Evaluation by members (Score <1 and answers<2)	Note
	Training courses	4.5	
	Content	Fully satisfied	
	Time frame	ditto	
	Timing	ditto	
	Techniques	ditto	
	Frequency	ditto	
	Management	ditto	
	Facilitator	ditto	
	Food	ditto	
	Techniques introduced / demonstrated	4.5	
	Compost making	Fully satisfied	
	Use of A-frame	ditto	
	Application of bench terrace	ditto	
	Application of contour composting	ditto	
	Land preparation	ditto	
	Selection of seeds	ditto	
	Mono-cropping in line	ditto	
	Farm management	ditto	
	Harvest and post-harvest	ditto	
	Storage of seeds	ditto	
	Approach taken	4.3	
	Participatory planning	Fully satisfied	
	Time for planning	ditto	n=23
	Group organization	ditto	n=23
	Making regulations	ditto	n=23
	FFS	ditto	n=23
	Deployment of staff	ditto	n=23
	No cash payment	ditto	n=23
	Work relationship	4.8	
	- with local staff of NGO	Fully satisfied	

Objectives	Accomp	lishments		
		- with field staff of NGO	ditto	
		- with MAF	ditto	
		- with JICA Study Team	ditto	
		-University	ditto	n=6
		Note:		
		3=fair, 2=rather unsatisfied, and 1= v <2: The portion of positive answers	evaluated by using 5-point rating, namely 5= unsatisfied. s to the total is also used in evaluation of the e of the portion, such as, 0-20% =unsatisfied,	satisfaction level. And the
Any changes in the	- None			
sub-program				
implementation				

Table 4-1-2 Evaluation of the Performance of SUFP-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	- Faming in slope land is the common practice in suco Batara. It is hard for them to work and difficult to stabilize the crop productivity due to constant soil surface loss. Although shifting cultivation is one of the ways to maintain the soil fertility as well as farm production for them, the practice is too laborious and vulnerable to environmental changes. In fact, a shortage of food caused by low productivity of staple crops (e.g., corn, cassava, beans) is the main concern in the village. Hence, the stabilization of agricultural production by introduction of the sustainable upland farming techniques, such as bench terracing and contour composting practices, is in line with the needs of local communities.
1.2 Relevance with the	- Farming in slope land without application of soil conservation measures is one of the direct causes of land degradation.
watershed management plan	Continuous surface soil erosion in farmland has often caused a lowering in land productivity and eventually resulted in a food shortage. Furthermore, a shortage of food has forced rural households to open and convert existing forests into upland farms for their subsistence. Hence, the aim of the sub-program, which is to enhance the capacity of local communities to introduce the sustainable upland farming techniques (or soil conservation measures) in their own farms to produce upland crops in the same lands in a sustainable manner, is highly consistent with the goal of the watershed management plan.
2. Effectiveness	
2.1 Achievement of sub-program objectives	-The objective of the sub-program is to expand the areas/farms with soil conservation measures through developing a model of the sustainable upland farming techniques and enhancing the capacities of the members to apply the techniques in their own farms. Given the fact that a total of 12 bench terrace farms and 32 contour composting farms have been developed by the members as of August 2009, the Study Team judges that the sub-program was able to develop a model of the

Objectives	Evaluation								
	sustainable upland farming ted	chniques and to enhan	ce the capacity	of the members at a certain level in the given period of					
	time.								
2.2 Logical relation between	- The sub-program comprised o		es:						
the activities and	Hands-on training course								
sub-program objectives				inable upland farming techniques					
		Assistance to the group members to apply the techniques which they learnt through FFSs at their farms							
		hese activities were effective in enhancing the capacities of the groups to apply soil conservation measures in their own							
		farms.							
2.3 Any external factors that	- Church at Batara as well as sub-district administrator of Laclubar have encouraged the members to actively participate in								
affected the project	the sub-program.		11 .						
implementation	- Crops planted in the demonstr								
2 EC. :	- The government projects, so-c	called 2-dollar-project,	negatively affe	cted the participation of the members.					
3. Efficiency 3.1 Inputs made by NGO	- The following table shows the	original budget and a	atual avnancas	of the cub program					
3.1 Inputs made by NGO	Cost items	Timing	Cost	Remarks					
	1. Staff allocation	As planned	As planned	Remarks					
	2. Training	Some training sessions were delayed.	Reduced	Some training courses were delayed.					
	3. Tools/materials provided								
	3.1 Agricultural tools	As planned	As planned	- A 12:2 1 2 2 2 2 2 2 2 2					
	3.2 Seeds/seedlings	As planned	Higher than planned	Additional species of seedlings such as clove, rambutan, etc, which were not included in the original plan, were procured in response to the request from the community.					
	4. Meetings, e.g., evaluation workshops	As planned	Slightly higher than planned	Evaluation workshops took longer than expected.					
	Source: JICA Study Team (2009)								
	- In general, the inputs made by the activities.	y the NGO are conside	ered appropriate	e and reasonable as compared with the results made by					
		were not conducted as	scheduled Sor	ne were postponed due to the difficulty in procurement					
				ity for training. However, such delays did not influence					
	the overall sub-program imple		P						
3.2 Level of achievement of			cing the knowle	edge and skills of the members.					
outputs and sub-program				ng members' participation in the sub-program activities.					
objectives as compared with	•								
the inputs									
4. Impact									
4.1 Positive impact	Impact to the members								
	- A total of 32 members applied	the contour composti	ng technique at	their own farms.					

