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# Pack 100, Item 3

Type: Script

January 2015

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 **Small-scale fish farmers in Malawi need access to reliable markets**

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### Notes to broadcaster

With the declining number of fish caught in lakes and rivers, fish farming is becoming an important alternative in many countries across the world.

In Malawi and other African countries, however, there are challenges to raising fish, with unreliable markets being the most significant challenge. As we see in this script, one problem is that small-scale fish farmers cannot meet the demand of established and reliable markets such as supermarkets and hotels.

This script is based on interviews with fish farmers who are working with the Lilongwe University of Agriculture and Natural Resources in collaboration with the Kawio Foundation. It also features an interview with the director of an aquaculture program based at the university, and a researcher working with fish farmers on the ground.

You might choose to present this script as part of your regular farming program, using voice actors to represent the speakers. If so, please make sure to tell your audience at the beginning of the program that the voices are those of actors, not the original people in the script.

You could also use this script as inspiration to research and develop a radio program on marketing fish produced in ponds in your own country.

If you choose to use this script as inspiration for creating your own program, you could talk to fish farmers and others, and ask the following questions:

* To what extent do farmers raise fish in your country?
* How do farmers in your country market their fish? Fresh or processed? What do consumers and farmers prefer?
* What species of fish are liked and raised by farmers?
* What role do the government and NGOs play in ensuring that farmers have markets for their fish?
* Do fish farmers sell their produce as a group or as individuals?
* What other challenges do fish farmers face in marketing their produce?

Apart from speaking directly to farmers and other key players in the local agriculture sector, you could use these questions as the basis for a phone-in or text-in program.

Estimated running time for this script is 25 minutes, including intro and outro.

**CHARACTERS:**
Host
Field reporter (George Kalungwe)
Fish farmers (members of Chambo fish farmers club)

* Stiford Pofera
* Julian Felix
* Kelvin Mwacha

Professor Emmanuel Kaunda, Deputy Vice Chancellor and Technical Coordinator of NEPAD Regional Fish Node, Lilongwe University of Agriculture and Natural Resources Chimwemwe German, Researcher, NEPAD Regional Fish Node

**HOST:** All across the world, fewer fish are being caught in lakes, rivers and dams. As a result, fish farming is becoming more and more important as a source of fish.

In Malawi and other African countries, however, there are challenges to the success of fish farming. The most important barrier is unreliable markets. But why are the markets unreliable? How can this be corrected?

Join me (*name of host*) as this edition of (*name of program*) investigates these questions.

Stay tuned as my colleague George Kalungwe speaks to farmers from Kanchedzera village, Traditional Authority Chadza in the Lilongwe District of Malawi, and to scientists who are promoting fish farming.

 Let’s start from the beginning … How did these farmers start raising fish?

**GEORGE KALUNGWE:** Let’s hear from the group’s chairperson first. How are you farmers organized? I understand that your club is part of a larger association, correct?

**STIFORD POFERA:** Yes, I am the chairperson and my name is Stiford Pofera. This club which we call *Chambo* is part of an association called *Chamachichi*. We established the club after learning about the benefits of fish farming. We were convinced after visiting a fellow farmer who is located north of here. He has four fishponds, and what we saw at his farm encouraged us. Now, each of us has two fishponds.

After we established our club, friends from neighbouring villages established their own clubs. Most of their villages are far away, so we decided to form an association that could bring all the farmers together and share knowledge. We call the association Chamachichi Fish Farmers Association.

**KALUNGWE:** How many farmers are in the club and in the association?

**STIFORD POFERA:** The total number in the association is 34. In the club, there are 11 farmers.

**KALUNGWE:** You say you were attracted to fish farming after visiting a fellow farmer who was doing well. But exactly what did you see on his farm that convinced you to start fish farming? Mr. Mwacha?

**KELVIN MWACHA:** We wanted to make money just like our colleague does. We saw that he lacks nothing in his home because of the money he earns from fish farming. So we built our ponds last year, and this year we have started reaping the benefits. Our profit is still small, of course, but we think it will eventually increase.

