



WorldFish Strategy

2017–2022

WorldFish vision:
To be the research
partner of choice for
delivering fisheries
and aquaculture
solutions in
developing countries.



Foreword

The WorldFish mission is to **strengthen livelihoods and enhance food and nutrition security by improving fisheries and aquaculture**. We pursue this through research partnerships focused on helping those who stand to benefit the most—poor producers and consumers, women and children.

The UN High Level Panel of Experts on Food Security and Nutrition (HLPE) recently concluded that fish is “crucial to any debate and action to reduce poverty and improve food security and nutrition.” In a world where climate change, water and land scarcity, ecosystem decline, and shifting consumption patterns pose critical risks to sustainable agricultural production, recognition of the power of fisheries and aquaculture is growing fast.

WorldFish uses its expertise in fisheries and aquaculture to develop technological innovations, strengthen institutions and policies, and deliver transformational impacts. We focus on fish for the following reasons:

- Fish is the animal-source food with the fastest-growing production in the world. In low-income food deficit countries it is also often the cheapest and most accessible animal-source food for poor consumers.
- Sustainable aquaculture practices offer water, energy and feed conversion efficiencies superior to any other domesticated animal food production system—and fish is the only animal-source food that can be produced in saltwater, offering unique advantages for climate resilient production.
- Fisheries and aquaculture contribute to the livelihoods of 800 million people; in the fisheries sector, 90 percent of those are in small-scale fisheries and 97 percent live in developing countries.
- Sustainable intensification of production—including in integrated fish and farming systems—along with nutrition-sensitive processing and trade, offer distinct opportunities to build the income and assets of women and youth.
- Fish consumption has a critical role to play in boosting dietary diversity and reducing the number of people who suffer from micronutrient deficiencies, with lifelong benefits for health and productivity.

This strategy details the ambitious impact targets we have embraced, which are aligned with the UN Sustainable Development Goals, and charts our course to achieve them. We focus our research on the three interlinked challenges of sustainable aquaculture, resilient small-scale fisheries, and enhancing the contributions of fish to nutrition of the poor in the places where we can make the most difference. These challenges will only be met by partnering with the communities, research innovators, entrepreneurs and investors who give fisheries and aquaculture their dynamism and promise.

Dr. Nigel Preston
Director General
(2016)

Dr. Elizabeth Woods
Chair, Board of Trustees

Dr. Blake Ratner
Director General
(2017)

Why fish?

Livelihoods. Eight hundred million people depend on fisheries and aquaculture for their livelihoods. The very poor often rely on fishing as a primary source of income and are particularly vulnerable when fish stocks decline. Increased productivity from sustainable fisheries and aquaculture can be a driver for rural development by mitigating risks to livelihoods and contributing to income generation and employment. Significant improvements in equitable management, technologies, farming systems and value chains are needed to increase production and economic returns in ways that are socially and environmentally responsible.

Food security. Three-quarters of the countries where fish contributes more than one-third of animal protein are low-income food-deficit countries. To meet future demand for fish, particularly in developing countries, production will need to double by 2030. Inefficiencies in fish value chains constrain access by poor consumers to highly nutritious and affordable fish products. Postharvest losses are a particularly widespread challenge, with 27%–39% of fish caught going to waste globally. Addressing these challenges through a food systems approach can yield significant food security gains.

Nutrition. Two billion people worldwide suffer from hidden hunger or micronutrient deficiencies caused by not eating a diverse diet. Fish provides nutrients and micronutrients that are essential to cognitive and physical development, especially in infants and children. Eating fish increases the amount of iron and zinc that the body absorbs from other foods in a meal. Fish, particularly small fish, is rich in micronutrients like vitamin A, iron, calcium and zinc, as well as essential fatty acids. Despite being a major source of key nutrients, fish consumption has not been fully integrated into global strategies to combat undernutrition.