Objectives	Evalu	ation						
	 Some members also made and applied natural pesticide in their farms. Some of the members who introduced the soil conservation measures intended to change their farming practices from shifting cultivation to fixed farming. Impact to other community members Other community members who have not participated in the sub-program also tried to apply the techniques following what they have observed in the demonstration plots. 							
4.2 Negative impact	 The members may have lost opportunity to engage in other income generating activities. The members were not able to spend enough time for other activities due to the work of the sub-program. Land preparation and terrace making techniques introduced by the sub-program were time consuming as compared to the conventional land preparation method. 							
5. Sustainability								
5.1 Government support	- There is no clear government plan to support the sub-program activities after the pilot project. Local communities might be able to tap technical assistance from the extensionist who was deployed in Laclubar (Orlalan and Batara) in 2008, though there has been no significant contact made by the extensionist so far.							
5.2 Capacity of the groups	 About one third of the members have applied the soil conservation measures in their sloping farms. Technically speaking, the groups are considered capable of using A-frame and develop a farm with contour composting. However, they need more practices for them to be able to develop bench terraces by themselves. On the other hand, the members are willing to apply the soil conservation measures as well as the improved farming practices (i.e., compost making and line planting) in their own farms. Why not Why not Necessary							
		Willingness	<1	continue	willing to continue	Any hindrance	assistance	
		Making and use of compost	4.3	To improve soil and production	Nil	lack of materials and employment	EM4, manure	
		to apply bench terrace in the own farms	4.0	Easy to maintain, increase production and keep soil	Nil	Limited employment	Build small group for harosan	
		to apply contour composting in the own farms	4.2	Easy to maintain & increase production Protect from erosion	Nil	Lack of seeds, Limited staff & many activity from church project& cultural	Build small group for Harosan	
	apply "mono-cropping in line"in the own farms Get many species of crop, to increase production Nil Natural factor technique							
5.3 Coordination with the NGO5.4 Coordination with other	5.3 Coordination with the NGO, USC Canada Timor-Leste, was committed to continuing assistance to the beneficiary groups even after the end of the pilot project. In fact, the NGO already programmed the post-pilot project activities in its work plan in 2009. Hence, the groups can still have technical assistance from the NGO.							

Objectives	Evaluation
organizations	
5.5 Financial aspect	- Development of bench terraces is too laborious or time consuming for one farmer to develop his/her own farm. Many of the members can not afford to hire farm labor for development of bench terraces. Therefore, it would be difficult for them to expand bench terrace farms unless a functional collective work system is developed and accepted by the members.

Table 4-1-3 Lessons learned

Lessons learned	Stage	Descriptions
Organization of	Planning stage	-The size of beneficiaries' group should be appropriate so that the group leaders and core members can
beneficiaries		manage it.
		-Organization of sub-groups or small groups under the beneficiaries' groups should be examined based on
		the existing collective working system so that the members could cooperate with each other for application
		of the soil conservation measures in their respective farms.
Preparation of work plan	Planning stage	- The work plan should be developed in due consideration of busyness of the members (availability of
		members) and the traditional/customary activities in the village, so that the planned activities could be
		implemented as planned.
		- The exposure visit to similar project sites should be organized prior to the implementation of the
		sub-program activities so that the members could get a clear picture of the outputs from the sub-program.
Selection of location for	Implementation	- Accessibility to the demonstration plot should be considered in determination/identification of the site for
demonstration plots	stage	the demonstration plot.
Management of	Implementation	- Development of live fence can not prevent animal intrusion in the demonstration plots. It is necessary to
demonstration plots		develop and introduce the village regulations with the revival of Tara Bandu to regulate free grazing in the
		village.
Follow-up trainings	Implementation	- Continuous support or follow-up training is necessary for the members to acquire the techniques that they
		have never practiced before, such as application of the soil conservation measures.
Management of the	Implementation	- The progress of the sub-program should be shared among the members periodically, so that each member
sub-program		could enhance their understandings of the sub-program.

