

Scaling Up the Women's Food Processing Home-industry in Indonesia

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Introduction

Shinta Lona, better known in her village as 'Mama Fons' is the 41-year-old wife of a seaweed farmer in Indonesia's Nusa Tenggara Timur (NTT) province. While drinking tea with guests who visited her home in 2011 Shinta offered them her homemade *pillus*, a crunchy snack made of seaweed, flour and other ingredients.

By adding value to the home-made product, *pillus*, a crunchy snack made of seaweed, flour and other ingredients, the group of women now makes seven times more profit than they did from selling dried seaweed.

One of the guests, a local expert on post-harvest processing, was visiting Shinta's family to talk about potential improvements to their seaweed drying racks as part of a livelihoods project. He tried her *pillus* and realised immediately that if improved, it could be

sold in the provincial capital Kupang. He invited Shinta to work with the Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP)¹ to help develop her product to its full potential.

"My first encounter with RFLP was a turning point for me. Since then my life has changed significantly," Shinta said. Today, along with others in the village, she makes Mama Fons' *pillus* for sale nationwide. By adding value to this homemade product the group now makes seven times more profit than they did from selling dried seaweed². Scaling up production has also contributed to poverty reduction by creating jobs and increasing income in remote villages, while enhancing food security and women's empowerment.

Poverty, food insecurity and malnutrition in the NTT archipelago

With an estimated population of 4.7 million³, NTT com-

prises 853 islands and is the only province in Indonesia with a predominantly Roman Catholic population. It is also one of the country's poorest provinces. Some 12.2 percent of the urban population and 22.4 percent of the rural population are classified as poor, figures that are considerably higher than the national averages (urban poor 8.6 percent; rural poor 14.7 percent.)⁴

Although NTT's economy is based mainly on agriculture and fisheries, these sectors account for 77 percent of the province's 337,500 underemployed workers⁵. Moreover malnutrition is reported⁶ especially in rural and remote areas. Food waste and losses through traditional food storage is very high, estimated at 25 to 30 percent⁷.

Processing fish and aquatic products was not common in NTT province⁸. Locals were more accustomed to eating fresh fish, and there was little demand for the processed variety.

Preservation techniques were generally only applied when there was a surplus of fresh fish that remained unsold in local markets. This resulted in generally low quality products that were only used for household consumption.

Processed food also lasts longer and reaches more distant inland communities where people may not have access to the nutritional benefits of fresh aquatic products.

But, as catches have been declining and the supply of fresh fish has become irregular, processing is now essential in reducing the vulnerability of coastal communities to economic and food insecurity. Producers of processed food receive higher returns than from sales of raw materials such as fresh fish or dried seaweed. Processed food also lasts longer and reaches more distant inland communities where people may not have access to the nutritional benefits of fresh aquatic products.

Success of Mama Fons seaweed snacks

NTT province has 20 districts, 281 sub-districts, one municipality and 2,667 villages. RFLP has been operational in Indonesia since 2009 and works with some 20 communities and groups in three districts (Kupang, Alor and Rote Ndao), as well as Kupang Municipality. A key objective of the project is to improve the post-harvest quality of fisheries and aquatic products, which in turn helps the livelihoods of vulnerable fishing communities.

Sulamu, a small village in Kupang District, is one hour by boat from Kupang City, or about three hours along a very poor quality road. The village is home to the Bajau people, a traditional Muslim ethnic group of sea nomads, and local Timorese people, who are mainly Christian. The major livelihoods options in Sulamu are fishing – mainly carried out by the Bajau people – seaweed farming and animal husbandry. Some of the locals are engaged in farming, but because of the scarcity of water and high soil salinity, growing vegetables and fruits is difficult. Under these conditions, seaweed farming is a reliable livelihood option.

Seaweed is produced, dried and sent to Kupang and then on to Surabaya as a raw material for processing. Although the income stream is regular, the returns are relatively low. Some processing of seaweed does take place, but only for home consumption. Shinta, like other women in her village, was producing seaweed products only for family consumption.



