



Inclusive financing for scaling improved fish processing technologies in Malawi

In this scaling-out phase, the researchers will design and test strategies for scaling-up fish solar tent dryers for small fish species, and improved fish smoking kilns for larger fish species. The aim is to improve food and income security of artisanal fish processors and other actors along the fisheries value chain.

The challenge

In Malawi, fish consumption contributes about 70% of animal protein and is a good source of essential fatty acids and micronutrients. When eaten whole (head, organs, and bones), small fish species are rich in calcium, vitamin A, iron and zinc. The contribution of fish to food and nutrition security is, however, being threatened by high post-harvest losses, estimated at 34%. These losses have negative implications on fish supply and incomes of actors in the fish value chain, particularly women who are involved in fish processing.

Evidence from phase 1 of the project indicated that improved fish smoking kilns and solar tent dryers are environmentally friendly, effective and economically viable fish processing technologies. However, scaling efforts have not been successful, partly because of the capital challenges faced by women and youth. Capacity challenges in terms of knowledge and marketing and access to capital among the same groups are also a hindrance. Gender norms in the fishing industry further restrict women's access to land, labour and non-labour inputs, training, and output markets.

The research

Evidence from phase 1 showed that maximum benefits of adopting solar tent dryers and smoking kilns can be attained when solar tent dryers are adopted as part of a package: the fish solar tent dryer or smoking kiln, certification of the products, and access to formal markets. Researchers will test a scaling-out model that targets women and youth, and that involves innovative financing from different sources, including commercial banks, village savings and loan associations and microfinance organizations, and links to formal markets. The project, implemented in Mangochi and Salima districts in the first phase, will also scale-out to two additional districts – Nkhonkhotakota and Nkhatabayto – to cover four in total.

Strategies for the cost effectiveness and capacity to reach many people, including women and youths, will also be assessed. Additionally, the project will evaluate the impact of the model on the reduction of post-harvest losses, women's economic empowerment, and fish availability and consumption.



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Expected outcomes

- Evidence generated on strategies for scaling-up fish processing technologies for small-scale fish processors, taking a value chain approach from financing to product marketing;
- Increased capacity of women, men and youth in fish processing, entrepreneurship, marketing, and business management;
- Increased adoption of improved fish processing technologies and enhanced economic empowerment of fish processors, a majority of whom are women and youth;
- Increased availability and consumption of nutritious fish, and empowerment of women and youth across the value chain, including increased decision making and control over income from fish processing.

Implementing partners:

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- WorldFish Centre, People's Trading Centre LTD, FDH Bank

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