

AGRICULTURE SECTOR OF ETESP

BRIEFING NOTES

1.0 INTRODUCTION

The Earthquake and Tsunami Emergency Support Project (ETESP) is a multi-sector project, to be implemented from 2005 to 2008. The purpose of ETESP is to:

1. Facilitate economic revival in the earthquake and tsunami affected regions by restoring livelihoods, and
2. Alleviate constraints resulting from the lack of public goods and facilities by restoring public services and rebuilding infrastructure.

The Agriculture Sector is one of the three livelihood sectors of ETESP¹. The estimated costs of the Agriculture Sector of ETESP alone are about \$32.7 million equivalent. In line with Ministry of Agriculture's Rehabilitation and Reconstruction Plan post earthquake and tsunami, the short term and longer term objectives of the ETESP Agriculture Sector were prepared for action.

The short-term objectives are:

1. Rehabilitation of farm capacity covering production, processing and marketing of rice and other food crops, estate/economic crops, and livestock/poultry.
2. Rehabilitating essential agricultural services, covering physical as well as human resource assets of the areas affected, in both public and private sectors.
3. Provision of implementation support to the Program, emphasizing community empowerment and clear targeting of vulnerable groups/households.

The longer-term objectives are:

1. Recovery and, where possible, enhancement of the rural household economy through crops, livestock, and related income generation activities, both existing and new.
2. Introduction and development of appropriate participatory coastal zone management system and practices, including integrated land use and management.
3. Strengthening of public and private agricultural support services, covering infrastructure, farm inputs, rural finance, technology development and extension, and other sectoral services.

In order to provide an integrated and effective program for achieving these objectives, the Agriculture Sector focuses on the three pillars of agriculture recovery:

1. Restoration of Farming
2. Restoration of Support Services
3. Community Empowerment.

¹ The other two sectors are fisheries and micro and small enterprise.

2.0 SCOPE OF ACTIVITIES

The Agriculture Sector covers 10 more affected districts of Nanggroe Aceh Darussalam (Aceh Besar, Pide, Bireuen, Aceh Utara, Aceh Timur, Aceh Jaya, Aceh Barat, Nagan Raya, Aceh Barat Daya, and Simeulue) and two districts on the island of Nias in North Sumatra province.

Restoration of Farming

Damage to farmland, supporting infrastructure, and farming assets has been extensive. Depending on the extent of damage, restoration of productive activities to pre-tsunami levels may take from 6-8 months to 3-4 years. The agriculture component is providing for studies to assess the extent of damage in different areas and develop different restoration strategies for different levels of damage. Less-affected areas may require the clearing of debris from farmland, and provision of basic tools, equipment, crop inputs, poultry, and small ruminants. Regions with moderate damage may require desalination and soil improvement measures, desiltation of farm irrigation and drainage channels, and introduction of salt-tolerant crops/varieties. Regions sustaining heavy damage, in addition to activities required for the less and moderate damaged areas, may require land leveling, new field layouts, and realignment of irrigation and drainage infrastructure.

The restoration strategies in the moderate and heavily damaged areas will need studies and close backstopping to initiate and guide the implementation, and monitor progress. In particular, close monitoring will be needed in monitoring the salinity levels in soil and water and in adaptability of salt tolerant crops to the local conditions.

Activities related to restoration of farming include:

- (i) studies to profile the damage and development of restoration strategies for different levels of damage;
- (ii) participatory land use planning in the settlements represented by 2,000 self-help groups;
- (iii) training of 2,000 self-help groups in the production of field crops, tree crops, poultry and small ruminants and horticulture crops;
- (iv) rehabilitation of 20,000 ha of farmlands;
- (v) soil improvement and desalination of 6,000 ha of farmlands;
- (vi) land leveling on 5,000 ha of severely damaged farmland;
- (vii) farmer-driven research;
- (viii) seed multiplication for salt-tolerant crops and varieties;
- (ix) support for resumption of field crop production on 15,000 ha;
- (x) community-based nurseries for tree crops;
- (xi) support for improving 15,000 ha of tree crops;
- (xii) monitoring of soil improvement including salinity levels in the soil and water in the areas receiving moderate to heavy damage.

Restoration of Support Services

The impact of the tsunami on the agricultural support services has been extensive with the loss of trained staff and damage to facilities, equipment, and vehicles. To help the

recovery of farming, the ETESP Agriculture Component will support agriculture-related human resources and institutional development of district and provincial governments in the project area. Drawing on previous ADB and other assisted projects in the country, the component will help to:

- (i) introduce extension methodologies, such as participatory farmer field schools and farmer-driven research, which have proven to be effective in transferring technology to farmers, and
- (ii) facilitate speedy recovery of farming practices.

The activities include:

- (i) capacity-building of institutions and human resources;
- (ii) recruitment of agricultural graduates, preferably belonging to the affected areas, on contractual basis that may later be absorbed by the district and provincial governments into their regular cadres;
- (iii) training of 250 new and 350 existing staff in the participatory extension methodologies, land use planning, crop production, and remedial measures for salinization and other tsunami-related issues; and
- (iv) rehabilitation of key agricultural facilities, and provision of necessary equipment and vehicles.

