

## INDONESIA STATUS REPORT 31 JANUARY 2006

### Coordination:

FAO is working closely with the Government of Indonesia, line Ministries and NGOs in providing technical and policy guidance to plan and coordinate rehabilitation efforts in the agriculture, fisheries and forestry sectors. FAO's emphasis is on optimizing sustainable outcomes and rebuilding livelihood opportunities for vulnerable fishing and farming families to enhance their food security and incomes. FAO has provided technical guidance and expertise to the Government of Indonesia through its close collaboration with the Ministry of Marine Affairs and Fisheries (MMAF), the Ministry of Agriculture (MoA) and the Ministry of Forestry. As a result, the Government of Indonesia was able to develop a rehabilitation and reconstruction strategy in Aceh and Nias for agriculture, fisheries and forestry. FAO is also working closely with the Rehabilitation and Reconstruction Agency (BRR - Badan Rehabilitasi dan Rekonstruksi) for Aceh and Nias to help coordinate humanitarian efforts in the region.

### Agriculture:

In the agriculture sector, FAO has distributed rice seed packages to 11 787 beneficiaries and is currently distributing agricultural inputs amounting to approximately US\$1.05 million to an additional 25 000 beneficiary households in the east and west coasts of Nanggroe Aceh Darussalam (NAD). Rice seed packages, seed crop packages consisting of groundnut, soybean and/or maize seed, vegetable crop packages consisting of six varieties of vegetable seed and estate crop seedlings are being distributed to these households, along with tools and fertilizer. Target districts include Aceh Besar, Aceh Jaya, Aceh Barat and Nagan Raya on the west and the districts of Pidie, Bireuen and Aceh Utara on the east.

Equipment worth almost US\$490 000, including 75 hand tractors, 150 threshers, 300 water pumps and 50 reapers, are being provided to farmer groups for rice, vegetable and estate crop farming activities. An additional 695 hand tractors and 100 threshers have already been delivered to farmer groups. FAO's implementing partners in the agricultural sector include international and national NGOs such as Keumang, Solidarités, Patgata, Peace Winds Japan, Child Fund, Jesuit Refugee Service Indonesia, Action contre la faim, Food for Hungry, World Relief, Mercy USA, Catholic Relief Services, Spanish Red Cross and Gruppo Volontariato Civile among others.

In August-September 2005, FAO carried out three training sessions in Banda Aceh and Simuelue on the operation and maintenance of hand tractors for community representatives. A total of 147 operators from seven affected districts were trained. To ensure that all active members of the farmer groups are able to utilize the hand tractors, FAO is also currently supporting on-site training of some 770 farmers in the use of hand tractors. More than 400 of these farmers have already been trained.

FAO also supported a cash-for-work (CFW) programme in Aceh Besar district to clear debris and rehabilitate paddy fields, in partnership with local organizations. About 300 labourers, 15 to 20 percent of whom were women, were involved in CFW activities. Another CFW programme to rehabilitate tsunami-damaged farm land currently employs an additional 300 labourers in the district of Aceh Barat.

Livestock inputs of over US\$100 000 consisting of poultry kits and veterinary supplies were procured. Veterinary equipment, medicines cold boxes for vaccine storage and vaccines against Newcastle Disease in poultry and Hemorrhagic Septicemia in cattle were delivered to the Dinas Peternakan to help the local livestock authorities resume work in disease prevention.

Additionally, some 300 head of livestock, including pregnant cows and buffaloes, are being distributed to livestock farmers in and around the district of Aceh Besar. About 50 farmers have already received one head of cattle each, with the remaining 250 to be distributed by mid-February. Once the calf reaches six months of age, farmers will be encouraged to donate the cow/buffalo to the next vulnerable member of the community, thus allowing a larger section of the community to benefit from one round of livestock distribution. The livestock were treated for parasites and vaccinated prior to distribution. FAO has also provided the Dinas with medicines and equipment to treat the livestock and administer drugs for up to three months following distribution.

