

# Ibu Supriyani: organic farming pioneer in Aceh

ACIAR is continuing its long-term work in rebuilding agricultural capacity in tsunami-affected areas of Aceh. Here, project leader Gavin Tinning writes about one of the key people linking the project work to farmers



**BY GAVIN TINNING\***

Ibu Supriyani made an immediate impression on me when we met in April 2007. My Indonesian is average and her English minimal but with the aid of her catalogue of training and field photos she described her work with groups of rural women around the tsunami-affected town of Meulaboh on Aceh's west coast.

Supriyani is a local extension worker with PPL (Penyuluh Petani Lapang), the local-level agricultural extension agency in Aceh. She prefers to work with women because they do much of the work on the family farm. They also respond well to new ideas, so are a useful conduit for demonstrating new farming techniques and crops to their husbands and brothers who manage the family's land. Supriyani has formed and supported four women's groups since 2006. She also supervises demonstration trials for the agricultural agency, but her passion lies in her work with the women.

Composting, small-scale poultry production and natural pest management are some of the techniques that Supriyani has introduced to the women who are eager to learn and create sources of income. Composting is particularly important as soil organic matter was stripped away by the 2004 tsunami and manure is still scarce.

Small amounts of initial funding from NGOs like TearFund have helped the groups establish their demonstration plots. ACIAR is supporting these groups so they can maintain their activities and demonstrate the benefits to other women in the district. Most of the groups are from areas severely affected by the tsunami. While the landscape still shows the scars of the destruction, and recovery is slow, the women are resilient and keen to move on.

Without the assistance of extension staff like Supriyani, the women's crops often fail or do not produce sufficient income to encourage them to continue. Supporting her work and the work of similar extension staff across Aceh is one of the most important aspects of the ACIAR-funded project led by NSW Department of Primary Industries (DPI) to restore agriculture in tsunami-affected areas of Aceh.

As a member of the ACIAR project, Supriyani has been able to further her training at project forums and participate in project activities. More importantly, she

receives support to allow her to form groups, visit them regularly, and record her training and extension activities as the groups develop.

She is just one of the dynamic members of a project that brings together staff from the Assessment Institute for Agricultural Technology (BPTP) in Banda Aceh, BPTP Medan, the Indonesian Soils Research Institute, and the Indonesian Centre for Rice Research. Working with committed and enthusiastic partners like Supriyani is one of the reasons that this ACIAR project in Aceh is so enjoyable and successful.

Communication of project activities and outcomes is a high priority in the project, given the problems facing farmers and government staff in a province where agricultural extension has been limited due to the long-running civil war, and communication networks were all but destroyed following the tsunami. Communication of new information is traditionally managed through formal presentations at meetings, with the information then 'trickled down' through extension and farmer networks. But with

### Blooming Flowers

One of the four groups that Supriyani has formed is called Bungong Barona, or 'Blooming Flowers', an appropriate name for the women who are restoring food crops and colour to a devastated landscape.

Twenty-five women have formed a cooperative to farm small plots of land near the coast as a means of generating income for themselves and their families. The plot I visited was planted out to red chilli bushes, which appeared in robust health.

Supriyani has encouraged the group to manage the crop using organic fertilisers and pesticides. While this requires extra labour to collect material for composting and to brew the compost teas and pesticides, it has reduced the group's fertiliser and pesticide costs. Chilli is a profitable crop if managed well. Corn is another successful crop the women

have grown since forming in 2006.

Bungong Barona has a simple profit-sharing arrangement that enables members of the group to be independent. A third of the profit is kept in the group account, a third is used to fund the next crop, and the remaining third is shared equally between members.

Most of the women work in rubber plantations or have small-scale poultry production at home. They meet in the afternoon after work, tend their crops and learn from Supriyani.

One of the group's immediate goals is to purchase more poultry to enable them to produce more compost. The destruction of poultry and livestock by the 2004 tsunami means that manure is still scarce around Meulaboh. – GAVIN TINNING



Ibu Supriyani



## Indonesia

**PARTNER COUNTRY:** Indonesia

**PROJECT/ DESCRIPTION:** SMCN/2005/1 18: Restoration of annual cropping in tsunami-affected areas of Nanggroe Aceh Darussalam Province, Indonesia

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these networks disrupted, involving extension staff like Supriyani in the ACIAR project is one of the keys to helping farmers restore their tsunami-affected soils and deal with associated crop problems.

