Building Human Capacity and Gender Equity Among Global Aquaculture Stakeholders

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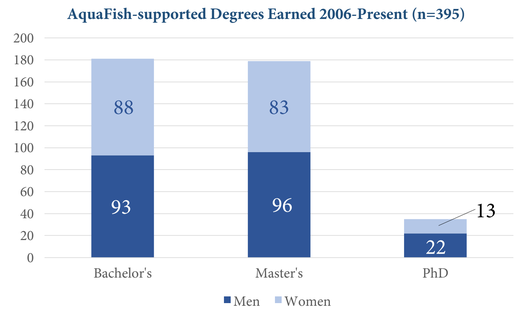
Introduction

The development and strengthening of human capacity in partner countries is a central objective of the AquaFish Innovation Lab. One success of AquaFish is the development of an expansive collaborative network of international researchers, professionals, students, and stakeholders dedicated to the sustainable development of aquaculture and fisheries. AquaFish builds capacity through providing aquaculture training in the form of workshops and other activities (**short-term training**), as well as support to students pursuing bachelor's and graduate-level degrees (**long-term training**). Another core component of the Aquafish capacity-building effort is **gender equity and integration**, as women's participation is essential to the successful growth and development of the aquaculture and fisheries sectors.

Long-term Training

AquaFish provides support, mentoring, and academic guidance for students in post-secondary degree programs in a wide array of disciplines, helping early-career researchers build and strengthen their professional networks. In addition to the award of a degree, students benefit from hands-on activities and access to an international network which can help propel them to future positions in aquaculture, fisheries, and science-related disciplines.



Since 2006, AquaFish has supported nearly 600 students in pursuit of post-secondary degrees, creating a pipeline of educated professionals who move on to careers in government, academia, and private enterprise upon graduation.

Reflections from Students and Alumni

"From the year 2001, when I was an undergraduate student, I got involved with Aquaculture Collaborative Research Support Program activities, like fish pond design and construction [and now] I have been practicing at an individual level where I started my own fish farm."

James Bundi Mugo, Alumni
Moi University, Kenya

"I am grateful to AquaFish for funding my Master's and giving me this opportunity to build my career. My most enjoyable times have been learning and the hands-on experiences on aquaculture techniques and being able to attend aquaculture conferences."

Shamim Naigaga, Current PhD Student
Auburn University, U.S.

"The AquaFish/Aquaculture Collaborative Research Support Program changed many lives for good, including mine. Thousands of farmers, students, and researchers have benefited from AquaFish projects, workshops, and publications."

Wilfrido Contreras-Sanchez, Alumni
Oregon State University, U.S.

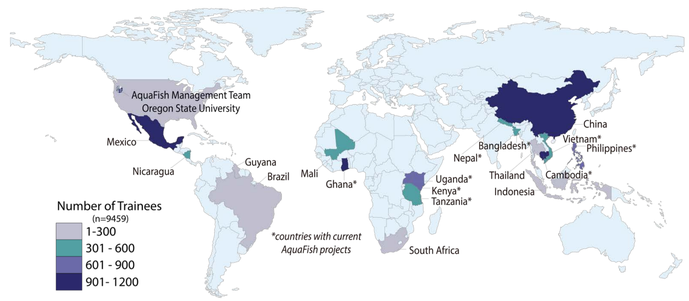
"My graduate education and work experiences [with] AquaFish helped [me acquire] my current position as a Research Assistant for WorldFish where I work to develop socio-economic condition of fisherman who engaged in the Hilsa Fishery."

Jimi Reza, Alumni
Bangladesh Agricultural University, Bangladesh

Short-term Training

Through short-term trainings, AquaFish partners teach about innovative aquaculture technologies and provide farmers, extension agents, and producers, with knowledge needed to implement and adapt strategies to their unique conditions.

Since 2006, more than 9,000 people in aquaculture and fisheries have been trained by AquaFish partners on a variety of topics, including fish harvesting and processing, record keeping, best management practices, and hatchery techniques.



In Ghana, AquaFish researchers trained local fish farmers, sellers, and traders on a Seafood Market Information System (SMIS), a web-based tool that provides tilapia market information online as well as via messaging to mobile phones. Trainees became registered participants of the SMIS and gained access to near real-time on-farm and market pricing.

In Cambodia, AquaFish is working to increase food security and household nutrition among women and children by promoting the benefits of fish consumption. A series of workshops trained over 1,000 farmers, women, and chefs on the nutritional value of the common capture and aquaculture species.

Gender Equity and Integration

Women have long been underrepresented in science, engineering, and technology careers. Although improved in recent years, collective quantitative data shows that women do not remain in science at the same rate as men and they lack access to resources and training opportunities. To address this, AquaFish sets a benchmark of women and girls comprising at least 50% participation in both trainings and support of degree-seeking students. Additionally, AquaFish designs strategies to engage women throughout the aquaculture sector including in research at universities, high level management in organizations, and as private operators in lending, fish marketing, and farming. AquaFish has successfully increased the proportion of women's participation in short-term trainings from 37% in 2008 to 50% in 2016. Furthermore, 50% of all AquaFish-supported long-term students were women in 2016.

AquaFish-supported Women Currently Working with AquaFish to Advance Aquaculture

Dr. Sunila Rai is a Nepalese fisheries scientist whose graduate education was supported by the Aquaculture Collaborative Research Support Program (ACRSP) and AquaFish, earning a Master's and a Doctorate at Thailand's Asian Institute of Technology. In 2013, Dr. Rai was appointed the Associate Dean of Academics of the Faculty of Animal Science at the Agriculture and Forestry University (AFU). Dr. Rai continues to work with AquaFish, serving as an academic advisor to AFU students and as a researcher on several Nepal AquaFish projects.

Moureen Matuha, originally from Uganda, received a Master's in Fisheries and Allied Aquaculture from Auburn University in 2015 with support from AquaFish. Currently, Moureen works at the National Fisheries Resources Research Institute and serves as a researcher on several AquaFish projects in Uganda, including the development and implementation of a mobile phone-based system that will enable fish farmers to access fish production and market information.

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