### **Fisheries:**

In the fisheries sector, FAO is helping fishing communities resume their livelihoods through the distribution of fishing gear and boat engines. A total of 518 fishing gear kits amounting to about US\$400 000 and consisting of 25 different items (including hooks, handlines, etc.) and 3 114 multi-filament fishing nets have been distributed to beneficiaries in North Sumatra and Nias Island. Another 504 kits are being procured for delivery to beneficiaries. FAO is supporting the Dinas Kabupaten Perikanan (DKP), local fishery authority, to implement their boat building programme. FAO's assistance to the programme includes the development of boat specifications and minimum standards for construction, training of boat builders and monitoring of boatyards for boat delivery. Following a spate of sub-standard boats being constructed and delivered in the last few months, FAO has made the training of boat builders an integral part of its efforts to ensure that safe, high quality boats are delivered to fishers. Forty-two boat builders, including representatives of the DKP and the local fisher association, Panglima Laot, have received training through two boat building sessions held in the districts of Aceh Utara on the east coast and Nagan Raya on the west coast.

Five boats produced during the first boat-building training have been delivered to fishers. Approximately 200 more boats are being built by FAO in collaboration with local NGO partners in Aceh Besar, Aceh Barat, Aceh Utara, Pidie and Simeulue (island). Many of the 42 FAO-trained boat builders have returned to boat yards administered by these NGOs, thus linking FAO's quality training with its boat building assistance. More than 50 labourers are actively engaged in and earning incomes through these boat yards.

FAO has signed an agreement with the Agency for Technical Cooperation and Development (ACTED) to provide boat engines, fastenings and fishing gear for 35 boats currently being built by the NGO. The equipment will be delivered once the boats have been constructed. Each boat will provide a source of livelihood for a team of 2-4 fishers and their families.

FAO is also assisting about 189 beneficiary groups, 30 percent of which are led by women, through the distribution of small-scale fish processing units and processing sheds to the Aceh Besar district on the west coast, and Pidie, Bireuen and Aceh Utara districts on the east coast of the Nanggroe Aceh Darussalam (NAD) province. About 1 512 individuals, 60 percent of whom are women, have benefited from employment in these fish processing units. A majority of the small-scale entrepreneurs have already commenced fish processing activities, with harvests of 3-5 tonnes per week being recorded in the district of Pidie. Planning is underway to replicate this entrepreneurial project in the districts of Nagan Raya and Aceh Barat along the west coast.

FAO is procuring 21 traditional motorcycles complete with pannier baskets and ice boxes to replace their loss so that coastal communities can re-establish links with the trading community. Ten of these are currently being handed over to local fish transporters in Aceh Besar. An additional 100 bicycles equipped with similar pannier baskets and smaller ice boxes have been procured, and will be distributed to the fishing communities in Simuelue, Pidie, Bireun and Aceh Utara.

Two fish markets have been built in the Meuraxa sub-district of Banda Aceh while a jetty is currently under construction and is nearing completion. Some 200 insulated-fibre fish boxes are in the process of being distributed to the fishers, fish traders and fish processors around Banda Aceh and Simeulue. Of these, 100 ice boxes have been distributed to 54 beneficiaries in Simeulue while 85 beneficiaries have received one ice box each in Banda Aceh.

Activities are underway to assist some 650 tambak farmers in Pidie and Bireun districts along the east coast and Aceh Besar in the north. Village-level participatory meetings have already been held with farmers to discuss tambak planning and rehabilitation. Some 42 ha of tambak farms are currently being cleaned and repaired, jointly, by tambak farmers and internally displaced people through a CFW scheme supported by FAO. Approximately 500 ha of tambak farms will be rehabilitated through similar CFW programmes to clean and repair the tambaks, followed by the provision of agroinputs including fish and shrimp seed, feed and fertilizer to farmers who lost their capacity to resume activities as a result of the tsunami.

FAO also supported a workshop on “Aquaculture Farm Rehabilitation in Aceh” organized by BRR/MMAF/Dinas Perikanan on 28 January 2006 at LOKA Ujung Batee (Regional Brackish-water Aquaculture Development Centre) in Aceh Besar. Some 54 participants representing 23 organizations and agencies participated. The workshop was the first in a series of ‘best practice’ workshops that aims to bring together government agencies, NGO’s and other organizations to share experiences, promote awareness of best practices, and provide a forum for solving technical issues in aquaculture rehabilitation in Aceh and Nias.

