



FEED THE FUTURE

The number of people suffering from chronic hunger totaled 925 million in 2010. In developing countries, vitamin and mineral deficiencies affect 1 out of 3 people. Such undernourishment severely impairs productivity and the physical and intellectual development of adults and children, thereby restricting their future earning capacity and perpetuating poverty. USAID is responding to this crisis with their global initiative, Feed the Future (FtF). As part of an overall strategic approach, FtF promotes actions that sustainably reduce global hunger and extreme poverty.

OUR COMMITMENT

In aligning our goals with FtF, AquaFish CRSP strives to improve the livelihoods of smallholder fishers and farmers by:

- Promoting development of regional government-led programs that honor locally identified needs in sustainable aquaculture and fisheries management.
- Mobilizing aquaculture resources through collaboration with international partners to strengthen the capacity of stakeholders.
- Implementing comprehensive approaches to improve nutrition through sustainable aquaculture development and fisheries management initiatives.
- Leveraging resources and investments to align US and Host Country development priorities and provide essential financial and technical support.
- Establishing benchmarks to gauge Host Country progress towards improving livelihoods and building local capacity and infrastructure.

GLOBAL THEMES

AquaFish CRSP brings together resources from US partners and Host Country institutions to target constraints facing poorer countries through four global themes:



Improved Health and Nutrition, Food Quality, and Food Safety



Income Generation for Small-Scale Fish Farmers and Fishers



Environmental Management for Sustainable Aquatic Resources Use



Enhanced Trade Opportunities for Global Fishery Markets

U.S. & INTERNATIONAL PARTNERS

Oregon State University - Lead Award Institution

CIAD-Center for Research for Food & Development, México

CIDEA-Central American University, Nicaragua

Department of Fisheries, Guyana

Louisiana State University

Universidad Autónoma de Sinaloa Culiacán, México

Universidad Autónoma de Sinaloa Mazatlán, México

Universidad Autónoma de Tamaulipas, México

University of Hawai'i at Hilo

Universidad Juárez Autónoma de Tabasco (UJAT), México

Texas Tech University

The University of Arizona

The Ohio State University

REGIONAL CENTER OF EXCELLENCE

The RCE is a support center that provides technical advice from a regional perspective.

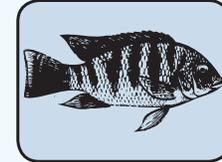
For more information, contact the RCE-LAC Lead Coordinator Dr. Wilfrido Contreras-Sánchez at aquafish@oregonstate.edu

Sources:

Feed the Future. March 2011. <<http://www.feedthefuture.gov/>>

World Health Organization. March 2011. <<http://www.afro.who.int/>>

Supporting ongoing research in
**LATIN AMERICA &
THE CARIBBEAN
(LAC)**



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USAID
FROM THE AMERICAN PEOPLE

Oregon State
UNIVERSITY **OSU**

May 2011



México
Guatemala
Guyana

REGIONAL PROJECTS

AquaFish CRSP promotes integrative, crosscutting research to address the root causes of poverty and hunger through aquaculture development and fisheries management. Our projects are actively implementing USAID's FtF objectives to accelerate inclusive agriculture sector growth and improve the nutritional status of rural stakeholders. In LAC, current projects are:

Developing Sustainable Aquaculture for Coastal and Tilapia Systems in the Americas

US Lead Institution: *The University of Arizona*

US Partner: *Texas Tech University*

Host Countries: *Guyana & México*

Human Health and Aquaculture: Health Benefits through Improving Aquaculture Sanitation and Best Management Practices

US Lead Institution: *University of Hawai'i at Hilo*

US Partners: *Louisiana State University; The Ohio State University*

Host Countries: *México & Nicaragua*



NUTRITION

With 53 million undernourished people, LAC ranks third in the world for chronic hunger. For coastal communities, shellfish are healthy foods high in protein and micronutrients that can help meet nutritional needs, particularly when other food sources are scarce. While there is general awareness of the need to carefully select and handle seafood, communities that rely on oysters and cockles—often consumed raw—are vulnerable to water-borne diseases caused by coliform bacteria. **In CRSP trainings, Nicaraguan cockle collectors, who are typically women, have learned when and how to collect cockles that are safe to eat and sell. By following shellfish sanitation standards, their market opportunities will grow.**



Cockle collectors in Nicaragua have learned essential skills to ensure the food safety of this important native shellfish consumed by their families and sold in local markets.

PRODUCTIVITY

LAC has the fastest growing aquaculture industry in the world, averaging a 21 percent annual increase between 1970-2008. This growth is largely due to advances in industrial-scale aquaculture aimed primarily at export markets. Yet aquaculture's role in regional markets remains vastly underdeveloped. As increasing challenges inhibit export market expansion, small-scale aquaculture shows promising potential for local markets. Integrated aquaculture and agriculture systems—aquaponics—is on the forefront of innovative technologies for smallholders. **CRSP researchers are developing sustainable aquaponics systems in México, which incorporate community needs and practices into resource conservation and food production.**



CRSP trainers helped the Lacadon Village Farmer's Cooperative in México set up an integrated aquaponics cropping system to produce crops and fish for local consumption and markets.

ENVIRONMENT

Shrimp and tilapia dominate the aquaculture industry in LAC, often at the expense of natural ecosystem health. Environmental damage to breeding grounds and overfishing of native species are also depleting wild-caught fisheries. CRSP research to introduce native species into aquaculture to replenish wild populations will both open new aquaculture opportunities for smallholder fish farmers and address natural resource conservation issues. **México and US researchers are working on captive breeding techniques to create broodstocks of native snook, chame, and cichlid species. In the near future, aquaculture of these species will provide fish for the market and thereby reduce pressures on threatened fisheries.**



Captive breeding of chame, a food fish for the poor, offers promise for restocking wild populations being depleted by the fishmeal industry and for a new low-cost farmed fish.