Table 4-2-1 Appropriateness of the Implementation Process

Objectives		Accomplishments								
Appropriateness	of	- The members evaluated the process of the sub-program implementation from the viewpoints of satisfactory level of training								
the process			taken in the sub-program implementation							
1			e sub-program activities as shown below.	1	11					
		inginy appreciated in	o suo program uen vines us sno vin sero vi.							
		т	evel of Satisfaction with Training Course	og Annuagah talzan and wank	rolotion	hing				
		ı	ever of Saustaction with Training Cours	es, Approach taken, and work	relations	sinps				
			Evaluation (Score <1 and % of Nata							
			Aspect	Positive Ans.<2)	Note					
			Training courses	4.7						
			- Contents of training	Fully satisfied						
			- Timeframe of training	Fully satisfied						
			- Timing of training	Fully satisfied						
			- Techniques introduced	Fully satisfied						
			- Frequency of training	Fully satisfied						
			- Management of training	Fully satisfied						
		- Food provided	Fully satisfied							
		Approaches taken	4.7							
		- Participatory planning	Fully satisfied							
			- Sufficient time allocation for planning	Fully satisfied						
			- Organization of beneficiaries' groups	Fully satisfied						
			- Formulation of group regulations	Fully satisfied						
			- Field Farmers' School (FFS)	Fully satisfied						
			- Deployment of staff to the village	Fully satisfied						
			- No cash payment / Voluntary work	Fully satisfied						
			Work relationship	4.9						
			- with local staff of NGO	Fully satisfied						
			- with field staff of NGO	Fully satisfied						
			- with MAF	Fully satisfied						
			- with JICA Study Team	Fully satisfied	n=2					
		Note:	- Others(with university)	Fully satisfied	$\Pi = Z$					
		22 unless specified with "n"								
	The number of sample is 32 unless specified with "n." <1: The level of satisfaction was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and 1= was not satisfied.									
		he positive answer against the total number of the positive		- was not	satisfied.					
		Source: JICA Study Tea		and the same of th						
			•							
			Level of Satisfaction with Tech	nniques introduced / demonstra	ted					
				•						

Objectives	Accomplishments	•					
		Vegetable farming	Evaluation (Score <1 and % of Positive Ans.<2)	Note	Tais Making	Evaluation (Score <1 and % of Positive Ans.<2)	Note
		Techniques	4.6		Techniques	4.6	
		Compost	Fully satisfied		Making weaving tools	Fully satisfied	n=7
		Land preparation	Fully satisfied		Spinning	Fully satisfied	
		Seeding / Nursery	Fully satisfied		Color coordination	Fully satisfied	
		Transplanting	Fully satisfied		Rolling	Fully satisfied	
		Maintenance	Fully satisfied		Designing of letters	Fully satisfied	
		Natural pesticide	Fair		Designing of others	Fully satisfied	
		Harvest / Seed Collection	Fully satisfied		Material setting	Fully satisfied	
		Sewing machine	Evaluation	Note	Food processing	Evaluation	Note
		Techniques	4.6		Techniques	4.6	
		checking machine	Fully satisfied		Cassava chips	Fully satisfied	
		Threading	Fully satisfied		Steam cassava	Fully satisfied	
		Initial seesawing	Fully satisfied		Taro chips	Fully satisfied	
		Measuring & Cutting	Fully satisfied		Sweet potato chips	Fully satisfied	
		Sewing	Fully satisfied		Banana chips	Fully satisfied	<u> </u>
		Fixing	Fully satisfied		Peanut with eggs	Fully satisfied	<u> </u>
		Others (design)	0%	n=1	Fried mach potato	Fully satisfied	<u> </u>
		Others (No of participants)	0%	n=1	Salted mustard	Fully satisfied	
	<1: The level of satisf	is 8 for each activity unless spacetion was evaluated by using the positive answer against the am (2009)	g 5-point rating, na			:=less, and 1= was	not satis
Any changes in the sub-program implementation	-						