### **Forestry:**

Many farmers and fishers in tsunami-affected areas are dependent on forests and trees for their livelihoods. Efforts to rehabilitate mangrove forests, to plant coastal shelterbelts, and to replant timber and fruit trees would serve to protect human lives and inland assets, and improve household economies. FAO is utilizing participatory approaches, in the context of integrated coastal area management, to develop programs to build the capacity of provincial, district and village-level communities in planning and implementing forest rehabilitation programs, in reforestation, in the sustainable management of coastal trees and forests and in agro-forestry. Local capacity building (through technical support, coordination, training and guidelines) and resulting forest and tree-derived benefits will provide affected populations with a means to address their immediate livelihoods needs, provide a solid foundation for coastal protection, and ensure a sustained supply of wood, non-wood products and environmental services from forests.

In addition, FAO’s assessment of wood demand and supply for reconstruction of houses and other infrastructure has produced positive results concerning government action to protect natural forest and wildlife reserves and address the danger of accelerated illegal logging and deforestation. FAO continues to assist government agencies in coordinating and monitoring the supply and demand for wood for reconstruction ensuring that environmental sustainability standards are maintained.

## **MALDIVES STATUS REPORT**

### **31 January 2006**

#### **Introduction**

Main stream FAO activities continued. In particular, the second phase distribution of agricultural inputs to remaining yet uncovered islands in the South of the country and bokkuraa construction progressed. Further measures have been taken among organizations with regard to coordination and collaboration. Some actions geared towards Avian Flu prevention and preparedness are being taken.

#### **Coordination:**

As envisaged during the November coordination meeting on livelihoods, FAO held a follow-up workshop on January 26. Participants from all major aid agencies still present in the Maldives for rehabilitation programmes attended the meeting. Highlight of the meeting was the attendance and full participation of the Ministry of Fisheries, Agriculture and Marine Resources (MFAMR) as the key actor in the delivery of assistance in the fields of agriculture, fisheries and forestry.

The workshop's main purpose was to offer a platform for agencies to share views on what livelihoods meant to their respective organizations. This was done in a pragmatic way with the respective agencies informing on their current activities, the geographic locations of their actions and indicating their intentions for future activities. A matrix drafted by FAO encapsulating current activities by agency on an island basis across the archipelago was circulated and discussed. There was consensus regarding the usefulness of this instrument as a tool for more effective coordination, It was agreed that the matrix will be fine-tuned on the basis of contributions from the agencies. In particular, the Ministry advised considering the planning tool developed for the National Rehabilitation and Recovery Plan (NRRP) and the scope for reconciling the categories in matrix with the NRRP. A key conclusion of this meeting was the commitment by the Ministry to assume responsibility for convening monthly coordination meetings of the development partners. In this regard, FAO Maldives committed to provide support to the Ministry in organising and servicing these meetings.

Follow-up discussions have been held with representatives from UNICEF, the British Red Cross and Italian Consulate to develop ideas and further explore the scope for FAO to implement projects funded by them or to play a specific technical assistance role in the field of agriculture, fisheries and forestry.

#### **Fisheries:**

In the commercial boat yard where the bokkuraas are being constructed, 20 hulls and decks were completed and are being assembled. In the 3 islands where Community Based Organizations are building the 69 other bokkuraas, work is progressing and the bokkuraas are expected to be completed by end of February.

To date, the community in Kudahuvadho produced 6 hulls and 2 decks. The community in Naalafushi has produced 23 hulls and the deck construction is about to commence. The Maroshi community completed 15 hulls as well as other small items such as thwart, front under deck etc. Another month is required for that community to complete the 23 bokkuraas.

Distribution of FAO fishing gear is on-going on the basis of beneficiaries coming from their islands to Male to collect the items they are due. The beneficiary package includes: feather hooks; compasses; fins; navigation lights; snorkels; underwater torches; fishing lines and ropes. To date 225 (59%) of the damaged vessels needing assistance have benefited from the assistance. This represents about 11 250 people receiving aid.

### **Agriculture:**

The target for the second phase distribution to the islands of the southern atolls was not reached. Indeed, stormy seas continue to hamper the finalisation of the distribution.