Shinta Lona and her *pillus*

Shinta improved her recipe with advice from the experts. With training from RFLP, she has improved hygiene and sanitation in the production process by ensuring that gloves and aprons are worn. Overall hygiene in the processing room was also boosted. By using basic equipment provided by RFLP, her *pillus* is now sold in more professional packaging with attractive labels designed under a “Mama Fons” brand instead of the simple plastic bags previously used. She also obtained national health and

safety certification (*Produk Industri Rumah Tangga – PIRT*), which is needed if products are to be sold in shops, as well as Halal certification, which opens the door to Indonesia’s huge Muslim market.

RFLP helped market Mama Fons *pillus* by introducing it to supermarkets, minimarkets, and gift shops in Kupang City. The brand was also featured at provincial fairs highlighting products from across NTT, and at nationally staged events in Jakarta.

As Shinta started selling her *pillus*, she also encouraged other women in her village to form a processors group and urged her fellow seaweed farmers to improve the quality of their seaweed. The economies of scale helped them to overcome limited production capacity that is a challenge for small-scale producers. When they were selling dried seaweed, they were making a profit of about IDR 6,000 (USD 0.6) per kilo of dried seaweed. “Now selling *pillus* we make a profit of around IDR 40,000 (USD 4) per kilo,” explains Shinta.



Map of Indonesia and NTT province

The strengthening of supporting institutional capacity

One of the key factors behind the success of Mama Fons’ group, as well as other small processors, is RFLP’s strategy to form a well-trained and highly motivated group of support staff and mentors to act as change agents.

“We created four groups of facilitators, and assigned one group per district. Each group had four people: two representatives of the district government or DKP⁹, one representative of a local NGO and one representative of an education institution,” said Rikhun¹⁰, RFLP’s National Post-harvest Consultant. This combination was very constructive – government officers brought the policy knowledge plus the institutional support, NGO representatives brought people-centered perspectives (which were often women oriented), while the educators brought technical knowledge and educational methodologies.

“We trained these facilitator groups at the beginning of the programme to become trainers themselves. We provided technical advice on post-harvest issues as well as conflict resolution and team building skills. Some of them had little experience working with communities, but we taught them how to use Participatory Rural Appraisal (PRA) techniques. The lack of experience was also not an issue, as we provided them with a lot of support,” Rikhun said.

“When we selected this group, we looked at their motivations and their wish to serve their community. It is important to note that the facilitators receive no extra salary to do this job – they provided their time and effort, which can be considered as in-kind support to the RFLP by their organizations,” Rikhun added proudly. “They did this to learn new skills and serve their communities. And I think this is what made our actions successful. Without their

commitment, this would have been impossible.”



Seaweed farmer

For the facilitators, working in this way was also a new experience. “My institution [DKP] is in charge of fish processing, however, the focus has always mainly been on capture fisheries with little attention given to other aspects of the supply chain,” said Samuel Alnabe¹¹. “My experience with RFLP opened my mind. I understood that much can be done to add value to fish

and other aquatic products, and that there are other actors we have to consider, not only fishers, but also processors, who are mainly women.”

In the beginning, the facilitator groups were unaware of what was required of them. They attended training thinking that that would be the end of it. However, on the last day of the training they were given a task: to prepare a list of potential processor groups that could receive support from RFLP. A week later they met again, and with the RFLP staff selected four or five processing groups in each district. The criteria used for the final selection were that groups should not have previously received support – or if they had received some, it had never been followed up. They then realized their involvement with RFLP was just beginning.

Many were enthusiastic about the idea of becoming “community facilitators”. Others were less so, concerned about the amount of work they already had and that these new tasks would be an added burden. Meanwhile, some feared that they did not have enough knowledge to teach others. In the end their worries were unfounded with RFLP providing all the technical advice and support needed.

Scaling up

The success story of Mama Fons is just one example of the results of training and the engagement of facilitator groups.

In recognition of Mama Fons’ achievements, her product was chosen for national promotion by the Ministry of Marine Affairs and Fisheries through the ‘National Branding for Fisheries Products’ programme. This programme promotes leading fisheries products from provinces to retail giants such as Carrefour. These products will be sold under a new brand called ‘Freeze and Fresh’. They will come in attractive, modern packaging, and be laboratory tested to verify safety and nutritional content.

