



# Rice aplenty in Aceh

FOR THIRTY YEARS the people living in the conflict affected areas of Aceh were restricted to tending the fields and gardens adjacent to their homes. The productive rice fields and rubber plantations that were further away were left dormant for over a generation, untended and unharvested.

The fear of being caught up in the conflict that raged between the Free Aceh Movement (GAM) and the Indonesian Military, meant civilians couldn't freely move about. Then in 2004 the Boxing Day tsunami devastated the Acehese coast. Despite the devastation wrought by the tsunami, new hope is returning to Aceh on the back of the enormous outpouring of generosity from the international community and the consequent peace deal that also followed.

As part of the tsunami emergency relief and rehabilitation response, Caritas Australia supported the Caritas Czech livelihood program in one of the conflict affected areas – Sampoiniet sub-district of Aceh Jaya district, NAD Province, Indonesia.

In these communities, the families who had the smallest area of land holdings traditionally struggled to feed

themselves for a third of the year, due to their limited production.

Through the Caritas Czech livelihood program, local small holders have learnt the System of Rice Intensification (SRI): an innovative way of growing rice crops which has had incredible results.

Dr Ingvar Anda, Caritas Australia's Humanitarian Coordinator says that SRI improved the yield in Aceh from two tons per hectare to 8.5 tons per hectare.

"Many families didn't even grow enough to feed themselves, so in this very simple intervention that is very low cost, they are going to go from net consumers of food to net producers," says Dr Anda.

Whilst the potential for rice production in Aceh is great due to the relative abundance of land and ready access to water, organisations like Caritas can add technical know-how which makes all the difference.

"In a way Aceh offers us a laboratory to see the value of sustainable agriculture as the terrible conflict meant people had been essentially cut off for 30 years from the chemical revolution that swept Java. Acehese farmers were using a really basic unimproved agriculture and they had no access to fertilisers.

"They were introducing the System of

Rice Intensification at the same time as organic compost was introduced and it is proving a perfect combination," Dr Anda said.

Caritas Czech also saw that the increase in production could be improved upon with better irrigation infrastructure and a willingness of villagers to planting and harvesting two crops a year.

"The farmers just don't think it is possible to grow two crops in a year as they have never done it this way. Even when you go through the four month planting to harvest cycle, many local farmers still find it hard to conceptualise. Yet with limited improvements to irrigation infrastructure it is achievable," says Dr Anda.

"So in their case they are potentially looking at a ten fold increase in productivity and this was a community that previously grew enough food for only eight months."

The System of Rice Intensification was developed by Fr Henri de Laulanié, SJ, in the 1980s in Madagascar.

Traditionally when rice seedlings are transplanted in a field they are clumped in bunches of four or five plants of between three and six weeks old. The fragile roots of rice seedlings at this age are easily and

often damaged, resulting in reduced productivity from each plant.

But with the System of Rice Intensification tiny 10 day old seedlings are taken and individually planted with bigger spaces in between so there are a lot less plants used. Hence the savings on seedlings is considerable and surprisingly productivity is far greater.

The draw back with the SRI method is it is more labour intensive. The planting process takes longer because these seedlings are more delicate. In the SRI method the field is not kept flooded and because the water normally suppresses weed growth, farmers need to do a lot of weeding.

Yet in many farming communities there is no short supply of labour and hence for village subsistence and low level surplus village economies, it is perfect.

Sandya Manickham Caritas Australia's Humanitarian team Program Coordinator said the best part of her most recent monitoring visit was the fact that

they could see the drastic improvement brought by the program.

"It is a model project. The practical nature of the training meant you could see people learning about these new techniques and theories and then putting them into practice and almost immediately the people involved can see the huge increase in productivity."

The SRI has been successfully trialed around the world including in India, Bangladesh, Cambodia, Madagascar and elsewhere in Indonesia as you can see in the story on Laz Harfa from page 4.

"People who are promoting this rice intensification method are often also promoting organic farming practices as the majority of these communities cannot afford expensive fertilisers and other inputs such as non-hybrid seeds. In this way you are improving the sustainability of the farm by increasing output, keeping expensive inputs low and using surplus labour," Dr Anda said.

The livelihood program is embedded with local partners Pansu who are involved in delivering the rice growing training.

A key impediment to increasing growth in these rural communities has been the lack of access to local markets. Hence the program has also extended to assisting communities to form and operate cooperatives. The formation of buying groups has increased the selling power of the local community, giving them better access to markets where they can sell their surplus. The establishment of these community co-ops has also promoted recognition of the communities to Government where they are now much more aware of their rights and the requirements of their respective governments to service these rights.

"Personally I like this kind of project. It is just win, win, win. Farmers are getting a sustainable outcome – they aren't getting a house or anything but they are getting a dramatic improvement to their livelihood. And the farmers, families and communities are responsible for the improvements they make themselves. They can choose if they want a new house or to improve their children's access to school and hopefully their health, all as a result of sustainable improvements to their nutrition and to their income generation," Dr Anda said.

"This is much more focused on long term development outcomes rather than short term asset replacement.

"There are really long term outcomes for this project so in terms of recovering from the tragedy that was the tsunami and the 30 year conflict and having sustainable improvements you need that long time frame and we have got it there.

"I think that the key to good rehabilitation is allowing yourself the time to do quite long term interventions to make real changes to people's livelihoods.

"These people are going to go from not growing enough food to feed themselves to having a decent income generating surplus.

"It is one of the best examples of food security that I have seen. You talk to the people with the house and the boat and they have also had a dramatic life improvement but to me this development work is really exciting because the cost is low and you are providing skills and new understandings for long term and lasting development," Dr Anda said.

GILLIAN COOK WITH TIM O'CONNOR

