Timor-Leste Agricultural Rehabilitation, Economic Growth and Natural Resource Management Project

Quarterly Report
January to March 2005

University of Hawaii at Manoa
Honolulu, Hawaii USA
Soil Management Collaborative Research Support Program
SM CRSP
LAG-G-00-97-00002-00
Executive Summary

Major activities and events

- Passing of Team Leader, Andre du Toit;
- GDA for candlenut stalls after meeting in Honolulu.
- Fertilizer rates demonstration trials
- Land use trials for income generation continue.
- Timor-Leste students at East West Center visit watershed on Maui.

Andre du Toit
Andre du Toit was killed in an accident at his home/field office in Baucau on the morning of February 9, 2005. Cause of death was attributed to electrocution. Specifics of the case are being investigated by local police in Baucau. The project lost two staff members, as his wife Carin who served as country coordinator, left Dili with their two children, Hendri and Simone, on February 11, 2005 for their home in South Africa. Andre was buried in Potchefstroom, South Africa after his funeral on February 25, 2005.

LCC Training Workshop.
The planned Leaf Color Chart workshop planned for the week of February 14 was postponed until April. We appreciate the understanding of the MAFF staff and look forward to their participation in April.

Fertilizer Rate Demonstration Trials.
Fertilizer rate trials with paddy or lowland rice were installed in Uaitobono. As with the maize trials, the N-P-K rates were determined from diagnostic tests from the soil test kit. Farmers planted rice nurseries in February for the fertilizer response trials using techniques designed by IRRI to produce seedlings with a mat nursery for the Integrated Crop Management or ICM trials. The mat nursery produces strong seedlings that have intact root and leaves and reduces planted seed to 10 kg per hectare. Instructions for implementing the rice nursery was provided by MAFF (Antonio Lopes) and University of Hawaii personnel.

Rice seedlings were transplanted in March to plots designed for the LCC training course in April in cooperation with IRRI scientist, Dr. V. Balasubramanian.

The fertilizer rate trial for maize is nearing maturity. The Bubuanakala farmers invited USAID/Dili, MAFF/Dili, and MAFF/Baucau to join them in the harvest of the maize trial planned for the end of March.

Income generation continues to be the primary goal of farmers and villagers involved in the land use trials. A total of 25 farmer groups are involved from sea level (Vermasse) to the upper elevations (Venilale) of the Baucau District. With the passing of Dr. du Toit, participating groups were informed the project would continue to monitor progress being made by each group. Both Jose Ximines and Francisco Soares in cooperation with Antonio Lopes of MAFF/Baucau would be responsible for the day-to-day monitoring and support to these groups.
**Candlenut and the GDA.** The meeting of partners in Honolulu ended without consensus. Partners representing CRS, USAID, Oils of Aloha and UH were in attendance in a 3 day working meeting on the University of Hawaii campus. A half-day visit to the Oils of Aloha factory and processing plant in Waialua allowed partners an understanding of the operational requirements of a candlenut oil-extracting plant.

CRS’s consultant, E. Tan, presented the technical team’s report that elucidated on the availability of candlenuts in E. Timor, W. Timor and Flores. The scope of the study was broader than had been anticipated. USAID sent a consultant, Jane Rosser who spent her time in Baucau. Rosser did not accompany other team members to Atambua, Kupang, and Flores.

The planned GDA program is presently on hold. Further discussions on prospects for candlenut are planned in April with USAID/Dili.

**East West Center**
Ten Timor-Leste students who are enrolled at the University of Hawaii through the East West Center traveled to Maui during the spring semester break. They were accompanied by Hal McArthur, and Goro Uehara and hosted by John Powley. Powley is an extension specialist in animal science with the College of Tropical Agriculture and Human Resources at the University of Hawaii. Purpose of the travel was to introduce the students to the variety of agricultural activities in watersheds not unlike those found in Timor-Leste. The visit allowed them to visualize commonalities and differences that may become useful to them on their return to Timor-Leste.