Table 4-2-2 Evaluation of the Performance of IG/CS-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
Relevance Relevance with the needs of the target groups	 The income generating activities assisted by the sub-program are closely related to the daily concerns of the members and are generally categorized as women's tasks in the village. Therefore, the training courses conducted by the sub-program were effective in developing the capacity of the members. Increase and stabilization of cash income is the most concerned topics for the members as well as local communities in the village. Hence, the techniques and skills that could produce marketable commodities and/or save expenditures from
1.2 Relevance with the watershed management plan	purchase of such commodities are highly consistent with the needs of the members. One of the major constraints on forest and watershed protection is the limited livelihood opportunities in hilly and mountainous areas. Due to the lack of livelihood opportunities combined with limited knowledge of sustainable farming methods, local communities tend to heavily explore forest resources and/or practice shifting cultivation in an unsustainable manner. Hence, the improvement of livelihoods of local communities can help local communities to break out of the vicious cycle of poverty and environmental degradation as shown right.
2. Effectiveness 2.1 Achievement of sub-program objectives	 The main objective of the sub-program is to enhance the capacity of the members to introduce and develop some livelihood development activities so as to earn cash income and/or save expenditures. As described in Table 4-2-2, the members judged that they have learned almost all the techniques and skills introduced by the sub-program. Furthermore, the women's groups have earned US\$ 87 ~ 163 from their livelihood activities supported by the sub-program, not to mention the cost-saving effects. Though there is still a need to provide technical and managerial support to the women's groups to ensure that they can continue the sub-program activities and manage the earnings in a proper manner, it is judged that the sub-program was able to achieve its main objectives.
2.2 Logical relation between the activities and sub-program objectives	 The sub-program comprised of the following activities: Hands-on training courses (FFSs) Market research Training on business and financial management Assistance in the daily operations of the income generating activities These activities were effective in enhancing the capacities of the women's groups to implement the livelihood activities

Objectives	Evaluation								
-	and manage t	he group fund in a proper and	transparent man	ner.					
	•				activities as a group. The group	os function not			
					of emergencies, since they have				
					g,,	- P			
2.3 Any external factors		credits and kiosks using the earnings from the sub-program activities. Church at Laclubar has encouraged the members to participate in the sub-program activities actively. Church has also							
that affected the project		been the main buyer of vegetables since it has hired workers for construction of the dorms.							
1 0					th of vegetables. In fact, the gro	um of Worlding			
implementation				medied the grow	th of vegetables. In fact, the group	up of werfulun			
2 E.C	nas not been	able to crop vegetables from A	August 2009.						
3. Efficiency	FF1 0.11 1			0.1					
3.1 Inputs made by NGO	- The following	g table shows the original bud				1			
		Inputs	Timing	Cost	Remarks				
		1. Staff allocation	As planned	As planned	-				
		2. Training			Training on maintenance work				
		2.1 Vegetables farming	As planned	Beyond the	needed more number of days than				
		2.1 Vegetables fairning	7 to planned	planned budget	planned.				
		2.2 Tais making	As planned	As planned	-				
		2.3 Use of sewing machine	As planned	As planned	-				
		2.4 Food processing	As planned	Slightly less than planned	Training period was shorter than planned				
		2.5 Others (Business management)	As planned	As planned	-				
		3. Provision of materials							
		3.1 Vegetables farming	As planned	Beyond the planned budget	Installation of water facilities was not included in the original plan.				
		3.2 Tais making	As planned	As planned					
		3.3 Use of sewing machine	As planned	Beyond the planned budget	Unit prices of materials were changed.				
		3.4 Food processing	As planned	As planned	-				
		3.5 Others	-	-	-				
	Source: JICA Stu	dy Team (2009)							
	 In general, the inputs made by the NGO are considered appropriate and reasonable as compared with the results made by the activities. The training courses for the use of sewing machine, tais making, and food processing, should have been divided into two to three batches in consideration of the number of participants and availability of trainers as well as equipment/facilities for training. Some of the training courses were postponed due to the busyness of the members and delay in arrangement for training. However, such delays did not influence the overall sub-program implementation. 								