During the month of January, distribution also slowed down due to the holiday period which caused some delays in supplier deliveries to Male. However, plans and arrangements have been made for the continuation of the second phase to start in early February. That round of distribution is destined to complete the December distributions and to cover 7 new islands of Meemu Atoll (563 beneficiaries) representing all tsunami affected islands of that atoll, and 5 out of 10 affected islands of Laamu Atoll (427 beneficiaries).

All in all, at the completion of this round of distribution, a total of 2 833 families or 95% of the targeted beneficiaries, would have received the agriculture kit composed of (72 gm vegetable seeds; 100 Kg compost; 100 Kg manure; 29.5 Kg inorganic fertilizers; 1 hoe; 1 rake; 1 shovel; 1 sprayer; 1 bush knife; 1 watering can; 1 wheel barrow).

Similarly this round of allotments will result in a total distribution of 224 000 seedlings, roughly 50% of the total quantity of 460 000 to be distributed.

To date 12 of the 13 atolls affected by the tsunami have received the complete agricultural relief kit necessary for restarting their production effectively. All atolls are expected to be covered by the end of February.

### **Forestry:**

Following the approval of the one year Emergency Project OSRO/GLO/502/FIN funded by Finland for an amount of US\$500 000, the consultant overseeing implementation of the project arrived in the country. He was accompanied by a forestry expert from the FAO RAP office on a 2-week inception mission. During this time, the operational plan is being developed and is to be submitted for endorsement to the authorities.

### **Avian Flu:**

Following a risk assessment conducted in November and funded under the OSRO/MDL/504/CHA project, FAO is considering how to assist the authorities on this matter. Meanwhile, an officer from the Ministry of Health will attend FAO's Sub Regional Training Workshop on Diagnostic Laboratory Techniques for Avian Influence. FAO Maldives has been coordinating with UNDP Male for the recruitment of a UNV Veterinarian to assist the Ministry in this area.

## MYANMAR STATUS REPORT 31 January 2006

### Coordination:

In Myanmar, FAO is collaborating with UNDP to provide assistance to tsunami affected fishers; in the agriculture sector, FAO is supporting 1200 farmers in the worst affected tsunami areas of Pyinsalu Sub-township, Laputta, Ayeyawady Division.

FAO is partnering with the Mangrove Service Network, a local NGO, in the distribution of both agriculture and fishery inputs. The transportation of the agriculture inputs had started in middle of August while reconfirming the beneficiaries. Immediately after completion of reconfirmation process, distribution of the inputs started on 10 September, 2005 and all of the agriculture inputs were distributed.

### Fisheries:

In the fisheries sector, FAO held two training workshops in July on fishnet making which were designed to improve the skills of women in net-making and income generating activities. The procurement of about 100 boats and accessories, as well as 700 tiger mouth fishing nets were made. The procurement orders for long lines, tiger mouth nets were issued on 28 September, 2005 and for 32' fishing boats and 20' fishing boats were issued on 5 October, 2005. At the end of November, 2005, 45 numbers of 20' boats and 16 numbers of 32' boats were already built. And at the end of December, 57 numbers of 20' boats and 30 numbers of 32' boats were built and 17 boats were installed with engines. Now, at the end of January, 2006, 67 numbers of 20' boats and 32 numbers of 32' boats and all 32' boats were installed with engines. Forty five numbers of 20' fishing boats and 16 numbers of 32' fishing boats were handed over to the beneficiaries on 18 January, 2006. The other 22 numbers of 20' boats and 16 numbers of 32' boats will be handed over again in 1<sup>st</sup> week of February, 2006. In November, 700 tiger mouth nets, and 67 long lines were received and paid. These tiger mouth nets were distributed on 2 November and 22 November, 2005 in two batches. The distribution of the sixty seven long lines was also commenced on the end of November, 2005. The 5-days Post Harvest Fishery Training Workshops were held in three villages during 19-23 September, 26-30 September and 3-7 October, 2005. These training workshops are planned to create income generation options with value added products. A fisheries backstopping mission lead by Mr Thomas Moth Poulsen was carried out from 23-29 May 2005. Another fisheries backstopping mission of Mr. Thomas Moth Poulsen made a visit from 30 October to 5 November 2005. The fishing gear technician from the Department of Fisheries began duties in October 2005 to check the specification of the fishing nets, fishing gears, and boats. The gill nets were shipped from Thailand arrived on 10 December, 2005 and via Bago Vessel and floats and leads on 9 December via inland. These gill nets were cleared from custom on 6 January, 2006 and these were checked by the fishing gear technician at the same day and are within the specification. These gill nets were sent to Pyinsalu for distribution and expected to be distributed on 1<sup>st</sup> week of February, 2006. Fifty tiger mouth nets were also procured on 2 December, 2005 and distributed on 20 January, 2006.

