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SUCCESS STORY

Kwame Nkrumah University of Science and Technology Nets National Award for Aquacultural Excellence

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December 2016

AquaFish partners develop new curricula in aquaculture and fisheries



“Aboboyaa,” the 200-horse power farm tricycle awarded to KNUST as part of the National Best Pond Fish Farmer Award at National Farmers’ Day in Ghana.

“It definitely feels gratifying and good to be recognized this way... We feel very much humbled by it, yet we appreciate the heart in it all,”

-Dr. Stephen Amisah, AquaFish Host Country Project PI



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Poverty reduction, improved nutrition, and greater food security are the focal points of development efforts by many African governments. Because fish is an important source of protein and essential micronutrients in African households, supporting the growth and sustainability of aquaculture on the continent, particularly in sub-Saharan Africa, provides a means to address income and nutrition concerns.

AquaFish Innovation Lab researchers in Ghana, including those at Kwame Nkrumah University of Science and Technology (KNUST), are working toward the overarching goal of improving food security and human nutrition in fish-farming and nonfish-farming households by increasing tilapia’s nutritional value through innovative tilapia feeds. Additionally, the development of a market information system is helping to close gaps in the fish value chain.

It’s part of the AquaFish longtime effort to support fish farmers around the globe — through advancement of aquaculture systems that promote and model small-scale fish farming, development of feeding strategies that reduce operating costs while maintaining optimal fish growth, and promoting environmentally sustainable technologies.

Over the last 10 years, AquaFish partners in the US and at KNUST have developed new programs and curricula in aquaculture and fisheries, establishing KNUST as a leading aquaculture research program in Ghana. The program includes a fish farm operated by the university’s Department of Fisheries and Watershed Management.

In December 2015, the fish farm was recognized by Ghana’s Ministry of Fisheries and Aquaculture Development with a National Best Pond Fish Farmer Award during the country’s 31st National Farmers’ Day, which acknowledges the vital role farmers and fish farmers play in Ghana’s socio-economic development.

Host Country Project PI Dr. Stephen Amisah, of KNUST, said the award makes researchers at the university feel appreciated for their work to help alleviate hunger, poverty, and malnutrition among Ghana’s rural poor.

SUCCESS STORY continued...



The award-winning fish ponds located at KNUST in Ghana.

“It definitely feels gratifying and good to be recognized this way. We share this honor with AquaFish in general and with the Purdue and Virginia Tech teams ... We feel very much humbled by it, yet we appreciate the heart in it all,” Dr. Amisah said.

The national award helps to shine a bright spotlight on KNUST and to position it as a center of aquacultural excellence based on its research, teaching and outreach efforts, training and extension programs, and farm infrastructure. The university has been featured in news reports across Ghana, thanks to the award recognition.

That attention is helping the Ghanaian public see that KNUST is expanding beyond academia by translating the relevancy and practical application of engineering and science. Dr. Amisah said the university is being “inundated with new inquiries from across the nation about training in fish farming.”

Another criterion for the honor was KNUST’s commitment to environmental safety without compromising economic gains. KNUST accomplished this by adapting earlier Aquaculture Collaborative Research Support Program (ACRSP) and AquaFish CRSP fish production methodologies that recycle benthic nutrients for vegetable crop production.

Over time, KNUST has scaled its farm up from a simple training and research facility for undergraduate and graduate students into a commercialized operation that includes 18 fish ponds of various sizes. The farm now generates income from fish sales, allowing it to maintain and improve facilities as the need arises. It also continues to be used for educational and training purposes, further building capacity around aquaculture in Ghana.

In addition to the farm, KNUST is poised to continue its contributions to aquaculture development in Ghana through AquaFish-support, research and capacity-building efforts, including training, professional development, and exposure at international conferences for KNUST students and faculty.