**Administrative matters.**
At the request of Mission Director Flynn Fuller, a no-cost extension was prepared in consultation with the mission staff for submission to the CTO (Cognizant Technical Officer) of the Soil Management CRSP. A meeting was scheduled for mid-April involving the mission staff in Dili with Uehara and McArthur and with stakeholders and donor groups operating in Timor-Leste.

Brian Goodard, a consultant to USAID, accompanied Angela Rodrigues of USAID/EG, Dili to Baucau to evaluate the project’s performance in early March.

Personnel actions are pending the outcome of the no-cost extension discussions in April. Presently, Mr. Fernando Sousa will take on the added responsibility of agronomist in addition to his role as associate country coordinator. With mission concurrence, we will recruit locally for a national country coordinator.
Objectives and Performance Indicators

The following lists the three project objectives with the respective estimated performance indicators as described in the action plan. Activities are noted under each of the indicators reflect those accomplished during the reporting period July 1, 2004 to September 30, 2004.

Objective 1. Increase Agricultural Productivity and Food Security

*Estimated performance indicator*: maize and rice yields doubled in participating farmer’s fields relative to yields in non-participating farmer’s fields employing traditional farming practices.

a. In Uaitobonu, paddies were prepared for two rice demonstrations. Farmers planted the rice nurseries for the fertilizer response trials. MAFF (Antonio Lopes) and University of Hawaii personnel taught farmers to produce seedlings with a mat nursery for the Integrated Crop Management trials (figure 1 below). The mat nursery produces strong seedlings that have intact root and leaves and reduces planted seed to 10 kg per hectare.

b. Maize demonstration trial was harvested at Bubu Ana Cala. Grain yields will be available for the next quarter’s report. Outcome from trials are expected to define the fertilizer recommendation rates for nitrogen, phosphorus, and potassium, show the effects of compost as nutrient supplier, and confirm suspected micronutrient deficiency in the soil.

c. Seasonal rain forecast based on International Research Institute for Climate Prediction was demonstrated to MAFF personnel in Baucau and Dili. The forecast indicates whether rain will be higher than normal, normal, or below normal for the proceeding 6 months. Probabilities are associated with each category. With foreknowledge of rainfall patterns, mitigation strategies can be implemented beforehand such as planting short season local varieties, lowering the crop population density, or increasing the area planted.

*Estimated performance indicator*: Participating farmers produce rice equal in quality to imported rice.

a. N.A.

*Estimated performance indicator*: Lessons learned in first and second cropping season transferred to new watersheds and districts by MAFF personnel.

a. N.A.

Objective 2. Diversify and Intensify Crop Production to Generate New Income and Employment Opportunities
**Estimated performance indicator:** Income of participating households increase relative to non-participating households.

a. Production of an organic pesticide composed of garlic, mineral oil, and liquid soap was demonstrated to vegetable farmers of the Fatulia land use trial group. This pesticide deters some insects from damaging vegetables such as cabbage and leafy vegetables. The active ingredient garlic is readily available.
b. The candlenut activity involving an oil-extracting plant has stalled. A University of Hawaii team will visit Timor-Leste in April for meetings with USAID and other stakeholders in the watershed.

**Objective 3. Improved Watershed Productivity and Sustainability Through the Adoption of Sound Natural Resource Management Practice**

**Estimated performance indicator:** Fodder and fuel wood banks established in three villages in Seical watershed.

- UH personnel and MAFF staff continue monitoring trees planted as forage and live fences. The latter is part of the land use trial groups activity.

**Estimated performance indicator:** Fodder banks result in healthier livestock and reduced overgrazing of grassland.

N.A.

**Estimated performance indicator:** Fuel wood banks result in less unlawful cutting of trees.

N.A.

**Estimated performance indicator:** Lesson learned from establishing fodder and fuel banks transferred to other watersheds and districts by MAFF personnel.

N.A.