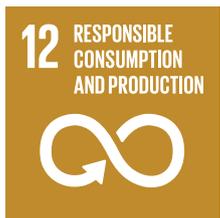
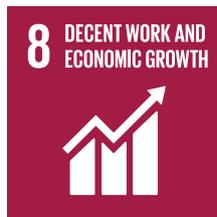
Gender. Fish value chains present important and relatively untapped opportunities to enhance gender equity. In developing countries, lack of access to and control of key assets such as land or ponds, capital, skills and technologies limit women's engagement in fish value chains. Social norms and power relations shape and limit women's participation in small-scale fisheries governance and decisions about food distribution. Evidence-based, gender-focused interventions and innovations can address these inequities and positively influence production and equitable distribution to reduce poverty and enhance food and nutrition security for women, men and children.

Climate change. Aquaculture and small-scale fisheries each offer investment opportunities that respond to the global imperative to reduce climate impacts from food production, and at the same time build adaptive capacity. Improving aquaculture systems can reduce greenhouse gas emissions while intensifying production. Adaptations addressing changes in water flows, sea level and water salinity can expand fish production in areas where crop production is not viable. To build resilience to climate variability among poor fish-dependent populations, we must better understand the vulnerabilities and advantages of fish production systems and develop innovations in management, governance and technologies that increase adaptive capacity.

These global challenges are reflected in the **UN Sustainable Development Goals (SDGs)**. Our research contributes directly to SDGs 1 and 2 by increasing the productivity of fisheries and aquaculture to provide poor and marginalized women, men and youth with more income, food and nutrition.



We also address a range of related goals targeting improved human health through fish consumption, gender equality, job creation, social equity, reduced food waste, climate adaptation, sustainable management of land and water resources, and effective institutions and development policies.



Among members of the CGIAR, a global agricultural research partnership, we make strong contributions to address SDG targets on protecting and restoring marine and coastal ecosystems and encouraging economic growth of Small Island Developing States.



Why WorldFish?

WorldFish is the world's leading **scientific research organization** that underpins the development of fisheries and aquaculture systems in developing economies. Our **40-year track record** of delivering research innovation in fisheries and aquaculture, to advance knowledge and promote sustainable, **evidence-based solutions** and support strengthened **policy design and implementation**, has been achieved in partnership with an extensive network of national research institutions, universities, the private sector, NGOs and development agencies. All share a vision to help the millions who depend on fish for food, nutrition and income.



Our **multidisciplinary approach** and unique **program integration** develop and implement innovations that optimize the individual and joint contributions of aquaculture and small-scale fisheries for reducing poverty, improving food and nutrition security, and sustaining the underlying natural resources and ecosystems on which both depend.

WorldFish creates change for the millions who depend on fish in the developing world. Together with our partners, the WorldFish research approach, history of innovation and depth of expertise position us well to achieve the six impact targets opposite by 2022.

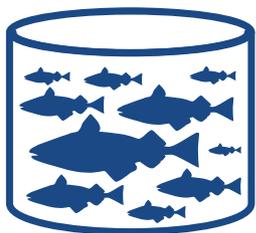
From research to impact: WorldFish innovations in action

Genetically improved farmed tilapia (GIFT) is an improved strain that grows up to 85% faster than standard tilapia. Disseminated in more than 14 countries, it now provides hundreds of thousands of small-scale farmers with an income and millions of households with a sustainable source of food and nutrition. In Egypt, WorldFish developed the **Abbassa strain of Nile tilapia**, which grows up to 30% faster than the country's next best commercial strain and can reduce greenhouse emissions by up to 36% over its production lifecycle.

In Bangladesh, WorldFish has increased productivity and incomes by training and supporting more than 100,000 rural farmers to improve the productivity of their **homestead ponds**. In 2013, this generated more than USD 120 million worth of additional production of tilapia, carp and shrimp benefitting more than 500,000 farmers.

In Cambodia, WorldFish helped communities improve the management of 40 **community fish refuges**, which provide a dry season sanctuary for brood fish. Despite drought, this boosted the average fish catch from **rice field fisheries** by 9%, directly benefitting 86,372 people, many of whom rely on fishing for food and income. A second phase of the project aims to benefit 300,000 people and support effective implementation of government policies on fisheries, climate adaptation, and food and nutrition security.