Objectives	Evaluation								
3.2 Level of achievement	_			hancing members' knowledge and skills.					
of outputs and	- Deployment of a local staff was also considered effective in facilitating the members' participation in the sub-program								
sub-program objectives as	activities.								
compared with the inputs									
4. Impact4.1 Positive impact	Economic and socio-economic impa	at to the man	- h -ama						
4.1 Fositive impact				-program activities contributed to the	incrasca	of income a			
	reduction of expenditures on purch				increase	of income a			
				a day at present, while they had previous	lv taken	only watercre			
	and cassava leaves.	, egetueres till		and the property, white they must provide	1) ((111011	i only waterers			
	- The members can tap the micro cre	edit schemes r	run by the	groups and borrow money from the sche	mes witl	h low interest.			
	Impact to other community member	<u>'S</u>	•						
				in the sub-program started vegetable	farmin	g following			
	techniques demonstrated in the der	nonstration pl	lots.						
			T = -		1				
	Positive Impacts reported	Ratio. of Positive	Range/le vels	Positive Impacts reported	Ratio	Range/level s reported			
	1 ositive impacts reported	Answer	reported	1 ositive impacts reported	Katio	3 reported			
	1) Vegetable Farming			2) Tais Making					
	Increase of income	100% (n=4)	NA	Increase of income	100% (n=7)	Making and selling			
	Increase of intakes of vegetables	100% (n=4)	NA						
	Confidence	100% (n=4)	NA	Confidence	100% (n=7)	Making tais with various motif			
	Reduction of expenses	100% (n=4)	NA	Reduction of expenses	100% (n=7)	NA			
	Mutual Help	100% (n=4)	NA	Mutual Help	100% (n=7)	NA			
	Expansion of income generating opportunities	100% (n=4)	NA	Expansion of income generating opportunities	100% (n=7)	NA			
	Acquisition of new techniques	100% (n=4)	NA	Acquisition of new techniques	100% (n=7)	NA			
	Others (Food security)	100% (n=1)	NA						

Objectives	Evaluation					
	3) Sewing Machine			4) Food Processing		
	Increase of income	100%	Sewing new clothes, repairing	Increase of income	100% (n=7)	NA
	Confidence	100%	Sewing various types of cloth	Confidence	100% (n=6)	processed local commodity to become useful snack for selling
	Reduction of expenses	100%	NA	Reduction of expenses	100% (n=6)	NA
	Mutual Help Expansion of income generating opportunities		NA	Mutual Help	100% (n=6)	NA
			NA	Expansion of income generating opportunities	100% (n=6)	NA
	Acquisition of new techniques	100%	NA	Acquisition of new techniques	100% (n=6)	NA
	Note: The number of samples is 8 for each a Source: JICA Study Team (2009).					
4.2 Negative impact	- The volume of water distributed expanded in Balurin recently.	to the demo	onstration	plot in Werlulun has become scarce as	vegeta	able farms have
5. Sustainability						
5.1 Government support	- There is no government clear plan to support the sub-program activities after the pilot project. Since the governme deployed one extensionist for Batara and Orlalan in 2008, they might be able to obtain some assistance from his However, there has been no substantial support made by him as of August 2009.					
5.2 Capacity of the groups	 - Almost all the members are apparently able to apply the vegetable farming techniques except natural pesticide application while some of the members seem to have still difficulties in tais making and sewing machine operations. - Technically speaking, the groups are considered capable of applying techniques that they have learned through sub-program. But they still need further assistance in the management of group fund and operations of micro creschemes as well as kiosks. - The following table shows the levels of their willingness to continue the activities. Most of them are willing to continue activities, while expressing their concerns over the lack of materials. 					

pjectives Evaluation	_				
Sustainability/Willingness	Rate <1	Why willing to continue	Why not willing to continue	Any hindrance	Necessary assistance
Vegetable Farming					
to continue vegetable farming in dry season by group	4.1	To increase group income	less availability of water	Lack of techniques and equipment	Implements, seeds, water tank, and pesticides
to continue vegetable farming in wet season by group	2.4	Nil	not growing well	Lack of seeds and material	water tank and implements
to continue vegetable farming in dry season by individuals	4.5	To increase individual income	less availability of water	Lack of seeds and material	Implements, seeds, water tank, and pesticides
to continue vegetable farming in wet season by individuals	3 (n=6)	Nil	not growing well		
Tais Making					
to continue tais making as a group	4.1	To increase group income	NA	Lack of raw materials and tools	materials (string and ropes)
to continue tais making as a private business	4.0 (n=7)	To increase income	Difficult to make it by myself	Lack of raw materials and understanding of techniques	materials (string and ropes) and additional training
to continue tais making for family	4.1	To reduce expenses	Difficult to make it by myself	Lack of raw materials and understanding of techniques	materials (string and ropes) and additional training
Sewing machine					
to continue making/repairing clothes as a group activity	4.6	To increase group income	NA	Lack of materials and funds	materials (e.g. Cloth, Strings, roll and oils)
to continue making/repairing clothes as a private business	4.5	To reduce expenses	Nil	Lack of materials	materials (e.g. Cloth, Strings, roll and oils)
to continue making/repairing clothes for family	4.8	To reduce expenses	Nil	Lack of materials	materials (e.g. Cloth, Strings, roll and oils)

