



## FACTSHEET

### CGIAR Research Program on Fish Agri-Food Systems (FISH)

FISH is a collaborative global partnership to sustainably improve the productivity of aquaculture and fisheries and enhance the contribution of fish to global development goals.

#### About

The UN's Sustainable Development Goals (SDGs) will not be achieved if we do not take into account the power of aquaculture and fisheries to positively affect livelihoods, food and nutrition security.

Globally, 800 million people, including many poor and marginalized women, men and youth, depend on fish for food, income and nutrition. Fisheries and aquaculture provide 3.2 billion people with 20 percent of their animal protein. Fish is a rich source of micronutrients and essential fatty acids, which are critical to cognitive and physical development. In many low-income food deficit countries, fish contributes more than one-third of animal protein in the diet, and is often the cheapest and most accessible animal-source food. Demand for fish in Africa, Asia and the Pacific is growing fast and in many countries a doubling or more of fish production will be needed by 2030.

The CGIAR Research Program on Fish (FISH) fosters impact-driven research innovations across the whole spectrum of aquaculture and fisheries production systems and value chains, with the goal of achieving sustainable increases in gender and socially-inclusive production and equitable distribution of nutritious fish to those most in need.

#### Research

FISH research focuses on the two interlinked challenges of sustainable production from aquaculture and small-scale fisheries, with cross-cutting themes of gender, youth, climate change and nutrition.

##### Sustainable aquaculture

FISH focusses on enabling environmentally sustainable farmed fish production and enhancing the contribution of aquaculture to poverty reduction, food and nutrition security and natural resource management. A focus on enabling enterprises to enhance production efficiency and sustainability through domesticated, selectively bred, healthy and disease resistant fish reared on sustainable feeds and in low carbon footprint production systems will contribute to new, sustainable supplies of fish and create gender-equitable livelihood opportunities and employment for men, women and youth. Impact assessment and foresight modeling, linking fish production, consumption and trade will generate knowledge to influence policies and priorities for civil society, development and government agencies.

##### Sustaining small-scale fisheries

FISH focusses on securing and enhancing the contribution that small-scale fisheries make to livelihoods, poverty reduction, nutrition and food security. Research will address, through close partnerships, the challenges of realizing ecological sustainability, good governance, equitable distribution of benefit and social-ecological resilience in the face of external shocks.

#### What is a fish agri-food system?

An interconnected and interdependent system involving components of fish production through to processing, marketing and consumption.

## Where we work

FISH works in Africa, Asia and the Pacific. Research is located in six focal countries (Bangladesh, Cambodia, Myanmar, Nigeria, Tanzania and Zambia) and two hub countries (Egypt and Solomon Islands). FISH seeks collaboration with multiple partners to scale out research and create impact, with an initial focus on Ghana, India, Indonesia, Kenya, Malawi, Philippines and Vietnam.

Country selection is based on demand from partners and the potential for impact, where fisheries and aquaculture make a significant contribution to animal-source food supply and where the potential for FISH to address livelihoods, poverty and food and nutrition insecurity challenges is high.

## Impacts by 2022

Through R&D in collaboration with its many partners, FISH expects to

- help at least 5.0 million households to adopt improved breeds, farming and fishing practices by 2022
- assist at least 3.5 million people, half of them female, to exit poverty through gender-inclusive livelihood improvements
- reduce by 2.4 million the number of women, men and children suffering from deficiencies in essential micronutrients
- assist 4.7 million more women of reproductive age to consume an adequate number of food groups
- reduce greenhouse gas emissions and improve water and nutrient-use efficiency in at least 4.8 million metric tons of fish production per year
- help restore 3.3 million hectares of ecosystems through more productive and equitable management.

## Partners

FISH partnerships are a key to success and impact. The program is led by WorldFish, together with the International Water Management Institute and three advanced research institutes:

- Aquaculture and Fisheries Group at Wageningen University, Netherlands
- Australian Research Council Centre of Excellence in Coral Reef Studies at James Cook University, Australia
- Natural Resources Institute at the University of Greenwich, England.

FISH partners with global, regional and national partners, and will progressively build a global partnership network, which is essential to achieve quality research outcomes and deliver the development outcomes and impact at scale necessary to contribute to the UN Sustainable Development Goals.

## Research innovations that change lives

### Fast-growing fish breeds

Improved, fast-growing strains of fish boost the productivity and incomes of fish farmers in developing countries, where yields are often low. FISH will continue research into improved strains of tilapia in Africa and Asia, and of carps in South Asia, combined with accelerated dissemination of existing strains. Research on Genetically Improved Farmed Tilapia (GIFT), which WorldFish has developed over the last 30 years and disseminated to more than 14 countries, will explore new traits in fish breeding, such as disease resistance and resilience.

### Fish-rice systems

In Cambodia, community fish refuges in rice-dominated floodplains are manmade ponds that provide a dry season sanctuary for brood fish. Research shows that improving the management of these refuges can lead to 20–120 percent higher fish productivity (per hectare) in rice field fisheries, a vital source of fish, income and nutrition for many Cambodian households. FISH research on sustainable management models in Cambodia, and scaling out with partners in other countries with extensive rice field landscapes, will enable sustainable fish-rice systems to be more widely adopted, potentially benefitting many hundreds of thousands of households.

## Contact us

### Office:

Jalan Batu Maung, Batu Maung  
11960 Bayan Lepas, Penang, Malaysia

### Mail:

PO Box 500 GPO,  
10670 Penang, Malaysia

### Tel:

(+60-4) 626 1606

### Email:

fish@cgiar.org

© 2017. CGIAR Research Program on Fish Agri-Food Systems. All rights reserved. This publication may be reproduced without the permission of, but with acknowledgment to, the CGIAR Research Program on Fish Agri-Food Systems.



[www.fish.cgiar.org](http://www.fish.cgiar.org)