Impacts by 2022



5M

producer households adopt improved breeds, feeds, fish health and best management practices



3.5M

people assisted to exit poverty through gender-inclusive livelihood improvements



2.4M

fewer women, men and children suffering from deficiencies in essential micronutrients



3.3M

hectares of ecosystems restored through productive and equitable management



4.7M

more women of reproductive age consuming an adequate number of food groups



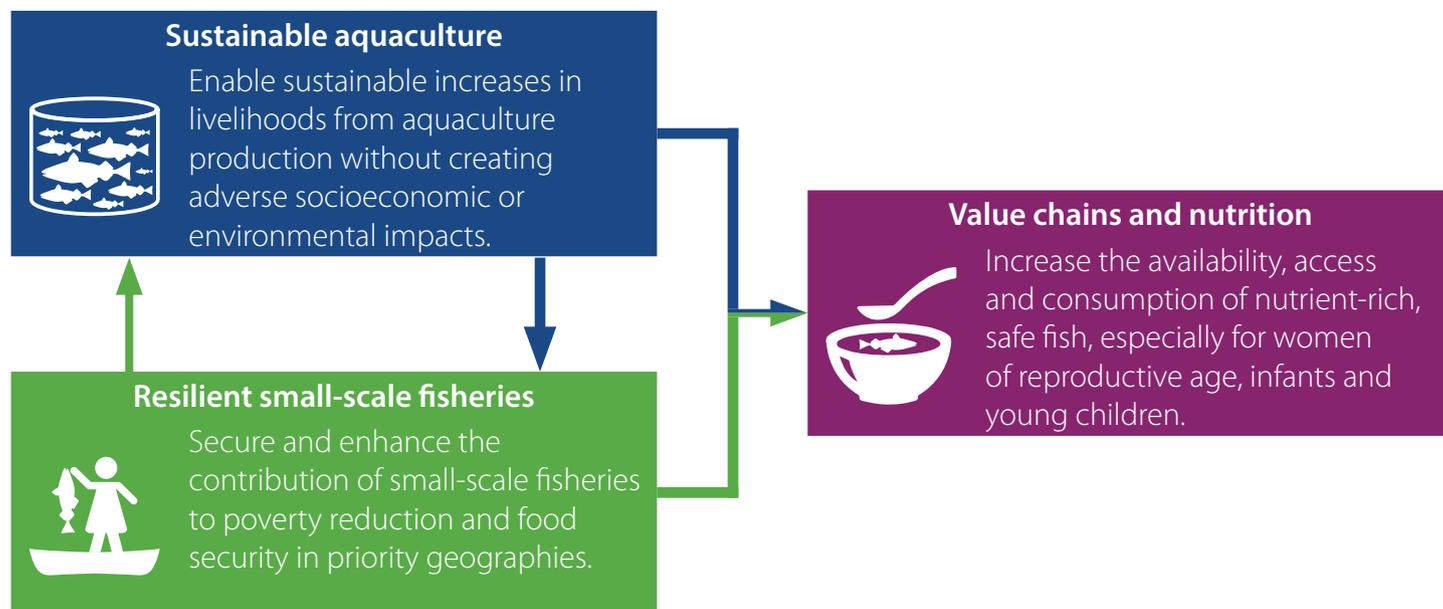
4.8M

metric tons of fish farmed annually with improved climate resilience and reduced environmental impact

These targets were calculated using data from outcomes of prior aquaculture and small-scale fisheries research, including external impact evaluations, and the domain knowledge of WorldFish researchers and partners in aquaculture, small-scale fisheries and fish value chains, aggregating up from achievable targets for innovations underway and planned in our focal and scaling countries. Check the WorldFish website for regular updates on progress towards these impact targets.

Research programs

The WorldFish research agenda focuses on leading-edge science that is applied through three interconnected programs of research. By using an integrated, multidisciplinary approach, WorldFish addresses critical gaps in research to build evidence on the most promising pathways to impact.



WorldFish strengthens the integration between research activities in aquaculture, small-scale fisheries and nutrition and value chains to enhance the prospects of achieving multiple, synergistic, beneficial impacts. For example, we will examine how to enhance the co production of highly nutritious indigenous fish species and improved tilapia and carp strains in ponds connected to rice fields. We will build on this work to boost the performance of these strains via selective breeding, disease control, improved aquafeeds, and environmental management of ponds and adjacent ecosystems, and by designing technologies to address the distinct needs of women and men producers where relevant. Our research on value chain innovations will then focus on translating productivity increases into gender-equitable livelihood and nutritional gains. To achieve these outcomes, WorldFish capitalizes on synergies within the broader CGIAR portfolio and with multiple research and delivery partners that work in complementary research domains in the same priority geographies of Asia, Africa and the Pacific.