Objectives	Evaluation	Evaluation							
	Food Processing								
	to continue making/repairing clothes as a group activity	4.3	To increase group income	NA	Lack of materials (not completed) and funds	materials (e.g. Steamer pan, knife, big spoon)			
	to continue making/repairing clothes as a private business	4.1	To increase income	No fund	Lack of materials	materials (e.g. Steamer pan, knife, big spoon)			
	to continue making/repairing clothes for family	4.3 (n=7)	To reduce expenses	No fund	Lack of materials (not completed)	materials (e.g. Steamer pan, knife, big spoon)			
	Note: The number of samples is 8 for each activity unless specified with "n". <1: The level of impact was evaluated by using 5-point rating, namely 5=very well 4=well, 3=fair, 2=less, and 1= no impact Source: JICA Study Team (2009)								
5.3 Coordination with the	- The NGO, USC Canad	a Timor-Leste,	was committed to	continuing assistance to	the women's g	groups even after	the end of		
NGO	the pilot project. In fact	t, the NGO has	already programm	ed the post-pilot project	activities in its	work plan in 200	9. Hence,		
	the groups can still hav	e technical assis	stance from the NC	GO.					
5.4 Coordination with other organizations	- There is no coordinatio	- There is no coordination or linkage with other organizations made so far.							
5.5 Financial aspect	of income and running	As long as the women's groups have technical assistance from the NGO, they are expected to keep gaining a certain level of income and running their micro credit schemes and kiosks. However, it would take more several years for the women's groups to be able to manage their funds and be self-reliant in terms of financial aspects.							

Table 4-2-3 Lessons learned

Lessons learned	Stage	Descriptions
Preparation of work plan	Planning stage	- The work plan should be developed in due consideration of the busyness of the members (availability of
		members) and traditional/customary activities in the village, so that the planned activities could be
		implemented as planned.
		- Participatory planning is effective in enabling the members to gain clear ideas of the sub-program activities
		prior to the implementation of the sub-program.
Design of training	Planning stage	- The design of training should be determined in consideration of facilities/materials and trainers available
		and the number of target participants. A total of 10 participants seem to be the maximum number of
		trainees to be handled in one training course if all the participants should make trial in the session. One
		training session is not necessarily enough to capacitate all the participant to learn the techniques when a
		new technique is introduced in the training.

Lessons learned	Stage	Descriptions
		- Hands-on training or Field Farmers Schools (FFSs) should be adopted as the main tool for developing the
		capacities of the group members.
Group organization	Implementation	- The regulations of the group should be developed prior to the implementation of the income generating
		activities. They are crucial in maintaining the solidarity of the group even after gaining some earnings
		from the activities. The regulations should be reviewed and revised whenever necessary.
		- Monthly meeting should be organized with participation of the village leaders (Chef de Suco and Chef de
		Aldeia) and the NGO to solve any issues and conflicts among the group.
		- The latest financial status of the group should be shared in the monthly meeting if the group already started
		earning cash income from the activities.
Management of the	Implementation	- The progress of the sub-program should be reviewed annually or biannually in a participatory manner. The
sub-program		more involved they are in planning and monitoring of the sub-program, the more clearly they could
		understand the sub-program.
		- In the meeting, the members shall review their performance and accomplishments made in the past 12 or 6
		months and discuss improvements/action to be taken for the next 12 or 6 months. Then, the participants
		shall prepare an/a annual or bi-annual work plan based on the discussions.
		- The work plan should be flexibly revised whenever necessary. At the same time, the work plan should be
		flexibly implemented on the basis of the situation of the members as well as the site.

Table 5-1-1 Appropriateness of the Implementation Process

Objectives	Accomplishments		
Appropriateness of	- The members of the beneficiaries' groups of		
he process	the viewpoints of satisfaction level of works		e sub-program implementation. The men
	highly appreciated the sub-program activities	as snown below.	
	1) Children		
	Aspect	Evaluation by adult members (Score <1 and answers<2)	Note
	Management of Activities	4.25	
	Content	Satisfied	
	Duration	ditto	
	Frequency	ditto	
	Facilitation	ditto	
	Food	ditto	
	Picture show	4.3	
	Story of picture book	Satisfied	
	Discussions after presentation of picture book	re ditto	
	Drawing festival	4.4	
	Drawing picture	Satisfied	Also, some children were satisfied with the materials distributed, such as color pencils.
	Preparation of description card	ditto	
	Presentation of the drawings to the adults	4.4	
	Exhibition tour	Satisfied	
	Presentation of the drawings to the adults	ditto	
	Discussion with adults	ditto	Also, some children were satisfied to hear commitments from adults to protect natural resources in the village.
	Participation in the Tara-bandu ceremony	4.3	
	Explanation of village regulation by adult		
	Presentation of the drawings by the children	ditto	
	unsatisfied.		satisfied, 4=satisfied, 3=fair, 2=rather unsatisfied, action level. And the classification was given to the

