

# Conclusion

Providing development assistance to disaster-affected communities requires a long-term commitment to fully realise its benefits. In the 9 years since the 2004 tsunami, projects by the Australian Centre for International Agricultural Research (ACIAR) in Aceh have worked with coastal farmers, extension officers, non-government organisations (NGOs), agricultural scientists and soils scientists to restore agricultural soils, and build skills in soil and water management, agricultural production and participatory research.

In that time, Aceh's agriculture has blossomed. Scientists and extension officers have learned new skills in agricultural science and communication, and farmers have increased their yields with improved crop varieties and management practices. Women's farming groups have also flourished, with women gaining production and marketing skills, social outlets and income.

ACIAR's long-term involvement has shown that helping farmers recover from a tsunami involves more than just fixing soil and water in the short term. Good communication and coordination between all aid parties involved in restoring the land are vital. Ideally, emergency management protocols are in place well before a tsunami, to ensure that farmers know what is happening and can return to productivity as soon as possible. In future tsunami events, farmers and local communities will have to deal with seawater inundation, saline soils and water, sediments of varying depth and composition, and damage to local infrastructure. The scale and timing of the tsunami event will determine what effect these factors will have on the productivity of agricultural land, and the duration of the impact. Similar impacts can be expected in low-lying coastal areas after severe tropical cyclones and the associated storm surges.

Farmers benefit most by being involved from the beginning in activities to restore their land. These activities include surveying boundaries, removing sediment, repairing infrastructure, and assessing soil and water quality before planting crops. Reliable, up-to-date information on the quality of soil and water can potentially save farmers time, effort and scarce funds spent establishing crops after a tsunami. In severely affected areas, leadership and social networks may need to be rebuilt, along with agricultural networks. NGO and government aid needs to be integrated into these networks.

The ACIAR projects have shown that, once agricultural production is under way again, agricultural networks are ideal mechanisms to introduce new management practices and new crop varieties to improve productivity. The productivity of tsunami-affected farmland can be higher following restoration and development assistance than before the tsunami, as has happened in Aceh. We hope that the information we have compiled in this guide will provide a useful benchmark for future post-tsunami restoration of agricultural land.