Community Empowerment

Experience with past and on-going projects is that the formation and development of self-help groups is highly effective in building coherent communities and enabling community members to revive the communities and build their capacities to undertake the recovery process with community participation. The community needs and capabilities will be assessed at the initial stages to provide a basis for targeting interventions. Revival and empowerment of the communities into self-help groups will also help the communities access reconstruction initiatives offered by the GOI and other donors.

Activities for community empowerment include:

- (i) develop 2,000 self-help groups;
- (ii) build the capacity of 4,000 community members in community management skills;
- (iii) develop participatory land and asset ownership mapping;
- (iv) undertake a needs and capability assessment;
- (v) establish community microfinance services;
- (vi) provide training in alternate income generation skills; and
- (vii) support communities to reestablish land ownership records.

Activities will specifically target households headed by women and orphans to ensure that their interests are protected.

To facilitate community empowerment ETESP has contracted the national NGO Bina Swadaya to carry out community facilitation and capacity building for self-help groups.

3.0 FIRST YEAR PROGRAM - REHABILITATION

The focus of the first year program (RKA-KL 2005) has been on restoration of food crop farming through the rehabilitation of farmlands, rehabilitation of irrigation and drainage

channels, and the repair of farm roads to get tsunami-affected farmers back farming. This was done through cash for work. Cash for work provided tsunami-affected farmers with cash income while at the same time repairing productive assets. Under RKA-KL 2005, support has been provided for the rehabilitation of 13,000 ha in 10 districts.

The land rehabilitation work was followed by material support (seeds, fertilizers, agriculture tools and equipment) for the planting of 10,850 ha of rice, 750 ha of corn, 650 ha of soyabeans, 750 ha of groundnuts, and 186 ha of horticulture crops (mainly chilli peppers).

Farm equipment provided included: 10 medium-size tractors (50-60 PK), 94 hand tractors, 86 water pumps, 57 power threshers, and 15 compost machines.

In addition, support services from government agencies was strengthened through training, repairs to facilities, provision of transportation (4 WD vehicles and motorcycles), and computers and office equipment/supplies for project implementation, monitoring and evaluation.

The Minister of Agriculture's program on 23 April 2006 is to document the successes of this program, and to participate in the first harvest resulting from the program. The village of Krueng Kalee in Darussalam Sub-District (Kecamatan) has been selected for the visit and participation of the Minister in the harvest of the first rice crop resulting from ETESP assistance.

4.0 2006 AND BEYOND - RECONSTRUCTION

The first year program outlined above was part of the rehabilitation phase. **In 2006, there will be a transition from rehabilitation phase to reconstruction phase.**

Rehabilitation

Farmland rehabilitation activities will focus on:

1. Rehabilitation of farmlands through repair/upgrading of tertiary irrigation and drainage systems which will facilitate the leaching of salt from tsunami-affected farmlands. Residual salt from the tsunami will caused reduce yields until washed out of the soil through leaching – requiring input of water and drainage to removal salt.
2. Removal of sand sediments deposited on farmlands by the tsunami. At many sites along the west coast, a return to food crop agriculture is restricted by deep sand deposits which need to be removed before farmers and return to food crop farming.

Material support (seeds/seedlings, fertilizer, and other inputs) will be provided for the planting of food crops on rehabilitated farmlands (13,000ha) in 10 districts of NAD. Main food crops are rice, corn, soyabeans, ground nuts, and horticulture crops. Priority in tree crop sector will be given to the replacement of coconut trees (3000 ha) damaged and destroyed by the tsunami, and the rehabilitation of other tree crops damaged by the tsunami or degraded by years of neglect resulting from the conflict.

Support will also be given for rehabilitation of the livestock sector. Emphasis is on improved support services, and on providing training and material support to farmers groups focused on animal husbandry.

Reconstruction

Reconstruction activities will focus on providing public goods and facilities which will not only support the rehabilitation of agriculture in tsunami-affected community but will provide the foundation for the future development of the agriculture sector in NAD and Nias.

This includes:

1. On-farm research for restoration of productivity on tsunami-affected farmlands
2. Capacity building for agriculture extension workers and farmers in land rehabilitation and management
3. Capacity building for farmers' groups and self-help groups, and linkages to microfinance and revolving funds.
4. Mechanization and support services.
5. Restoration of seed production capacity in Aceh for rice, other food crops and horticulture crops
6. Support for improving the quality and productivity of livestock.
7. Establishment of animal health posts and improved support services for animal husbandry.
8. Restoration of plant and animal quarantine facilities.
9. Improved processing facilities.
10. Improved facilities for Agriculture Services for Food Crops, Tree Crops and Livestock
11. Improved capacity for Agriculture Services – human resource development, improved transportation, and improved data management for project improved design, implementation, monitoring and evaluation of agriculture programs.
12. Integrated development strategy for agriculture sector supporting agribusiness development and promoting investment.

ADB is also assisting in coordination of all stakeholders in Aceh's agricultural development through the BRR Agriculture Steering Committee. The committee has been charged with facilitating the planning of the modernization and expansion of Aceh's agricultural sector with the participation of all stakeholders and determining the gap between agricultural development needs and funding available.