



The Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins in the Democratic Republic of Timor-Leste



Background/Introduction

Between 1972 and 1999, the Democratic Republic of Timor-Leste had reduced its forest cover at a rate of 1.1 % per annum or by 24 % in total. At present, forests in the country cover only about 35 % (or 0.5 million ha) of the total land of the country (1.5 million ha). It is reported that the main causes of deforestation are i) forest fires, ii) tree cutting for firewood collection, iii) shifting cultivation, and iv) uncontrolled illegal logging. Deforestation has further caused soil erosion, land slides and flash floods, and eventually affected the people's life in major river basins.

The Comoro and Laclo watersheds have the respective important values for the people in Timor-Leste. The former is the catchment of the Comoro river running through Dili city and has a source of major water supplies to the city in itself, while the latter supports one of the major rice producing areas in the country by supplying water to its irrigation system. However, deforestation / forest degradation has progressed in both watersheds over years, and therefore, MAFF designated them “critically degraded watersheds”. Because of their values, there is an urgent need to prevent both watersheds from further degradation and rather to restore their vegetation covers, so that they can maintain their important functions.

Under the circumstances, the Government of Timor-Leste officially requested the Government of Japan to conduct a development study to come up with a community-based integrated watershed management plan for both basins so that MAFF could manage the basins in a proper and sustainable manner. In response to the official request, JICA dispatched a Preparatory Study Team in April 2005. Through a series of discussions between the Preparatory Study and MAFF, both bodies agreed on the implementation of the Study and signed its Scope of Work (S/W) on April 28, 2005.

Composition of the Study Team

Based on the scope of work for the Study, JICA dispatched a Study Team, which has carried out its field works since November 2005. The Study Team is composed of experts from various fields and they are as follows:

1. Yoji Mizuguchi (Watershed Management)
2. Hiromi Yasu (Forest Management)
3. Ippei Itakura (Community Development)
4. Naoki Koga (Agroforestry)
5. Yayoi Yoshioka (GIS/Soil Conservation)

These experts are complemented by Timorese counterparts coming from the Directorates of MAFF as well as District Offices concerned. They are:

1. Francisco Inacio Castro Araujo (NDCF)
2. Vicente S. Soares (Aileu)
3. Fernando C. Araujo (NDCF)
4. Marcelino Pereira (Aileu)
5. Mario Alves (Manatuto)
6. Vildito J. X. Maia (Manatuto)
7. Fernando Barros (Manatuto)
8. Eduardo F. Martins (Ermera)
9. João dos Santos Boavida (Liquica)
10. Domingos Mook (ALGIS)
11. Agustino Ximenes (NDAL)
12. Joanico Correia (NDAL)
13. Dinis Quintao (NDAL)

Objectives of the Study

The Study has three main objectives:

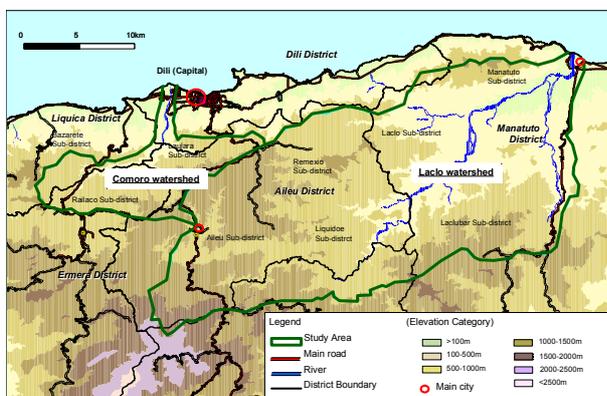
- i) formulate a community-based integrated watershed management plan for Laclo and Comoro river basins;
- ii) prepare watershed management guidelines for MAFF to formulate a community-based

- watershed management plan in any basin in the country; and
- iii) develop the capacities of the counterpart personnel to formulate and implement a watershed management plan through on-the-job training in the course of the Study.



Study Area

The Study area covers the watersheds of the Lacleo and Comoro rivers within six (6) districts (Liquica, Ermera, Aileu, Ainaro, Manifahi, and Manatuto) with an approximate area of 160,000 hectares. It includes nine (9) sub-districts and 73 sucos.



Schedule of the Study

The Study is composed of two (2) phases, namely, i) Formulation of a draft watershed management plan and ii) Implementation of pilot projects. Phase 1 Study is scheduled from November 2005 to December 2007, while Phase 2 Study is planned between January 2008 and December 2009. The detailed 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: 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

Activities undertaken as of Today

The Study has conducted the 1st and 2nd Field Works since its commencement in November 2005, though it had a long break in 2006 due to disturbances in the country. During the said field works, the Study conducted:

- Village Profile Survey;
- Forest Survey;
- Satellite Image Analysis ;
- Slope Failure Analysis;
- Surface Soil Loss Estimation; and
- Preparation of a Land Use and Vegetation Map.

Through these, the Study drafted a watershed management plan composed of the following eight (8) management/supporting programs in March 2007.

- Land Use and Management;
- Afforestation/Forest Management;
- Farm & Livestock Management;
- Agroforestry & Silvo-pastoral Management;
- Community and Livelihood Development;
- Slope Protection and Sediment Control;
- Information Dissemination and Awareness Raising; and
- Capacity Development.

Activities planned in the 3rd Field Work

From August to November 2007, the Study plans to conduct a social survey at four selected villages using RRA tools and to have a series of discussions with the villages to identify potential pilot projects for each village. Based on results of the social survey and discussions with villagers, the Study will draft an implementation program for pilot project in November 2007.

For more information or any valuable comments, please contact us at:

JICA Study Team
 1st Floor, NDCF Building, Caicoli, Dili, Timor-Leste.
 Land line: 333-1125 (Tel/Fax)