

ONADUJA TRANSFORMED HER BUSINESS WITH LEAN TOOLS AND HELPED OTHERS DO THE SAME

By the Applying Lean Management in Aquaculture Production team

Atinuke Onaduja has been a successful fish farmer for several years. As such, she is always eager to learn more about how to improve her operation to be more efficient. Through a Feed the Future Innovation Lab for Fish activity, she discovered how to be more efficient and reduce waste through the Lean approach.

The Applying Lean Management in Aquaculture Production activity's approach aims to reduce waste starting from the aquaculture pond all the way to the marketplace. The activity has trained hundreds of fish farmers in Nigeria on how to identify areas of waste on the farm and resolve operational inefficiencies that are common in aquaculture.



Atinuke Onaduja is showing off the fish oil gotten by using Lean technology. (Photo provided by Elizabeth Akuwa)

After being introduced to the Lean training program, Onaduja quickly discovered how effective her farming operation could be, and she became a Lean Subject Matter Expert to help share what she learned with other fish farmers. Using tools like the 5S workplace organization and five why's analysis, she gained a deeper understanding of her farm and how to optimize her workflow.

For example, the 5S workplace organization tool is a systematic way of organizing workplaces by eliminating waste, improving flow, and reducing the number of processes where possible. The five why's method is a root cause analysis tool that helps 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.

During the Fish Innovation Lab intervention, Onaduja worked on 15 farm projects with about 13 farmers, sharing her knowledge and experience to help others in the industry succeed. Using the 5S workplace organization tool, she analyzed her work environment and determined how it should be set up for maximum efficiency. Additionally, the five why's tool helped her identify the root causes of various issues on her farm.

With the knowledge gained from the Lean training, Onaduja became proficient in ideal stocking density and learned how to do it properly. Previously, she only had two ponds, but after the training, she expanded her farm to five ponds using the same amount of labor. She also learned the concept of Total Productive Maintenance, which emphasizes the need for regular equipment maintenance. She no longer waits for her machinery to run down before servicing them.

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An additional improvement Onaduja made on her farm was to use a borehole close to her ponds to easily supply them with water. This only required making some minor technical changes she had never considered.

"The borehole has been there for years," Onaduja said. "After going to the Lean training, I realized I could do more with it than I previously had. I've connected a channel between the borehole and the ponds, allowing water to flow in naturally."

She also shared her knowledge of Lean to help fish processors to reduce different types of waste in fish production such as discarded intestines and fish fat. She even helped another fish processor expand her

business to produce fish oil and other products from fish waste to now make an extra daily income of 5,000 Naira (Nigerian currency, which equals 6.45 USD).

"The Lean training has changed everything," Onaduja said. "You want to invest your energy in things that are productive, and this activity has shown me how to shift my focus. I hope to continue to learn more ways to better my craft."

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