**All Objectives**

**Estimated performance indicator:** Local NGO’s adopt and spread project methodology throughout the country.

- CCT personnel were given informational material on forage trees produced by UH personnel. CCT will use this material in their outreach program across the country. Discussion on developing material on trees for firewood, timber, and coffee shade trees is in progress.
**Estimated performance indicator:** Peace Corps volunteers contribute to attainment of project objectives and voice support for continued participation in project.

- Peace Corps staff provided with reports and publications from CTAHR/UH including those on maize production and tropical flowers.

**Estimated performance indicator:** Participating National University faculty adopts and incorporates lessons learned from project into the University’s teaching, research, and outreach programs.

N.A.

**Estimated performance indicator:** High demand for returning East West Center students to fill key private sector and government positions after graduating from the University of Hawaii.

- Students from Timor-Leste visit agricultural activities in watersheds in Hawaii to improve understanding the balance among agricultural productivity and natural resource management.
Fiscal Reports

A. Accrual Calculator

(1) Jul 07, 2002 to Jun 30, 2005 = 24 months

Period of Performance (P): 24
Months to date (M): 21
Quarters remaining (Q): 1

Obligated Total (A) $ 2,400,000.00

Vouchered Total (B) $ 1,553,207.00
Encumberance Total (B1) $ 75,000.00
(as of Mar 31, 2005)

Unliquidated Total [C] $ 771,793.00

Estimated Accrual (D) $ 546,793.00
A/P x M (used) - B

Modified Accrual (E) $ 1,533,207.00

Calculations for Estimated Accrual
A/P $ 100,000.00
A/P x M (used) $ 2,100,000.00

Calculations for Modified Accrual
m1=Actual project to date expenditures: $ 1,533,207.00
(Mar 31, 2005)
t1=Quarters remaining: 1
m1/t1= $ 1,533,207.00

Estimated Project to Date Expenditures (m1 + t1): $ 3,066,414.00
Vouchered amount(B) $ 1,533,207.00
$ 1,533,207.00

B. Expenditure Report
Timor-Leste Agricultural Rehabilitation, Economic Growth & Natural Resource Management Project
Expenditure Report for January - March 2005

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>On campus</th>
<th>Off campus</th>
<th>(Jan - Mar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries &amp; Wages</td>
<td></td>
<td>$12,057.00</td>
<td>$25,465.54</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>$2,839.56</td>
<td>$2,062.35</td>
<td>$4,901.91</td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Materials & Supplies - $11,630.06
Travel - Domestic - $296.40
Travel - International $20,046.67 - $1,305.00
Print & Publications - - $5.70
Util & Communication - $1,511.94 - $1,511.94
Rentals - -
Equipment - -
Others - $285.18 - $24,246.57
Direct costs subtotal $35,228.41 $85,661.61

Indirect costs $12,787.91 $17,646.29
Total costs $48,016.32 $103,307.90 $151,324.22

Written Reports, News Articles or Other Material

- Travel reports of UH faculty and staff are available at the project’s URL, http://tpss.hawaii.edu/tl. Included with these reports are digital photos recorded by travelers. These photos can be viewed under “gallery”.
- Training and technical reports and links to USAID, UH, SM CRSP, and the government of Timor-Leste are also available at the project’s URL.
- DVDs describing the land use trials are complete. Copies in both English and Tetun were prepared and will be distributed to MAFF and USAID/Dili.

Implementation Issues/Constraints

Transmittal of documents remains an issue. Essential documents and project receipts continue to be exchanged through courier, i.e., DHL. Other printed materials are mailed to the PO Box established in Becora. Fax transmissions can now be accomplished by contacting Mrs. Carin du Toit. Otherwise, documents are scanned and transmitted as attached files to email.

Shipments of non-documents have encountered delays in clearing customs. These are supplies and products to be used in the conduct our project efforts. Examples include the soil test kits, replacement solutions and indicators for the test kits, micronutrient fertilizers, and so on.