The main challenge now for the Mama Fons group is to

ensure sufficient supply of material for national retail chains, as they will need to produce and deliver 100 kg of seaweed *pillus* a week. This will be a major step up as previously the five members of Mama Fons group produced a maximum of 10 kg per week. To meet this increase in demand five more people have joined the group, including some Bajau people, increasing the sense of unity within the community.

As with many small-scale producers, lack of access to capital is a major obstacle to increasing production. Following RFLP support, the group is now more professionally run and with ‘bankable’ products has also received attention from a micro-finance institution, *Swasti Sari*. This should enable them to further expand their business.

In addition to producing *pillus*, Shinta and her group are also looking at new products. Following RFLP training and visits to other producers they have also started to make *dodol*¹² (compacted seaweed jelly). This famous snack can be found in large stores, hotels, and at the airport in Kupang. The Mama Fons team is improving the quality, packaging and marketing of *dodol*. DKP donated equipment for *dodol* production; however, it was never used because of insufficient power. “We have electricity in the village, but it is insufficient for the processing equipment,” explained

Shinta. “We hope that Sulamu village gets better noticed by the government so we can get the support the village needs.”



RFLP staff testing *Dodol*

The way forward

Sustainable supply of electricity is one of the many challenges that remote villages face. To expand seaweed farming in NTT and replicate the success of Mama Fons, RFLP and DKP are working with BAPPEDA, the regional planning and development board, to produce a Road Map for Seaweed Development in the province. This Roadmap will support larger-scale industry as well as small-scale processors, by examining the entire supply and value chain.

Much of the success of the Mama Fons group stems from the motivation of members to better themselves and learn more. This positive attitude and entrepreneurial spirit has been vital, and supports the idea that beneficiary selection at the outset is important. Yet, the need for on-going support is also crucial for the success of the initiative. In the case of NTT, the building of local mentoring capacity helped ensure the success of the initiative

and facilitates sustainability and replication.

The local counterparts and facilitators also received ongoing mentoring to help them put their skills to use and build their confidence. They were actively involved in RFLP actions. Making use of the networks created by RFLP through its facilitators, collaboration evolved among different stakeholders. A Fisheries Information Marketing System (FIMS) is also being developed, which will facilitate access to fisheries-related data, and will be used by the different government departments to develop policies. DKP staff has worked collaboratively with RFLP to obtain relevant data from small-scale processors.

Mama Fons' success is not only a matter of increased income. "We are happy that we can contribute to the improvement of conditions in our community, which has such high levels of unemployment. Some of the teenagers are starting to help after school and we are able to pay them. Our main concern is to ensure that people in our community have employment, especially young people, and our dream is to be able to contribute to this with a processing plant," Shinta said.

Endnotes

- 1 The RFLP operates in five main outputs; implementation of co-management mechanisms to improve the management of resources, safety at sea and vulnerability reduction, improved post-harvest and marketing of aquatic products, livelihoods strengthening and diversification and micro-finance services. In addition to Indonesia, the programme is also being implemented in five other countries: Cambodia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam. The RFLP is funded by Spain and implemented by the FAO. For more information visit: www.rflp.org
- 2 On a kilo-for-kilo basis.
- 3 2010 figures, Badan Pusat Statistik, Statistics Indonesia.
- 4 Ibid.
- 5 Ministry of Manpower and Transmigration (2012)
- 6 World Food Programme (2010).
- 7 Bottema et al. (2009).
- 8 RFLP Indonesia Baseline Survey (2010).
- 9 Marine Affairs and Fisheries Agency.
- 10 Many Indonesians use only one name.
- 11 Director of Marine Affairs and Fisheries Agency.
- 12 *Dodol* is a common snack in Indonesia. Sweet, green, sticky and thick it can be made from various natural ingredients such as corn, brown sugar, milk, rice, apples, pineapples, strawberries and other fruit. It is usually consumed when families and friends gather, and is also sold as a gift.

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