### Agriculture:

Procurement of agricultural inputs consisting of rice seed, sunflower seed, fertilizers, and different varieties of vegetable seeds, seedlings and hand tools has been completed. The distribution of agricultural inputs commenced on 10 September and completed 25 of October. Due to savings of expendable equipment – agriculture inputs, 120 baskets of mung bean and 1 200 mango seedlings were procured for distribution. These were already distributed in November 2005.

Two training courses were carried out for the agriculture sector, the home gardening and post harvest management training, and field crops training in three villages. Each of the trainings has 5 days duration and 21 trainees in each village and commenced on 19 September 2005 and completed on 7 October 2005. These trainings intend to increase the

income, introduce appropriate cropping patterns and cropping techniques, create more job opportunities, and empower women.

Agriculture backstopping missions were carried out by Dr. Yuji Niino (FAORAP) from 7 to 13 August 2005 and Dr. Aun Chuan Peter Ooi (FAORAP) from 6 to 11 November, 2005.

#### **Additional Budget:**

Further funding was provided by the Government of Japan. The following activities will be implemented using the generous resources provided to FAO Myanmar.

#### **Fisheries:**

More gill nets and tiger mouth nets were ordered and this will fulfil the amount of fishing nets lost by the affected beneficiary fishers.

#### **Agriculture:**

Tender invitation for mung bean, cow pea, and black gram seeds; urea, rock phosphate, and gypsum fertilizers; rhizobium bio-fertilizer; insecticides and fungicides; thresher, winnower, sprayer, and pH/Salinity meter were issued on 16<sup>th</sup> November with the closing date of 21 November. The selection of appropriate bidders was already done and procurements will be made soon. These agriculture inputs will be used for double cropping after rice harvest. Using additional budget 36 MT of Urea, 60 MT of Rock Phosphate, 24 MT of Gypsum and, 3.6 Kg of Rhizobium fertilizer, 1425 baskets (45.8 MT) of Cow pea, 450 baskets (14.5 MT) of Mung bean, 275 baskets (8.84 MT) of Black gram were procured distributed at last week of December, 2006.

## **SEYCHELLES STATUS REPORT**

### **31 January 2006**

#### **Coordination:**

In the framework of the mid-term review of the UN Appeal, which was launched in early April 2005, FAO appealed for a total of US\$2.75 million to assist the fishery and agricultural livelihood rehabilitation and recovery of the tsunami-affected population in the Seychelles. In April 2005, FAO fielded a mission to Seychelles in order to assess the damage and to prepare, in close consultation with the government, project proposals for the pledges received from donors in response to the Appeal. In June 2005, a technical backstopping mission from FIIT was fielded. An emergency coordinator has been in on site since early June and local technical experts have been contracted.

FAO is working closely with the Government of Seychelles, through the Seychelles Fishing Authority (SFA) and the Ministry of Natural Resources and the Environment.

#### **Fisheries:**

In the fisheries sector, FAO is providing support to: (i) replace damaged boat engines, parts, and equipment (ii) replace actual vessels lost in the disaster (iii) replace damaged and lost fishing gear and equipment (iv) repair a damaged ice storage facility.

Boat engines are scheduled to arrive in February 2006, while the bulk of the fishing gear will arrive in April 2006. The high demand for similar supplies and equipment across the region has created some production and shipment delays. Repair work to facilities and vessels will be completed in April/May 2006.

#### **Agriculture:**

In the agriculture sector, FAO is providing a variety of agricultural inputs to assist farmers recover from the disaster. Inputs will be distributed to beneficiaries in the first two weeks of February 2006.

#### **Forestry/Rehabilitation:**

In the area of environmental rehabilitation, FAO is providing support to stabilize slopes affected by the Tsunami and prevent further erosion and damage to key coastal areas. Rehabilitation work has been completed as planned.