Photo credit: Yans Peter Lang Dalggaard/WorlFish

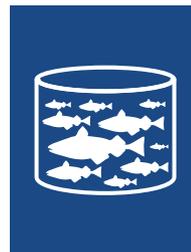
Jitra Aquaculture Extension Center, Malaysia—a joint research venture with the Department of Fisheries (DoF) Malaysia.

Sustainable aquaculture

Fish breeds and genetics

Fish health, nutrition and feeds

Aquaculture systems



This program focuses on enabling enterprises to progressively enhance production efficiency and sustainability via the use of domesticated, selectively bred, high-health fish reared on sustainable feeds in gender-inclusive production systems that have low carbon and environmental footprints.

We target countries with low and medium human development indicators and a high dependence on fish for food, where aquaculture is in the early stages of development and needs accelerated growth to fill projected shortfalls, or where aquaculture is already established but opportunities exist to sustainably intensify the supply levels required to meet growing domestic or regional demand.

Research advances across the key research domains of fish breeding and genetics, disease detection and control, nutrition and feeds, and enhanced production systems will contribute to sustainable growth, while ensuring that poor farmers, their families and communities access the nutritional and economic benefits from a sustainably growing aquaculture sector.

Impacts are delivered through widespread dissemination and use of improved tilapia and carp seed, application of best management practices, adoption of fish disease control measures, use of sustainable aquafeeds and adoption of production systems with reduced greenhouse gas emissions and improved water and nutrient use.

Resilient small-scale fisheries

Resilient coastal fisheries

Fish in multifunctional landscapes

Fish in regional food systems



This program aims to improve fisheries governance—in both coastal and inland systems—to deliver more equitably distributed food and income, to enable sustained improvements to human well-being and promote the social-ecological resilience of fishery systems. Our research primarily targets fishery-dependent households and communities, and the traders and consumers of the fish they produce.

Research advances will build on the strengths and innovations within fishing communities, and engage with

structural drivers of vulnerability and resilience. Critical issues include governance innovations to reduce fishing pressure, promote sustainable and equitable resource use, increase gender and other social equity in decision-making and control of assets, increase the profile of fish in health and development policy agendas, and position fish in domestic and intra regional food systems to deliver optimal benefits for the most poor and food insecure.

We focus on inland and coastal fisheries in Africa and Asia-Pacific, where the largest number of poor people depend on fish for nutrition security and where our research has the greatest potential to deliver impacts at scale. In Asia-Pacific, we focus on inland and estuarine fisheries in Bangladesh, Myanmar and Cambodia and near-shore coastal fisheries in the Pacific islands. In Africa, we work first on inland fisheries and small fish that constitute the majority of catches and that supply value chains reaching poor consumers across the continent.

