

## OTOMIEWO USED LEAN TOOLS TO TURN AROUND THE AQUACULTURE BUSINESS OF HER FARMING CLUSTER

By the Applying Lean Management in Aquaculture Production team

Onorame Otomiewo is a successful fish farmer with seven years of experience in the industry. She studied economics at her university and has participated in various training programs, but the Feed the Future Innovation Lab for Fish activity on applying Lean management in aquaculture production was a significant turning point for her business. The activity is centered around teaching Nigerians Lean management, which is a practice to identify areas of waste on the fish farm and resolve operational inefficiencies that are common in aquaculture.

"When I got involved with the Lean activity, it was a turning point for me and my business," Otomiewo said.



Onorame Otomiewo was doing clean up after she found out the root cause of the problem in her hatchery during the Lean training in Ogun State. (Photo by Princely Otomiewo)

Before participating in the Lean activity, Otomiewo admitted to fish farming without a clear understanding of the best practices required to ensure cost-effective production and maximize profits. However, after completing the 9-day Lean training program in Ogun State, she gained the knowledge and skills needed to revolutionize her farm.

As the head of her farm cluster, Otomiewo immediately returned to her farm and began to apply the Lean concepts she had learned. She also taught those in her farming cluster what she had learned, such as minimizing fish mortality and small but powerful ways to increase farm efficiency.

One of the most significant areas where Otomiewo applied the Lean concept was in minimizing fish mortality rates. With the knowledge gained from the Lean training program, she understood the importance of maximizing time by stocking fish that will yield the best outcome and reducing the number of fish stocked in her ponds, which helps reduce fish mortalities from over-stocking. Now, her cases of mortality are significantly lower. She recently reported stocking 400 juvenile fish, and after one month, the mortality rate was zero percent.

She also implemented the five whys tool, which helped her to identify the root causes of problems on her farm to find lasting solutions. The five whys method is a root cause analysis tool that helps





MISSISSIPPI STATE UNIVERSITY™ GLOBAL CENTER FOR AQUATIC HEALTH AND FOOD SECURITY

Lead PI and Nigeria PI	Rohana Subasinghe, PhD WorldFish
Nigeria Co-PI	Sunil Siriwardena, PhD WorldFish
U.S. PI	Julius Nukpezah, PhD Mississippi State University
U.S. Co-PI	Joseph Steensma, EdD Washington University in St. Louis

pinpoint a problem's cause by asking the question "why?" several times. Each question leads to another question, forming a chain of cause-and-effect that gradually gets closer to the root cause of the problem in order to identify appropriate solutions.

For example, some of Otomiewo's whys were, "Why am I not making profit? Why do I keep having fish die in my ponds?"

Using these skills, she worked with six farmers in her cluster on about nine projects to help improve their farming operations. They all benefited from the knowledge and skills she acquired during the Lean training program.

One of the farmers Otomiewo worked with had a similar problem that she had dealt with, which was high cases of mortality from overstocking ponds. After Otomiewo introduced the Lean concept to the farmer, she reduced the number of fish she stocked and was able to reduce the rate of fish deaths and increased the efficiency of her operation just like Otomiewo was able to do.

For another farmer, Otomiewo introduced the waste-in-motion principle since the farmer kept her feed far away from her farm. She combined her ponds, brought her feed closer, reduced feeding time, and tagged each pond for easy identification for improved efficiency.

"My joy is that, among the 50 farmers in my cluster, all but 10 participated in the training I did," Otomiewo said. "I am happy we got to benefit from this training."

She hopes to continue to teach the Lean concept to other farmers and help them achieve similar successes in their operations. Her accomplishments inspire other farmers to adopt Lean principles, especially the benefits of waste minimization and tools for farm efficiency.

## 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