## **SOMALIA STATUS REPORT** **31 January 2006**

FAO has received a total of US\$1 391 604 for tsunami relief in Somalia from the Governments of Norway and Trinidad and Tobago as well as from private sources such as the Italian private supermarket company CONAD and the Church of God in Christ COGIC, an Afro-American religious organization. The Government of Germany (BMVEL) has recently signed a project document to provide additional resources (€114 000) and it is expected that the Standard Bank of South Africa (SBS) will do the same in February 2006. The World Food Programme has recently also made available US\$ 900.000 received from the Government of Italy for the support of vulnerable households in the Puntland region. Activities are directly benefiting more than 2 000 fishers in 28 villages along the Indian Ocean coast. Indirect beneficiaries include an estimated 20 000 shore workers, traders and family members in these fishing communities.

Funds received so far have been used to;

- procure approximately US\$603 000 worth of fishing gear and boats for the affected communities to replace those lost – at the request of local authorities, larger, improved boats are being procured to “build back better” in a way which facilitates preservation of the most fragile resources close to the shore; the boats are being manufactured locally, providing needed employment;
- carry out training programmes for fishers, focusing on fish handling and processing as well as the environment and the management of marine resources – critical in circumstances where post harvest losses are as high as 50-70% - and for mechanics in boat engine repair, essential to ensure sustained performance of the fishing fleet;
- prepare a Fisheries Association Statutes template, which has been used by four district associations recently established with the assistance of FAO, whose legal status has been officially recognized by local authorities – these associations will be fully involved in distribution of the boats and gear to their members and take charge of revolving funds for the maintenance of the fishers’ equipment and further investments;
- carry out assessments to obtain a more precise idea of damage caused by the tsunami, not only in the worst affected northeastern part of the country, but also in the centre and south of Somalia;
- identify suitable locations for installation of ice-making machines, critical for the preservation of fish and reduction of post harvest losses.

FAO works closely with the Humanitarian Assistance and Disaster Management Agency (HADMA), established by the Puntland authorities as a governmental body responsible for the overall coordination of the post Tsunami Interventions.

While the on going procurement actions are aimed at the relief of the fishers, a major recovery effort is underway to bring the region back to and beyond its pre-tsunami condition and to help achieve longer-term development objectives, the new WFP contribution will be instrumental to this end. Further activities under consideration focus on fish handling and processing and marketing.

## THAILAND STATUS REPORT 31 January 2006

### Coordination:

A regional fisheries consortium has been established for the coordination of a fisheries and livelihood recovery programme in collaboration with relevant regional fisheries and aquaculture organizations. The FAO Regional Office in Bangkok also organized four regional workshops to identify a strategic framework for medium- and long-term tsunami rehabilitation in the region, thereby enhancing collaboration and coordination among the partners.

The FAO Regional Office expanded the function of its Tsunami Task Force with the establishment of a Tsunami Technical Coordination Unit. The activities of the Task Force will be supported and strengthened through the new regional project "Regional co-ordination and information management on strategies for early recovery of agriculture in coastal regions" (US\$800,000) which is funded through un-earmarked OCHA funds.

### Fisheries:

In the fisheries sector, FAO assisted the Government's efforts to re-establish sustainable fishery activities, rehabilitate affected/damaged areas and restore fisheries-based livelihoods. More specifically, fishers were assisted to resume fish harvesting for improved nutrition and income in the most affected provinces of southern Thailand, thereby reducing their dependence on food assistance and their vulnerability to financial crisis. FAO has distributed 800 fish cages, 180 000 fish fingerlings, 18 000 fish traps (crab, squid and fish traps), 3 320 sets of shrimp gill nets, 408 wood pieces for boat repair and 328 fish cage nets. In addition, to support a rapid re-establishment of sustainable income-generating activities by fisher folk, 430 boat engines and associated accessories are being supplied to 28 fisher groups in six provinces, which will then be provided on loan to 430 selected fisher folk. FAO is now moving towards a medium and longer-term post-tsunami rehabilitation phase. Under this new phase, two new recently approved FAO projects (US\$ 760,000) are supporting the government to undertake (i) a technical assessment to determine the fishing capacity level and (ii) a stakeholder analysis for implementing community-based sustainable coastal resource management as well as empowering coastal fishing communities for the development of their self-help capacities. The project will also enhance the coordination capacity of the Department of Fisheries (DOF) under a joint DOF-FAO post-tsunami rehabilitation coordination unit which is being established within the Department of Fisheries.

