Aquaculture Enterprise Malawi: Creating farmers with a vision

Author: Avani Nadkarni



Move over China and Chile — Sub-Saharan nations such as <u>Zambia</u> and <u>South Africa</u> are quietly beginning to delve into aquaculture — and armed with a grant from the Scottish government, one group is training a team of entrepreneurial Malawians to farm fish successfully.

Aquaculture Enterprise Malawi (AEM), a three-year Scotland-funded project in the landlocked southeastern African country, provides "good quality feed, fingerlings, good advice and training to small to medium" fish farmers, Abudala Napuru, the project's technical manager, told **Fish Farming International**.

A carefully crafted team

Starting in May of 2013, UK-based Stirling University's Institute of Aquaculture, the Scotland Malawi Business Group and Malawi-based Microloan Foundation and Umodzi Consulting teamed up to provide technical support, project and financial administration, loans and small business support, respectively, on the project. Napuru was carefully chosen due to his strong commercial aquaculture background — he was formerly with Lake Harvest in Zimbabwe and Uganda. The team's goal was to work with 20 "carefully selected individual producers" each year; the farmers had the option of receiving a loan to pay for the commercial feed and fingerlings in ponds — the loan was paid back once the fish were sold following the six-month production cycle.

The farmers themselves were also carefully chosen not just for having suitable sites and a 12-months peryear water supply but also because of their entrepreneurial potential, explained Institute of Aquaculture researcher William Leschen. He made it clear that AEM isn't simply providing regular technical advice and backup to its client farmers, but is instilling entrepreneurial skills in them as well. Once they join, they are expected to be able to pay off the loan within six months to a year with their fish sales — if they are able to or are close to being able to pay off the loan, Aquaculture Enterprises will continue to work with them. If they are nowhere near being able to pay it off, the group doesn't continue the relationship — something that is clearly explained at the beginning, Leschen said.

"It's not necessarily about the old adage of working with rural farmers or people living in rural areas who grow agricultural crops," he told **Fish Farming International**. "Our fish farmers come from very different backgrounds. Being entrepreneurial is key. In the past, donor-funded aquaculture development projects [in Malawi and other Sub-Saharan African countries] have tended to be based on blanket coverage of rural areas and villages and expecting everybody there to build fish ponds, irrespective of sites, distance to periurban markets and the skills sets and abilities of the individuals concerned. The evidence base shows this approach clearly doesn't work. We looked and advertised out to a much wider group of people."

Fish Farming International



Farmers harvest in Malawi. Photo: Aquaculture Enterprises

Fish farmers computer and internet training workshops were held at a Blantyre Internet cafe last year, Leschen recalls, and 19 people attended with 15 "having never sat in front of a computer before." Those with an entrepreneurial desire, he said, picked it up very quickly. They are the ones who succeed with AEM, he said.

Abudala and his team of three technical officers visit all the client fish farmers at least once a month to monitor progress, answer questions and to test-weigh the fish to assess their growth rates and thus evaluate their pond and feeding management towards stand-alone financial viability.

Scotland-based Leschen visits, too, and plans to head to Malawi in a few weeks time for the "inception" meeting of the next group of 20-plus carefully-chosen third-year fish farmers. Other than technical, small business development and IT training and advice, AEM also has a strong component providing market and supply chain expertise to its fish farmers. It's a crucial piece of the puzzle, Leschen said, since the end objective is to allow them to successfully sell the fish for profit and pay off their loans.

Things don't always go as planned

As with most projects, not everything has gone just as planned. The first year, AEM managed to recruit 13 strong candidates, but just nine continued on to the following year. It became clear that the program only wanted "those showing signs of seriousness," Napuru said, a business approach that not all Malawians were used to. The second year, though, 26 came on board, bringing the total to 35. Currently, the program is "in the process" of recruiting more and has identified 30 strong candidates, so the goal of 60 over the three years may be met after all.

"At the beginning of year one, we had some challenges," Napuru said. "But after making some adjustments [especially with feed and fingering suppliers], we've seen our fish farmers able to harvest their fish and make profit to be able to pay off their loans."

The journey hasn't been without some pretty notable challenges. A major one, according to both Napuru and Leschen, is that certain strains of tilapia are banned in Malawi.

"Malawi doesn't currently allow outside strains of tilapia into the country," Leschen said. Nile tilapia (*Oreochromis niloticus*) is not allowed, so the farmers are growing indigenous species such as tilapia rendalli.

Fish Farming International



The farms range from 200 square meters to 1,500 square meters. Photo: Aquaculture Enterprises

"The trouble is they grow much slower than *niloticus*," Leschen explained, saying while certain strains of Nile tilapia can reach around 450-500 grams after six months, the indigenous tilapia grows to about 100-150 grams in that time. "When you start to do the sums and look at input costs and markets sales prices and thus profitability, obviously it's a big difference."

The reason for these strict regulations, Leschen said, is the government is concerned about maintaining the biodiversity of its fish stocks, particularly in Lake Malawi. If Nile tilapia are introduced, the government is concerned it may "ruin" the country's natural fish species.

However, farmers in neighboring Mozambique — which interestingly shares Lake Malawi with the country — do farm Nile tilapia.

"The minute you start getting bigger tilapia coming into the country at similar prices, you have a bit of a problem for Malawian fish farmers," he said. "It's quite an interesting dilemma or quandary at a policy level."

As of now, Malawians are used to the smaller fish and Napuru said the farmers are fetching in the \$3-\$4 per kilogram range for the tilapia, which they are selling within a 120 kilometer radius of Blantyre, the city that is the financial center of the country.

The availability of quality feed and fingerlings were also hurdles AEM had to overcome, but Napuru said there are "always challenges in this part of the world." Currently, the farmers — who have ponds running from 200 meters squared to 1,500 meters squared — obtain feed from Maldeco, the biggest commercial aquaculture producer in the nation; it also provides its own feed.

What happens when the money is gone?



The farmers sell the fish and are expected to pay off the loan within a year. Photo: Aquaculture Enterprises

Slated to end this coming April, the project has just about nine months left — but Napuru and Leschen have been looking to the future of the farmers since the inception of the project.

"The best possible exit strategy [scenario] is producing individual, stand-alone fish farmers who produce fish for a profit — that's the objective," Leschen said. "Into year two now, we're beginning to see that."

In the initial proposal and business plan, there was also the option of identifying a local social enterprise or other business that would, after the project finished, provide essentially a private-sector extension service model that fish farmers would pay for with a dividend from their harvests, with the addition of supply of key inputs — such as feed and fingerings — and equipment. "We have already had several expressions of interest from Malawian private sector individuals," Leschen added. "This type of private extension is already successfully working in the growing aquaculture sector in Ghana, where a large commercial feed company provides a similar range of services to its customers."

Interested in learning more about aquaculture in Africa? Read about our new industry report here.

Fish Farming International Digital Edition Email This Post

Download / Print PDF