Value chains and nutrition

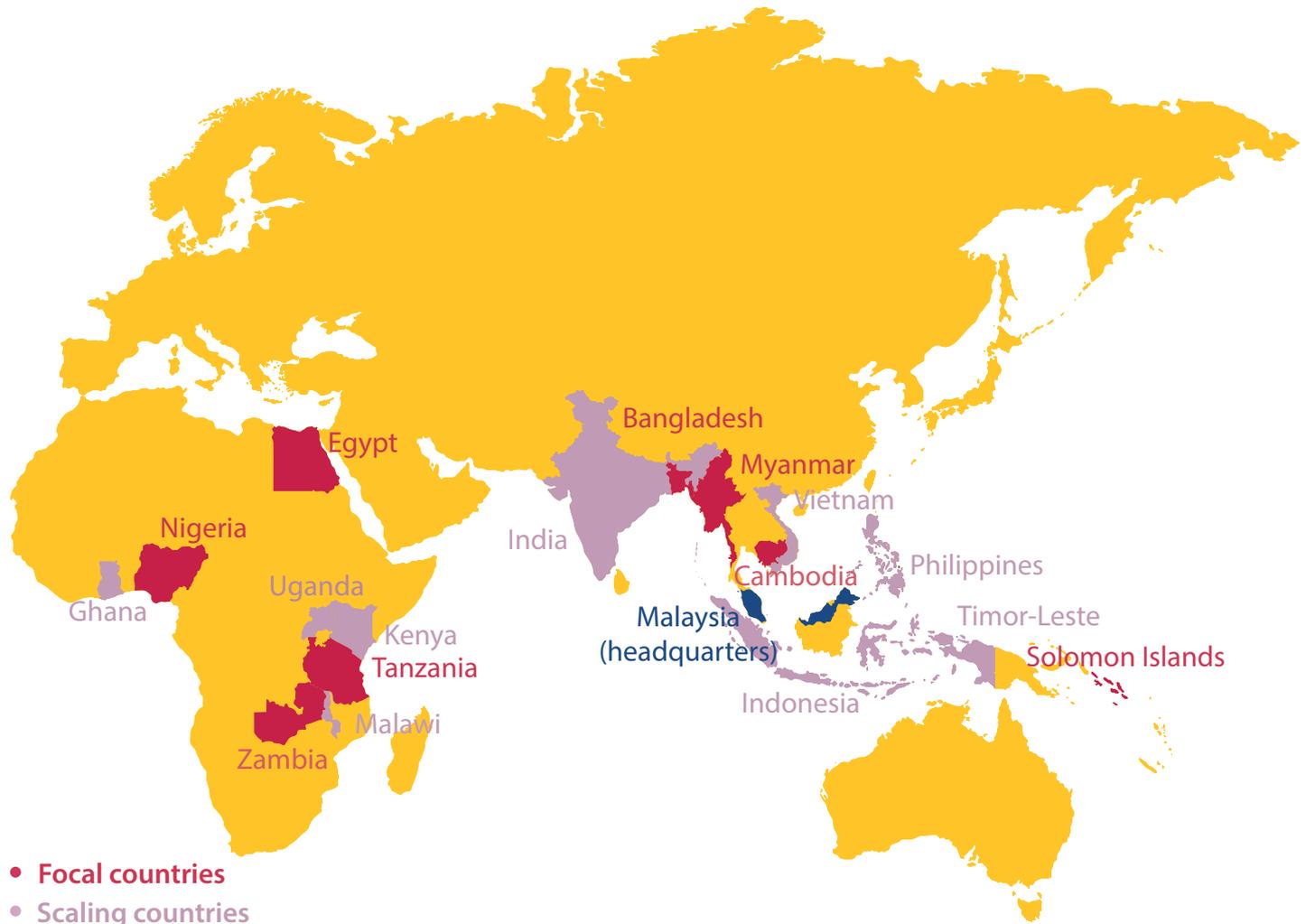


This research program aims to increase the availability, accessibility and consumption of nutrient-rich fish by poor consumers, with particular emphasis on women and also children in the first 1,000 days of life. We focus on specific geographies in Asia and Africa that leverage synergies with our work on aquaculture and small-scale fisheries production, and where the potential for direct impacts at scale is high.

We will accelerate the development and implementation of novel, nutrition-sensitive, aquaculture and fisheries production systems, in particular fish-rice systems. Research on nutrition outcomes will help guide the integration of small fish in polyculture pond systems, enhance feed composition to improve nutritional quality for consumers, and build evidence on strategies for homestead and landscape-scale integration of fish, vegetables, fruit and staple crop production. We will analyze fish value chains in order to reduce waste and loss and improve food safety and nutritional quality. Research on reducing waste and loss will focus on overcoming processing and marketing barriers that reduce the availability, accessibility and affordability of nutritious and safe fish to poor consumers.

Despite the rich nutritional value of fish, intake by pregnant and lactating women, especially among the poor, is low, and infants and young children are often not fed fish. To increase consumption of nutritious fish in the first 1,000 days of life, we will continue to develop novel fish-based products, such as those piloted in Bangladesh, and make them accessible to women and children to address nutrient gaps. We will test scalable production methods and marketing approaches with the private and public sectors and NGO partners, including through women-led entrepreneurship. Research will also help develop and test behavior change communication interventions aimed at increasing fish in the diets of those most in need.