In November 2005, an additional 82 cage nets were distributed to beneficiaries in Phuket and Satun provinces. This activity completed the distribution of boat engines and fishing accessories. Follow-up of the utilization of the engines/accessories is an ongoing activity. Leasing agreements for 430 beneficiaries are being finalised. In January 2006, fish cage net sets and 20 sets of fish cage structure were delivered to beneficiaries in Puyu Island in Satun province.

## **Agriculture:**

Several low income farming communities in the affected regions lost their crops, livestock and production assets making it difficult for them to meet the immediate food needs of their families without external assistance.

The intrusion of sea water due to the tsunami and resulting soil salinity affected grasses (important as livestock fodder) and a range of crops including vegetables, young oil palm, rubber seedlings, rambutan, and mangosteen. The crops died within three to four weeks of sea water intrusion. By August 2005, FAO had delivered 247 tonnes of gypsum (natural calcium sulphate) to farmers. Gypsum application has improved the soil structure, thereby facilitating the leaching of salts from the rooting zone. A total of 15000 fruit seedlings (coconut, oil palm and cashew nut) were also given to the farmers. A total quantity of 1 052 tonnes of organic fertilizer was procured and distributed to tsunami-affected farmers to improve the soil organic content of their farm land and offset the effects of salinity. The distribution of 177 tonnes of animal feed and 1 500 mineral block pieces for livestock was also carried out to help livestock farmers. FAO has a target of helping over 1 600 farmers resume agriculture activities. FAO is now moving towards a medium-term rehabilitation phase through a new project (US\$ 323,480) for the implementation of an in-depth technical damage assessment in the agriculture sector and the identification of appropriate soil reclamation measures for medium/long-term post-tsunami rehabilitation.

Eighty Hydroponic and 30 net house vegetable production units have been delivered to tsunami-affected farmers under the "building-back-better" concept. In addition, 38 tonnes of gypsum, 7.7 tonnes of organic/chemical fertilizers and 4 450 fruit tree seedlings were handed over to tsunami-affected farmers in October 2005. In November 2005, training on hydroponic was provided to beneficiaries in Tambon Lamkean, Phang-Nga province.

All project inputs had been delivered to beneficiaries by the end of January 2006. Training on the practical use of salinity meters was organised for field officers of district and provincial DOAE and DLD stations on 26 Jan 2006 at Ban Lamkean School, Thai Muang district, Phang-Nga province.

In later February 2006, it is proposed to arrange training on the technical and management aspects of hydroponics for the 80 hydroponic beneficiaries in Thai Muang district.

## **Forestry:**

In early July 2005, an in-depth technical assessment of tsunami-affected mangroves and other coastal forests in south Thailand began under a new project (US\$220 000). The project's Plan of Operation was approved by the Government-chaired Project Steering Committee in August 2005 and the project inception meeting was held in September 2005. Assessment missions are continuing to obtain additional information for a final scientific and socio-economic assessment.

This project will also support development of Government capacity for integrated coastal land use planning and forest ecosystem management through the application of remote sensing and RS/GIS. All procurement actions were completed and the delivery of equipment for GIS facilities had taken place in early November 2005. During December 2005 and January 2006, all GIS and surveying instrument sets were delivered to the Phuket Mangrove Research and Development Station of the Department of Marine and Coastal Resources (DMCR). In December 2005, the Geo-Informatics and Space Technology Development Agency (GISTDA) installed a GIS facility and conducted an eight-day training course on the introduction of GIS/RS for six local DMCR staff.

The Prince of Songkla University (PSU) also organized the first introductory course in RS/GIS for general public organizations as part of the project's public awareness programmes in December 2005.

Project progress reports and work plans were submitted to FAO by the end of January 2006.

In February 2006 it is planned to conduct an advanced training course in RS/GIS by the PSU for the same DMCR trainees. Study teams of the Faculty of Forestry and Faculty of Economics of Kasetsart University will also continue with their field work in February 2006. The PSU group will continue its public awareness activities on forest functions in conservations and mitigation.