Objectives	Accomplishme	ents			
	Sour	rce: JICA Study Team (2009)			
	0 11				
	2) Adults	Aspect	Evaluation by adult members (Score <1 and answers<2)	Note	
		Management of Activities	4.0		
		Content	Satisfied		
		Duration	ditto		
		Frequency	ditto		
		Facilitation	ditto		
		Food	ditto		
		Workshops	4.5		
		Exhibition tour	Satisfied		
		Presentation of the drawing by the children	ditto		
		Discussion with children	ditto		
		Discussion among adults	ditto		
		Participation in Tara-bandu ceremony	4.5		
		Explanation of village regulation to the children	Satisfied		
		Presentation of the drawings by the children	ditto		
	 <1: unsa <2: Tof the Sour Among the apresentation of to realize that 	number of samples is 6, The level of satisfaction was evaluated by tisfied. The portion of positive answers to the total e portion, such as, 0-20% =unsatisfied, 20-ce: JICA Study Team (2009) activities implemented under the stoff drawings to the adults. At the put some adult members were impresented at the village.	is also used in evaluation of the satisfact 40% =rather unsatisfied, 40-60% =fair, 6 sub-programs, the children were presentation of the drawings, som	tion level. And the classification was g 50-80%= satisfied, and 80-100%=fully e most satisfied in the drawing e children mentioned that they	iven to the range satisfied. g festival and were satisfied
Any changes in the	- None	rees at the vinage.			
sub-program	110110				
implementation					

Table 5-1-2 Evaluation of the Performance of PAC-SP (based on the five criteria, such as relevance, effectiveness, efficiency, impact, and sustainability)

Objectives	Evaluation
1. Relevance	
1.1 Relevance with the needs of the target groups	 The RRA survey conducted by the Study Team in 2007 revealed major problems on natural resource management in the village, such as forest fire, no regulation/rules on cutting trees, lack of dense forest, and water shortage especially during the dry season. Some of the problems are caused as results of intervention by the villagers possibly due to lack of awareness of proper natural resource management and consensus among the villagers on natural resource management at their locality. In order to realize sustainable natural resource management, it is essential to raise awareness not only among adults but among children since the children are the ones who will have decision making on the use of natural resources in the future. But it was difficult to implement environmental education programme at the primary school of the village since there was lack of material and skills of the teachers to conduct the activities. Therefore, awareness raising activities on natural resource management which target mainly children in the primary school with involvement of adult members in the village have high consistency with the necessity of the community. Through the workshops organized by the sub-program, the members enhanced effectively the understanding and
	awareness of importance and measures to be taken for natural resource management.
1.2 Relevance with the watershed management plan	- Enhancement of public awareness about the importance of watershed management plays a vital role in the implementation of the watershed management plan. Without changing the ideas and understandings of rural communities and households who actually decide land/resource use in the watersheds, it would be quite difficult to shift the environmentally downward trend to an environmentally sound one. Since there is no legal base that allows MAF/NDF to control the current activities of rural households at present, the enhancement of public awareness is the sole means that can encourage rural households to regulate their life style. Hence, the introduction of public awareness raising activities is one of the crucial issues to be addressed to improve watershed environment.
2. Effectiveness	
2.1 Achievement of sub-program objectives	Due to the limited implementation period of the workshops under the sub-program, it seemed to be difficult to expect the change of awareness among the target groups. However, the Table 5-2 implied that the target children apparently changed positively their perception about future image of forest and water resources in the village after implementation of the sub-program.
2.2 Logical relation	- The sub-program comprises of the following activities:
between the activities and	Assessment Survey
sub-program objectives	Material preparation Material preparation
	> Implementation of workshops at the village These activities were effective in enhancing the awareness of the groups about the sustainable natural resource management in proper way.
2.3 Any external factors	- Teachers of the primary school of suco Samalete with acknowledgement of the sub-program by the Ministry of Education