Geographies



Fish production and consumption are characterized by significant regional disparities. In Southeast Asia, many countries have significant small-scale fisheries but aquaculture is becoming increasingly important. By contrast, production in Africa from aquaculture is relatively low, with the notable exceptions of Egypt and, to a lesser degree, Nigeria. Over the past decade, per capita fish consumption has increased in most developing countries in East and Southeast Asia, whereas in India and in most of Africa it has remained low.

The geographic focus of WorldFish is based on (1) the current status and projected future potential for aquaculture and small-scale fisheries in developing countries, (2) the probability that the program and its partners can effectively respond to demands for research and deliver impacts at scale, and (3) striking a balance between the needs or regions where fish production and supply chains are more developed and must adapt, versus regions where they are less developed and offer promise.

In focal countries, we aim to deliver significant impacts through sustained research engagement. In scaling countries, we will pursue further development outcomes through capacity building, policy dialogue and advisory services that leverage the technology and learning developed through our focal country research. Our aquaculture research hub and training center based in Egypt will facilitate transfer of our core aquaculture research learning in Egypt more widely across the continent. In Solomon Islands, a hub for learning networks on small-scale fisheries governance will seek to extend learning on that challenge throughout the Pacific region.

Focal country	Priorities
Bangladesh	Sustainable intensification of aquaculture; fish breeding and genetic improvement; polyculture systems; micronutrient-rich fish production and consumption; fish-based products for the first 1,000 days of life; community-based fisheries management.
Cambodia	Rice-field fisheries; small-scale aquaculture development; community-based fisheries management; micronutrient-rich fish production and consumption.
Egypt	Sustainable intensification of aquaculture; fish genetic improvement; novel feeds; fish health.
Myanmar	Small-scale fisheries management and governance; small-scale aquaculture development; micronutrient-rich fish production and consumption; equitable participation in domestic fish markets.
Nigeria	Fish genetic improvement; sustainable fish feeds; fish disease control and health management; women and youth employment in value chains.
Solomon Islands	Decentralized community-based management; small-scale fisheries governance.
Tanzania	Sustainable aquaculture development; coastal fisheries; reduction of fish waste and loss; youth employment in aquaculture.
Zambia	Sustainable aquaculture development; micronutrient-rich fish production and consumption; small-scale inland fisheries.

We will expand our work in stages during the six-year strategy period to achieve an appropriate level of engagement in each of the focal countries. In particular, this includes augmenting our existing partnerships by establishing offices and a sustained staff presence in Nigeria and Tanzania. In both focal and scaling countries, we will regularly review our level of engagement to ensure that we demonstrate the gains of partnership before expanding and becoming overstretched. We expect a degree of dynamism in the set of scaling countries prioritized to enable us to respond to emerging opportunities for partnership, influence and impact.

Featured innovations

Our impact targets for 2022 are based on the anticipated outcomes of a range of innovations taken to scale with partners. Four of these are featured here.



Putting coastal communities back in charge

Target Outcome: 1 million people (500,000 people in the Pacific and 500,000 in Eastern Africa) have strengthened livelihoods through improved design and implementation of community-based resource management.

Coastal communities, particularly across the Pacific islands, are becoming increasingly affected as essential marine resources that support hundreds of thousands of people are diminished by impacts such as climate change and overfishing.

WorldFish promotes community-based resource management, which helps coastal communities safeguard the future of their resources, including coral, mangroves and fish. Our research links localized fisheries management innovations to broader-scale governance improvements through policy analysis and institutional strengthening.

Projects in Solomon Islands, for example, have worked to halt the degradation of inshore reefs and fisheries by stabilizing and starting to rebuild them—so as to protect local food security and livelihoods in coastal communities.

Target SDGs:



Polyculture: Boosting nutrition and livelihoods

Target Outcome: 1.2 million households have greater productivity of nutrient-rich small fish.

Recognizing that small fish have an essential role in helping to meet the micronutrient needs of poor populations, WorldFish encourages polyculture technologies in which both large and small fish species are grown in the same ponds.

This innovation draws on research demonstrating that small nutrient-rich fish such as *mola* can be grown alongside carp, without adversely affecting production. *Mola* require frequent, partial harvesting, unlike carp, increasing the likelihood that they will be consumed in the household rather than sold.

