



Dinas Perikanan technical team members sampling for acid sulfate soils in a damaged dyke.



Dinas Perikanan staff measuring the pH of soil before and after oxidation to determine the acid-generating capacity of the soils.

PHOTOS: JES SAMMUT

sary reconstruction methods. Demonstration sites will be established in collaboration with other agencies in different districts.

Although we have raised awareness of technical issues, in particular highlighting soil and disease problems and how to tackle them, getting the technical teams out into the community has been a challenge.

We trained several teams and equipped them with field sampling equipment, but the scale of the problem is enormous and staff are thinly spread. Team members also reported that they were still grieving and coming to terms with the impacts of the tsunami. Many are still homeless and picking up the pieces of their shattered lives. The pressures on staff are intense and there is a need to continue offering support.

By late 2005 the need for technical assistance from NGOs and farmers exceeded the capacity of the local fisheries staff and we seconded one of our Acehese team members, Mr Aliman, from another ACIAR project in South Sulawesi to Aceh to provide technical inputs while we developed a new training and capacity-building program.

Mr Aliman, from the Research Centre for Coastal Aquaculture in Maros, moved to Aceh, where his skills are desperately needed on the ground, in September 2005.

On his return he expressed an enthusiasm for the task ahead: "There is a lot to do – more than you can imagine – but you can see positive changes already. The farmers have a will to restart their businesses. There are thousands of kilometres of dykes to rebuild and this will take a long time," he said.

The UN's Food and Agriculture Organization (FAO) has initiated a farm cluster program to help facilitate the reconstruction efforts. This approach has already been applied by ACIAR in South Sulawesi through Dr Dick Callinan's disease management project. The program establishes small groups of farmers who can share resources and cooperate to rebuild farms, manage production systems and eventually to work together on the market end of their business.

We will target technical extension activities through the farm clusters. We will also help the FAO and the farm clusters to produce rehabilitation plans. We will provide pond and canal design criteria,

TIDAL HYDROLOGY TEAMWORK

A new member of the project team, Mr Taruna from the Research Institute for Coastal Aquaculture in Maros, South Sulawesi, describes what he thinks of the project:

"Hydrology is an important factor to consider in reconstruction. Tidal hydrology will need to be considered for the design of the ponds and canals and pond management. There is no use in rebuilding dykes, ponds and canals if their dimensions are all wrong. There will be too much erosion and sedimentation and pond management will be difficult. We will be modelling tidal hydrology and producing tidal charts for the farm clusters. We have been writing computer programs to make it easier for consultants, NGOs and government officers to apply the hydrological data. The software is user-friendly and we will train people in its use.

"Being involved in the ACIAR programs is exciting for me. I learned a lot from past ACIAR projects and here I am, applying the information in one of the most challenging situations. Knowing you can make a difference is exciting. I feel privileged to be a part of this and I know my colleagues in South Sulawesi are very happy that our past research is being used. This is a good example of how Australia and Indonesia can achieve good results working together."

Damage to primary and secondary dykes has left many ponds exposed to air on every low tide since the tsunami. These soils are producing more acid than before the tsunami and if not properly managed will cause production losses when the ponds are rebuilt.



advise on the soil constraints and how to manage them, and also help to produce maps and plans.

Mr Taruna, an AusAID-funded Masters student at the University of New South Wales, has given up his spare time to help out by translating educational materials, authoring software and technical information and helping with the coordination of activities.

Some of the participants from the earlier ACIAR project stay in regular contact by email or text messages. They keep me up to date on how they are going personally and professionally. In between requests for technical information the participants share how they are feeling and rebuilding their lives.

At one of the workshops I asked the participants to write down their name, address and other contact details. One of them joked that for most of them their mobile number was their address; although said in jest, his comment was a reminder that most of them were left with nothing. ◀