

## E-AQUAHEALTH WEB PLATFORM: AN AQUACULTURE INTERVENTION

By the Improving Biosecurity team

Fish farming is a highly valued agricultural practice in Delta and Ogun States, Nigeria. Based on available information, it appears that aquaculture in earthen ponds is a significant contributor to fish production in these states. Although the fish farmers' intensive farming practices have promise in providing financial and food security, there are major constraints with respect to fish health and health management systems, which ultimately often lead to a negative outcome for production and profitability. In incidences of disease outbreak, a lot of farmers seek unorthodox treatments passed on from other farmers and rarely seek expert advice from veterinarians. This leads to inadvertent use of dangerous and harmful chemicals, affecting the aquatic environment as well as endangering both animal and human health. Moreover, there is oftentimes unsafe and unscrupulous disposal of sick and moribund fish, which has significant public health implications if consumed.

In a study by the USAID-funded Feed the Future Innovation Lab for Fish activity on aquaculture biosecurity, the research team identified numerous gaps in fish health management, such as poor communication between fish farmers and veterinarians. The practice of aquatic medicine in Nigeria is still in its infancy, and there are limited resources and expertise available in the country, which has given rise to farmers using unconventional medical practices. Sometimes, poultry and large animal veterinarians are called to help, and without prior training in aquatic medicine, they may recommend the use of unsanctioned drugs on the farm. Accordingly, the activity on improving biosecurity for the Nigerian catfish and tilapia industries aims to connect farmers to quality veterinary services and other stakeholders with the aquaculture value chain.



*Here, Arnold Irabor is taking samples from catfish in Warri, Delta State, Nigeria. (Photo by Ayamre Efevogh Ufuoma)*

First, the team identified and engaged resident aquatic veterinarians within Ogun and Delta States to assist the farmers in disease diagnosis and treatment of sick fish as well as maintenance of standard biosecurity on the farms. In order to aid the functionality of the initiative, they equipped the resident veterinarians with hand-held meters to monitor basic water quality parameters like dissolved oxygen, pH, temperature, etc. They also created e-AquaHealth, a web-based platform designed to bridge the gap between fish farmers and aquatic veterinary professionals to enhance the delivery of quality services and improve the wellbeing of fish.

“This is a well thought out development,” said Olajide Azeez, from Ilase cluster in Ogun State. “Now, I don’t have to guess what the problem is on my farm or ask people who are also as clueless as I am. I can easily use the application and get a resident vet in no time at all. Thank you for this innovation.”

The platform was designed using simple features for low-literacy users, and the platform will also be used to

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provide extension information to fish farmers as well as continuing education resources for aquatic veterinarians.

“The e-AquaHealth platform is very simple and easy to use,” said Arnold Irabor, a supervisor for Delta State connected with the University of Ibadan and an actor in the aquaculture value chain from Warri in Delta State. “The most interesting thing for me is the fact that the aquatic vets are in the nearby areas, so farmers don’t have to travel for miles to get the needed services for their farm.”

It is the research team’s hope that the farmers using the platform will recommend it to other fish farmers beyond Delta and Ogun States, and the community will grow by word of mouth beyond the activity’s reach, leading to an increased production of healthy fish in Nigeria.

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## 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](http://www.feedthefuture.gov)  
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