**KALUNGWE:** Can I also hear from you, Mrs. Felix, what attracted you to fish farming?

**JULIANA FELIX:** My aim was to raise money for my children’s school fees and my household needs. I also wanted to eat some of the fish so my family stays healthy.

**KALUNGWE:** How long did it take until you started harvesting your fish after you constructed two ponds each? Mr. Mwacha?

**KELVINMWACHA:** We built the dams early last year, and we started harvesting and selling this year.

**KALUNGWE:** Can you tell me how much profit you have made, chairperson?

**STIFORD POFERA:** Because this was our first year, we did not make enough profit. The fish did not grow and mature well, so some of us harvested just 10 and others 11 or 16 kilos of fish from each pond.

 We sold the fish at 1,600 kwacha per kilo, so some of us earned 12,000 and others 16,000 or even 20,000 from each pond. This was not bad, considering it was our first year.

**HOST:** You are listening to (name of radio station). We are discussing marketing of fish produced in farm ponds.

 A little later, we will be talking to researchers at the New Partnership for African Development Fish Node, an organization which is promoting fish farming in the region. They will tell us what they are doing to link farmers with buyers. But now George Kalungwe asks the fish farmers where they sell their produce and if they face any problems.

**KELVIN MWACHA:** As we are harvesting, people come to the pond to buy the fish. We take whatever remains to Bunda College, which is nearby.

**KALUNGWE:** But I am told it is not good to sell fish direct from the pond because the prices are low. Mr. Mwacha, what do you say to this?

**KELVIN MWACHA:** Actually the selling prices here are almost the same as when we sell at Bunda, or when traders sell in other markets.

**KALUNGWE:** Mr. Chairperson, how do you determine the selling price in order to make a reasonable profit – whether you sell the fish at the pond or in any other market?

**STIFORD POFERA:** The advice we received from extension workers is not to sell any fish that is less than six months old. We determine the price after calculating the cost of all the inputs, such as feed and labour. We make sure that the price is fair both for us and the buyer.

**KALUNGWE:** In your opinion, Mr. Mwacha, is there is a reliable market for fish produced in ponds?

**KELVIN MWACHA:** Yes, there is a reliable market, for example the one at Bunda. I don’t think it is good for us to sell fish at the farmgate because, if we have large quantities, sometimes they go bad.

But the problem is price. For example, if we consider the cost of our inputs, a price of 1,600kwacha per kilo is almost a giveaway. We would be happy if the price were higher.

**KALUNGWE:** What is a reasonable price that would also be fair to the buyer?

**KELVIN MWACHA:** We would like it around 3,000 kwacha a kilo because it costs a lot of money to ensure that the fish grow well.

**KALUNGWE:** Why do you sell your fish by the kilogram?

**KELVIN MWACHA:** This helps us to determine the selling price, based on the cost of inputs. For example, if five fish weigh one kilo, we calculate the cost of the feed that five fish can eat and other inputs for five fish, and factor those costs into the selling price.

**HOST:** The New Partnership for African Development, or NEPAD, is working with farmers to promote aquaculture in Africa. The headquarters of NEPAD’s Regional Fish Node is at Bunda College, in the Lilongwe University of Agriculture and Natural Resources in Malawi. Professor Emmanuel Kaunda is vice chancellor of the university and heads the centre. George Kalungwe spoke with Professor Kaunda.

**KALUNGWE:** Talking about Malawi, what is the situation with marketing fish produced in ponds?

**KAUNDA:** You can classify aquaculture production into two groups. The first category is the commercial sector. We have some higher end companies whose proceeds are very high, and they are getting good yields from fishponds.

The second category is small-scale and semi-commercial fish farmers. These are the categories which in my opinion have a lot of potential, but which also face challenges, particularly when it comes to marketing. Most of these farmers are outside of towns and therefore they sell their produce by the fishpond, where prices are very low, as low as 300-400 kwacha per kilo. But if you take the same fish to town, they sell for around 1,500 kwacha.

 Another challenge is that fish are perishable. So the problem is how to get the fish from the pond to the market. The farmers do not have ice plants. So we are working on creating some sort of organized market – a system that would allow us to sell the fish on behalf of the farmers. We would act like middlemen, taking the fish and selling it on their behalf and bringing them the money. In the end, they would make quite substantial profits.

