

2. Coordination

The enormity of the humanitarian effort required after the Aceh tsunami meant there were inevitable duplications and gaps in rehabilitation activities in agricultural areas. It is important to establish good communication between all groups providing agricultural aid to share successes and problems and learn from each other's experiences.

Our experience in Aceh showed that there needs to be a clear allocation of responsibilities and activities in agricultural areas among national, provincial and local government; agricultural research and extension; NGOs and farmer groups. These activities and responsibilities are probably best defined in emergency planning protocols that can be implemented immediately should a tsunami hit.

Land surveys

The earthquake that produced the Aceh tsunami had a significant effect on the topography of the Aceh coast, with land levels dropping one to two metres in some coastal areas (FAO 2005). Areas which were previously inhabited became permanently flooded, and drainage patterns and river flows changed, particularly in estuarine areas. (AusAID 2007) In the Meulaboh, Aceh Barat area farmers reported that sand dunes disappeared, the river mouth clogged up and drainage channels changed, making land unsuitable for dryland crops. Restoring agriculture in these areas without adapting for these changes can lead to inappropriate management and wasted resources, which can be dispiriting for farmers already traumatised by the tsunami. The survey teams also need to define farm boundaries to provide certainty for farmers.

Indonesia's Soils Research Institute mapped tsunami-affected land on Aceh's west coast using the FAO classification system and GIS referenced data and mapping software. This enabled assessment of land suitability for certain crops in tsunami-affected areas.

Urban and rural rehabilitation

Coordination between urban planning and agricultural rehabilitation is required to minimise impacts on agricultural land. For instance, drainage from new housing estates near Banda Aceh resulted in nearby agricultural land becoming a flood basin that could no longer be reliably used for production.

Agricultural aid

In Aceh some aid groups provided aid to individual farmers, some to groups of farmers. The Bureau of Rural Reconstruction preferred to work with groups of farmers, providing the group with a loan and requiring the farmers to fence their combined production area.

Linkages between NGOs and local agriculture departments

After the tsunami hit, there were many aid groups working in Aceh's rural areas. Most of them worked independently and were not familiar with local agricultural practices, crops and seasons, which led to some inappropriate plantings and failed crops. One consequence of this was when farmers encountered problems and asked government advisors for help, the advisors were not familiar with the NGO programs. It is vital that NGOs work with local agricultural services to ensure the long term sustainability of their agricultural work once the aid program finishes. Aid groups need to understand how agriculture is managed at a district or local level - ie through agriculture department or through local government, and then build links with appropriate groups and people, to ensure good communication.

The Aceh experience has shown that agricultural aid workers and government agricultural extension workers need to work together to

- build relationships
- exchange knowledge
- plan work programs to ensure all information going to farmers is consistent
- share feedback from farmers about their needs.

Governments need to treat NGOs as an opportunity, not competition, and make it easier for the NGOs to assist farmers through collaboration with the government extension network.

The ACIAR project has shown that it takes some time to restore soil health in tsunami-affected areas, so it may be useful for agricultural aid projects to commit to 2-3 year projects rather than only for the emergency period.

Training

Immediately after the tsunami in Aceh there was a need for training of farmers and agricultural officers in restoring inundated farmland. There were many difficulties in achieving this, not least lack of local agricultural staff due to the high death toll, and lack of information about post-tsunami agricultural management. While aid groups were generous with seeds and fertiliser after the tsunami, there was often little follow-up support or advice.

Given the lack of knowledge about post-tsunami agronomic problems the lack of support is not surprising, but aid groups, local agricultural advisors and farmers need training in what to expect and how to overcome production problems due to seawater inundation and sediment.

If training activities are coordinated and delivered to a wide cross section of aid and extension staff, a consistent message is distributed, ensuring that farmers and field staff receive the same information and the appropriate support.

References

AUSAid 2007 Aceh mapping assistance project

<http://www.indo.usaid.gov.au/projects/Acehmapping.htm>

FAO 2005 Impacts of subsidence on coastal areas: Drainage and salt related issues

<http://www.fao.org/ag/tsunami/assessment/impact.html>