Objectives	Evaluation							
that affected the project	and its district office have been involved in the activities from the beginning, which enabled to keep high participation							
implementation	level of the target children throughout the sub-program implementation.							
3. Efficiency								
3.1 Inputs made by NGO	- The following table shows the original budget and actual expenses of the sub-program.							
T	Cost items							
	1. Staff allocation	As planned	As planned	-				
	2. Workshops	As planned	As planned	-				
	3. Tools/materials provided							
	3.1 Picture books	As planned	As planned	-				
	3.2 Calendar	As planned	Lower than planned	The specification of the calendar was changed for practical use by the villagers.				
	4. Meetings, e.g., evaluation workshops	As planned	As planned	-				
	Source: JICA Study Team (2009)							
	•	he Study Team ar	e considered ap	ppropriate and reasonable as compared with the results				
	made by the activities.							
3.2 Level of achievement	- Workshops implemented were co							
of outputs and sub-program	- Coordination with teachers, chef	fe de suco and th	e local staffs o	of NGO dispatched at the village helped to keep high				
objectives as compared	participation level at the worksho	ps.						
with the inputs								
4. Impact								
4.1 Positive impact	Impact to the members							
•	Basically, the followings are syne under TPP-SP.	ergetic impacts ma	ade by the sub-	-program and the village regulation developed in 2008				
	- The members seemingly have mo	re interest in assis	ting TPP-SP.					
	- Number of case of cutting trees in			en was reduced.				
	Impact to non-members	1 10/11 01/01/2 01/0 100	a of the children					
	-	drawings by the	children at the	Tara-bandu ceremony and distribution of the calendar				
	non-members also could share the			Tura banda ceremony and distribution of the earendar				
	- Teachers of the primary school of		_	uh program in other village				
4.2 Negative impact				reparation of examination for the children.				
5. Sustainability								
5.1 Government support	- There is no government clear plan	There is no government clear plan to support the sub-program activities after the pilot project.						

Objectives	Evaluation						
5.2 Capacity of the groups	According to the Table 5-2, almost all the members are apparently understood the importance of natural resource management at their locality. As tabulated below, almost all the members expressed that they have willingness to continue the activities.						
	Willingness to continue the sub-program activities	Rate <1	Why willing to continue	Why not willing to continue			
	Willingness among children	4.3	- To know more about protection of natural resources for future - To understand more about environment also to raise awareness among adults	Nil			
	Willingness among adults	4.3	-To learn more about natural resources -To disseminate information to the other community members - To increase capacity to protect natural resources in suco	Nil			
	Note <1: The level of willingness was evaluated by using 5-point rating, namely 5=very high, 4=high, 3=fair, 2=low, and 1= very low.						
	-With respect to the reasons to continue the activities by the children and adults, it is found that some of members wer interested to disseminate information to others. It implies that the some of target members can be used as resource perso to disseminate information to other members in succeeding awareness raising activities in the village.						
5.3 Coordination with the NGO	- Although there was coordination with NGOs in implementation of the activities under the sub-program, there is no plan to continue the activities after the sub-program by the NGOs.						
5.4 Coordination with other organizations	-The teachers of Suco Samalete are intere the teachers of neighbouring schools.	-The teachers of Suco Samalete are interested in disseminating activities in their neighbouring schools in coordination with					
5.5 Financial aspect		If they have material support as picture book, it is possible for the community to continue the similar activities at school					

Table 5-1-3 Lessons learned

Lessons learned	Stage	Descriptions
Preparation of work plan	Planning stage	- It would be better to take enough periods for implementation of the workshops since the tight schedule can
		affect the curriculum. The workshops organized at the school should be less than two (2) times per month.
Selection of type of	Planning stage	- Since the suco offices have televisions with DVD-players, the multi-media materials can be developed in
PAC materials		further awareness raising activities at the communities.
Involvement of teachers	Planning-Imple	- In case the PAC activities target children, it is essential to involve teachers to organize the children groups
	mentation stage	and improve skills of the teachers to conduct PAC activities since they can continue implementation of the

App-I-4-1-60	
0	

Lessons learned	Stage	Descriptions
		activities at the village after the sub-program.
Implementation of the	Implementation	- If the PAC activities organise discussion session between adults and children, it is important to focus on the
workshops	stage	upper grades with proper guidance by the facilitator.
		- In organizing workshops targeting children, it is crucial to consider method and way of facilitation, such as
		ice-breaking activities, so as to make children feel at ease in expressing their own ideas freely.
Further information	Follow-up	- In order to disseminate information to the non-members, additional sessions can be organized where the
dissemination in the		members can be resource person to explain to the non-members what they learnt about importance of
village		natural resource management in the previous workshops.