Supriyani's skills in working with groups were very evident when the ACIAR project held meetings for local farmers and extension staff in Meulaboh in April 2007. Our project was seeking feedback from farmers about a booklet on soil biology and other activities that we were conducting. Supriyani was able to engage her group and encourage them to give their ideas, helping us to improve our work and benefit farmers and extension staff across Aceh.

Supriyani was also one of the presenters at a communication forum in Saree, near Banda Aceh. She used poster presentations to talk about her work with groups of women around Meulaboh, and accompanied our group to visits at sites where she has worked. Unfortunately her collection of photos cannot be reproduced in sufficient quality for printing so I am hoping that she can make use of a digital camera provided by the NSW DPI and capture more of the interesting work carried out by her and the groups she works with. ■

\*Gavin Tinning, from the NSW Department of Primary Industries, is the project manager for the ACIAR cropping project in tsunami-affected Aceh.

## ACIAR and ATSE Crawford Fund support training for aquaculture rehabilitation in Aceh

BY MIKE RIMMER AND JANE OAKEY\*

Although it is now more than three years since the tsunami of Boxing Day 2004 devastated the Indonesian province of Nanggroe Aceh Darussalam ('Aceh'), rebuilding of infrastructure and livelihoods is still ongoing. One of the major sectors affected by the tsunami was aquaculture.

The Food and Agriculture Organization estimates that about 20,000 hectares of coastal aquaculture ponds, known locally as *tambak*, were damaged or destroyed by the tsunami. Many thousands of coastal *tambak* farmers lost their livelihoods when their ponds were destroyed.

The Brackishwater Aquaculture Development Centre (BADC) at Ujung Batee, about 20 kilometres from the capital of Banda Aceh, was badly damaged in the 2004 tsunami. The Australian Government is rebuilding the facility as part of the Australia-Indonesia Partnership, and has funded a program to build the capacity of staff who work

there. The capacity-building project is being delivered by ACIAR and will support not only the reconstruction of coastal aquaculture in Aceh, but the longer-term development of sustainable aquaculture. ACIAR is also supporting further training in aquaculture in Aceh from its own resources.

As part of the capacity-building project, BADC Ujung Batee staff are being trained in laboratory practices, including polymerase chain reaction (PCR) techniques to test for shrimp and fish viral diseases. A joint ACIAR-ATSE Crawford Fund training activity has assisted in the development of improved disease monitoring and diagnostic practices for aquaculture in Aceh.

Two BADC staff, Mrs Endah Soetanti and Mr Islahuttaman, undertook training in PCR in Australia, at the Tropical and Aquatic Animal Health Laboratories in Townsville, Queensland. The training was hosted by Biosecurity Queensland, part of the Queensland Department of Primary Industries and Fisheries which operates the Townsville facility. ProAqua, a Brisbane-based company, donated the molecular test kits used for the training. Dr Jane Oakey, senior molecular biologist at Biosecurity Queensland, was the main trainer in Townsville.

"We have learnt so much from Jane," Endah says. "She has been patient, talked very slowly to us to make sure we understand, and she is very dedicated to her profession. We have learnt useful techniques that we can apply in our new laboratory, from diagnostics to quality control."

The trainees are implementing their new skills by checking the disease of shrimp postlarvae before they are stocked in ponds. ACIAR research has demonstrated that, by ensuring stocked shrimp do not carry specific viral pathogens, farm production and profitability improves.

Skills and knowledge are not the only attributes to return to Aceh. The molecular biology facilities in the new laboratory being constructed at BADC Ujung Batee have been modelled on those in Townsville. As a follow-up training exercise, Dr Oakey will visit Aceh later in 2008 to provide additional training and to assist in implementing best laboratory practices in the newly constructed laboratory.

\* Mike Rimmer is from the School of Marine and Tropical Biology at James Cook University, Queensland; Jane Oakey is a senior molecular biologist at the Tropical and Aquatic Animal Health Laboratory in Townsville, Queensland.

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As part of rebuilding Aceh's aquaculture capacity, Mrs Endah Soetanti and Mr Islahuttaman are trained in laboratory techniques to test for shrimp and fish viral diseases.