**KALUNGWE:** Which is better for farmers – selling their fish fresh or processed, say dried or smoked?

**KAUNDA:** Small-scale farmers receive a premium for fresh fish. Our team did a market study which showed that fresh fish are preferred by people and that therefore demand is high. So it’s better to sell it fresh and not bother with processing. If you cannot sell it fresh, the alternative is to process it. What processing does is to increase the shelf life.

But if you are a small-scale farmer, you should aim to sell fish fresh at premium prices. These prices range from 1500 up to even 3000 kwacha. That’s $3-8 U.S. a kilo, so it’s quite high.

**KALUNGWE:** How many fish ponds does a small-scale farmer need in order to make a reasonable profit?

**KAUNDA:** To make a reasonable profit, a farmer must have about 1000 square metres of water. So if someone has five ponds of 200 square metres each, that would be enough. That is the break-even point. I should add that one of the benefits of fish farming is that, in Malawi, studies have shown that it is a more profitable use of land than growing crops. A small-scale fish farmer can earn twice as much from using the same piece of land for fish farming rather than growing crops. And, because fish farming is not as labour-intensive as other farming, it allows farmers to engage in other agricultural activities. Farmers can also practice integrated fish farming and land crops, which increases their income.

**HOST:** This is (*name of station*) and you are listening to (*name of program*). Today, we are looking at marketing farmed fish. Professor Kaunda of Bunda College said that the failure to access profitable markets is one of the major challenges faced by small-scale fish farmers. George Kalungwe asked some farmers in Traditional Authority Chadza their opinions on the best way to sell their fish.

**STIFORD POFERA:** We think the best way is to sell the fish fresh. To process the fish, you need a lot of things ─ like racks. Our friends who catch fish from the lake know how best to process them. But since we want to sell the fish as quickly as possible, we prefer selling them fresh.

**KALUNGWE:** Is it possible to sell fingerlings to other fish farmers instead of just selling mature fish for food?

**KELVIN MWACHA:** It is possible. I recently sold some fingerlings.

**KALUNGWE:** So which is better? Selling fingerlings or mature fish?

**KELVIN MWACHA:** I prefer fingerlings. They bring in a lot of money all at one time.

**KALUNGWE:** How many times do you sell your mature fish in a year?

**STIFORD POFERA:** We expect to sell our fish at least twice a year.

**KALUNGWE:** Is that enough? If you rely only on fish farming, where do you get money when you are not selling fish?

**STIFORD POFERA:** It is difficult to harvest more than two times because we have only a few ponds. You can’t harvest three or four times.

 But as a farmer, you do not have to rely only on fish farming. You can grow crops as well. For example, we plant vegetables, maize, bananas and other crops around the ponds. We don’t just rely on fish. We sell these crops as we are waiting to sell the fish.

**KALUNGWE:** When you sell the fish at the farmgate, how do you preserve them as you wait for buyers?

**KELVIN MWACHA:** When we catch the fish, we put them in pails, and buyers come to the farm to buy. If we take fish to the market, we use cooler boxes to prevent them from going bad.

**KALUNGWE:** What kind of fish do people prefer here?

**STIFORD POFERA:** Our customers mostly prefer species of tilapia called *makumba* (*Oreochromis shiranus*) and *chambo (Oreochromis karongae)* because they are tender and tasty. They also easily adapt to the conditions in ponds.

**KALUNGWE:** After harvesting, where do you get new fish stock?

**STIFORD POFERA:** As we harvest the fish, we select fingerlings and keep them in a small pond five metres by five metres, which we build near the main pond. When we finish harvesting, we transfer the fingerlings to the main pond. This helps us to have fish all the time.

**HOST:** In addition to knowledge on marketing, fish farmers also need information on how to harvest, store, and transport their fish. Chimwemwe German is a researcher with NEPAD Fish Node in Malawi who works with farmers. George asked her what they tell farmers about these issues.

