



Sea Grant Fosters New Aquaculture Markets in Ghana, Kenya

Illinois-Indiana Sea Grant aquaculture marketing specialist Kwamena Quagraine's latest studies hit close to home. Quagraine, who was born and raised in Ghana, is currently leading research efforts to build successful aquaculture industries there and in Kenya.

"Fish has always been an important part of the diet of most Africans," he said. "Because of over exploitation of the natural fishery resources, aquaculture can become a profitable alternative agriculture enterprise to help alleviate poverty on the continent," said Quagraine, an Extension specialist at Purdue University.

As lead coordinator of the Development Theme Advisory Panel on Income Generation for Small-Scale Fishers and Farmers, which is part of the USAID Aquaculture & Fisheries Collaborative Research Support Program (AquaFish CRSP), Quagraine is currently overseeing five international study projects. He is the lead researcher on two of the projects, which focus on marketing of aquaculture products in Kenya and Ghana.

"Because of their adequate water resources, good mix of clay soils for pond construction, and warm weather," said Quagraine, "Kenya and Ghana are ideal for fish growth and technology transfer."

Quagraine and others have completed research on the development of material needs in Kenya and Ghana for a successful aquaculture industry. Now, he said, the focus has shifted to marketing and economics. With the help of Moi University in Kenya and Kwame Nkrumah University of Science and Technology in Ghana, Quagraine's team aims to develop supply chains from fish farms to retailers in these countries.

Their objective is to analyze multiple aspects of the countries' fish markets, including the cost of alternative outlets for marketing farmed fish. They are also trying to optimize spatial organization of fish assembly centers. And, the researchers are looking at the effect of public policy investment options on the aquaculture industry as well as the effects of private investment in the form of



better access to telecommunication, cold storage facilities, and transportation on marketable fish supply and farmers' welfare.

"The goal is to support the emerging small-scale commercial aquaculture sector in these countries, and also enable fish farmers to realize significant profitability and potential to obtain credit for fish production," Quagraine said. The bulk of the data will come from surveys sent out to fish farmers and fish traders.



The researchers are also focused on increasing production of catfish fingerlings as bait for Kenya's Lake Victoria fisheries. Traditionally, Kenyan fishermen rely on beach seining to catch catfish. Quagraine aims to reduce that, because it destroys habitats of native cichlids and, moreover, is illegal.

They also hope to increase profitability for fish farmers. Because it takes time for catfish to grow to food size, it's more profitable to sell them as baitfish when they are fingerlings. One challenge, Quagraine said, is that the market is not fully developed, which he noted is the essence of the study. Also, many fish farmers are reluctant to sell their fish as bait, because they are used to raising fish to food size.



Quagraine's team has been in contact with large groups of Kenyan fish farmers. "We are arranging farm visits with baitfish dealers to improve their perceptions of farmed catfish as bait," he explained. "From the work done so far, many fish farmers have learned the benefits of improved management and collective marketing."

Quagraine said it is important to him to help support the growth of aquaculture in Africa. "These projects are a wonderful opportunity," he said.

Photos from left to right: Aquaculture workshops are held at the Moi University Farm in Kenya. In Tanzania, from left to right, Quagraine, a local fish farmer, Nazael Madalla of Sokoine University of Agriculture in Tanzania, Aloyce Kaliba of Southern University, Louisiana, and two more fish farmers. Fish farming ponds in Kenya.

