

MODIFIED FISHING TRAPS AND FISHER WORKSHOPS PROMOTE FISH CONSUMPTION AND SUSTAINABLE FISHING

By Clay Obota, Ivy Blackmore, Andrew Wamukota, and Austin Humphries

Hamisi, a fisherman in Uyombo, Kenya, was grappling with declining fish catch and could not take fish home consistently to provide for his family. The 38-year-old father of three sets out every day to go fishing, but he owns neither the boat nor the fishing trap he uses, both of which belong to a fish dealer.

“I have to sell fish to the fish dealer who owns the fishing gears at a pre-agreed price,” Hamisi said. “Moreover, low fish catches have made it difficult to reserve part of my catch for home consumption, and the wooden material and reed strips used to construct traditional traps are not durable, lasting up to six months. Therefore, I have to maintain my traps weekly.”

The Feed the Future Innovation Lab for Fish project called *Samaki Salama* (which means “fish security” in Kiswahili) is working to address these challenges by collaborating with the fishers in Mayungu and Uyombo landing sites on the Kenyan coast. Together, they designed modified fishing traps for the fishers to control and use in their fishing operations.

Consultations between the fishers and the project team informed the materials used for the traps and the design specifications, which included lighter metal rods and an opening to allow small-bodied, immature fish to escape. The modified gear helps fishers capture only mature fish and reduces retention of juveniles without significantly reducing the fishers’ daily catch. Avoiding the capture of juvenile fish is critical to the sustainability of local fish populations.

The provision of traps was integrated with a social marketing campaign to provide materials (T-shirts, banners, calendars, stickers, etc.) to beneficiaries with messages promoting sustainable fishing and the nutritional benefits of fish, especially for young children.

In addition to receiving the modified traps and social marketing materials, fishers were invited to participate in a series of fishers’ workshops in the intervention sites of Mayungu, Uyombo, and Kuruwitu. These workshops educate the fishers on the importance of fish nutrition, especially for children less than five-years-old, and sustainable fisheries, which ensures nutrient-rich fish are available for future generations. The workshops are also an opportunity for the project team to monitor the use of the modified traps and record any challenges faced by the fishers.



Hamisi (in the blue T-shirt), is a fisherman in Uyombo, receiving his modified basket trap from the Samaki Salama project staff. (Photo provided by Christopher Cheupe, Pwani University)

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Feedback from fishers during the workshops revealed they prefer the modified basket trap that keeps fish species like rabbitfish, which are more valuable due to their larger size, and have a lower maintenance cost compared to other fishing gear.

Hamisi was one out of 100 fishers who received basket traps as part of the Samaki Salama project. In exchange, he is providing information about the amount and types of fish he catches for project data collection over a 12-month period. This information helps the project team better assess and understand the impact and benefits of using the modified traps.

Hamisi was interested in participating in the project because he hoped he would be able to increase his income and catch enough to ensure his family gets at least half a kilogram of fish each day for home consumption. The durability of the traps was another key selling point.

“Since the metal frames are long-lasting, we do not need to bring the new traps back to the shore for maintenance as often as we did with the old traps made from reed strips,” Hamisi said. “It has also saved us from going to the forest to look for sticks to temporarily fix a trap.

“The modified traps target larger fish sizes that fetch higher prices, and the modified gear has significantly improved my catch and enabled me to keep some fish for my household. Additionally, targeting only mature fish using modified traps ensures we harvest fish sizes that would produce maximum yield and is sustainable.”

Since receiving his traps on January 14, 2022, Hamisi has reported an increase in the economic value of the fish he has captured thanks to the modified traps. The increased income has enabled him to sustain his family and put nutritious food, including fish, on the table as a regular part of his household diet.

“On average, I now take at least one kilo of fish for my household to eat, and I sell the rest of my catch to the fish dealers of my choice at a fair price,” Hamisi said. “My wife has also learned how to best prepare fish to get the most nutrients, especially for our young children, by attending a cooking demonstration also lead by Samaki Salama.”

Note: Hamisi is a pseudonym out of respect for the participant's privacy.

ABOUT THE FISH INNOVATION LAB

The Fish Innovation Lab supports the United States Agency for International Development's agricultural research and capacity building work under Feed the Future, the U.S. Government's global hunger and food security initiative. Mississippi State University is the program's management entity. The University of Rhode Island, Texas State University, Washington University in St. Louis, and RTI International serve as management partners.

www.feedthefuture.gov
www.fishinnovationlab.msstate.edu