**GERMAN:** We encourage farmers to grow Tilapia varieties such as *makumba* (*Oreochromis shiranus*), *chilinguni* (*Tilapia rendalli*) and *chambo* (*Oreochromis karongae*) because they are easy to grow in ponds. Tilapia is usually ready to harvest in six months. Farmers who are using best practices ─ for example, adding manure to their ponds and using formulated feed ─ have fish big enough to sell at the age of six months. Those who want them much bigger and those do not follow the right procedures may need more than six months to reach a satisfactory size.

**KALUNGWE:** In your opinion, what is the best way for farmers to sell their fish?

**GERMAN:** The best way for farmers to sell their fish is to find markets that are far from their fish ponds. We discourage them from selling at the pond. According to the study we did, most farmers who sell at the farmgate receive low prices. We advise them to send out messages to potential buyers a few days before their harvest day. If they do this, people from distant places know the farmers will be selling their fish.

When they take their fish to a bigger market, for example the district market or trading centre, they have more customers and can sell all their fish in one day. This is important because most farmers do not have proper storage facilities to keep their fish before selling. So it’s important for potential buyers to know in advance when the farmers intend to sell their fish.

**KALUNGWE:** How can farmers keep their fish fresh between harvest and waiting for buyers or taking the fish to the market?

**GERMAN:** Whenever possible, they should keep them in cooler boxes. These days, there are also many places which sell ice blocks. These storage methods keep fish fresh for a longer time, so that farmers can take them to distant markets and sell at high prices.

**HOST:** We will take a short break. When we return, we will hear how a group approach to marketing fish can help small-scale farmers.

**INSERT SONG ABOUT FISH FARMING OR OTHER MUSIC**

**HOST:** Welcome back. This is (*name of station*) and you are listening to (*name of program*). Today, we are looking at marketing fish grown in ponds. It is clear that access to good markets is a big challenge for small-scale fish farmers. George Kalungwe wanted to find out from fish farmers if the group marketing approach that is being encouraged for other types of farm produce might work in fish farming. Here is Juliana Felix.

**JULIANA FELIX:** When we want to sell, each farmer brings his harvest and we weigh it. The weight of fish produced in each pond is recorded against the name of the owner. Then we bring the fish together to sell as a group.

**KALUNGWE:** What is the benefit of selling as a group compared to just selling as an individual?

**JULIANA FELIX:** We save time we would otherwise use searching for markets as individuals. Buyers negotiate with us as a group and pay money at once, and fish can be taken to the market without each of us spending money for transport. So it’s cheaper to sell as a group.

**KALUNGWE:** Apart from local markets, have you tried to link up with big buyers like hotels, restaurants or supermarkets?

**STIFORD POFERA:** No. We are told there are such markets, but we have never had access to them. We know that the vendors who buy from us sell to such markets.

**KELVIN MWACHA:** Also, because we produce small quantities, it would be difficult for us. However, we hear that some farmers have access to such markets. We hope to link up with them when we increase our production; we are ready and willing.

**HOST:** Farmers say they are ready and willing to supply their fish to major markets. So what is the problem? This is the question George Kalungwe put to Professor Kaunda.

**KAUNDA:** The link between farmers and big buyers is not as strong as we want because of volume. Supermarkets need a constant supply of large volumes of fish. At present, farmers do not have enough fish to supply supermarkets. We can’t start negotiating with supermarkets because our farmers cannot supply them. The demand is just huge but the supply is very, very low.

But if the farmers were in groups, they could plan how to sell. One group could sell this month, another group the next month ─ and so forth through the whole year.

 To me, I think the only challenge has been the approach. The farmers construct only one or two ponds, which is not commercially viable. Fish farming has to be approached as a business; it has to be market-driven and financially sustainable.

**HOST:** That was Professor Emmanuel Kaunda of the Lilongwe University of Agriculture and Natural Resources in Malawi bringing us to the end of the program. Today, we talked about how small-scale farmers can improve marketing of fish produced through aquaculture.

 For questions or comments about fish farming in Malawi and Africa as a whole, you can contact:

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**Acknowledgements**

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**Information sources**

Interviews with farmers and NEPAD researcher: October 8, 2014

Interview with Professor Kaunda October 10, 2014

 Project undertaken with the financial support of the Government of Canada through the Department of Foreign Affairs, Trade and Development (DFATD)