WorldFish couples the production of these nutrient-rich foods with intensive nutrition education to encourage consumption by nutritionally vulnerable groups, especially women and young children. As a result, households gain income from selling the carp, and regular consumption of small fish by women and children helps them meet their nutritional needs.

Target SDGs:





Improved and resilient tilapia and carp breeds

Target Outcome: 1.5 million households have access to and use our improved tilapia and carp seed. Productivity of tilapia aquaculture improves by 10% in focal countries.

With diminishing wild fish stocks, aquaculture is a key solution to meeting future global demand. WorldFish scientists are focusing on improving the production traits of commercially important aquatic animal species through selective breeding.

Genetic improvement through selective breeding has been used for millennia on crops and livestock, but up until the 1980s, little had been done to utilize this process for farmed fish. WorldFish has pioneered the process with its breeding programs for tilapia and carp.

Continuing research will build on previous international public goods developed by WorldFish and partners that successfully developed and delivered improved breeds of tilapia in Asia (GIFT strains), Egypt (Abbassa strain), Ghana (Akosombo strain) and Malawi (Shiranus strain), and of rohu carp in Bangladesh and India. We will broaden the scope of our collaborative research via multidisciplinary integration of selective breeding, fish health, aquafeeds and environmental management.

Target SDGs:



Fish-rice systems: Harnessing the potential for sustainable increased productivity

Target Outcome: 1.2 million households produce and consume more nutrient-rich small fish.

Fish-rice systems are common in many South and Southeast Asian countries as well as in some areas of Africa. The systems are diverse, spanning capture fisheries and aquaculture, with fish and rice growing concurrently in rice fields and canals or, alternatively, fish raised between rice crops.

WorldFish has developed several approaches to increase fish production and productivity in fish-rice systems. In northwest Bangladesh, culturing carp species and *mola* in homestead ponds connected to rice fields led to a 3.5-fold increase in total fish production compared to stand-alone ponds, as well as a higher nutritional quality of the production. In Cambodia, improved governance and management of community fish refuges have led to increased fish production and fish species diversity in the surrounding flooded rice fields, resulting in increased fish consumption in the communities.

WorldFish aims to work through a strategic alliance with the International Rice Research Institute (IRRI) and partners to expand these technologies in Bangladesh and Cambodia, and introduce them in Myanmar and Sierra Leone. Research is also testing new approaches for growing fish in cages and pens at the edge of inundated rice fields and in canals surrounding rice fields.

Target SDGs:



Crosscutting themes



Climate change

Climate changes can impact fisheries and aquaculture directly, by influencing production quantities and efficiency, or indirectly, by influencing the market price of fish or the costs of goods and services required by the fisheries and aquaculture sectors. We therefore address mitigation and adaptation of climate change across four domains:

1. *Analyzing vulnerabilities of fishery systems in regions, countries and communities.* New vulnerability indices will be used to understand how climate change will affect ecosystems and the capacity of fisheries and their dependent communities to adapt to such impacts. The results provide a foundation for innovation in management and governance.
2. *Within vulnerable systems, assessing who and what is most vulnerable, the sources of vulnerability and the modes of impact.* We identify practical ways fishers can reduce vulnerability and increase resilience to the effects of climate change, with a focus on the higher-risk fishery systems.
3. *Developing and testing small-scale fisheries interventions to increase adaptive capacity at regional, national and local scales.* To enable fishers to better manage external opportunities and threats, WorldFish will research and help implement new management systems that emphasize building resilience and adaptive capacity.
4. *Researching aquaculture technologies to reduce vulnerability and increase adaptive capacity.* To overcome the negative impacts and harness the new opportunities presented by climate change, research will focus on developing technological innovations such as resilient fish production traits, integrated farming systems, marine fishmeal replacements and novel aquafeed ingredients as climate-smart aquaculture solutions.



Gender

In developing countries, women are farmers, workers and entrepreneurs, but they generally face more severe constraints than men in accessing productive resources, markets and services. Closing this gender gap in aquaculture and fisheries systems can help boost agricultural production, reduce poverty and hunger, and enhance nutrition security.

To achieve these outcomes, WorldFish proactively contributes to gender responsiveness, inclusion and equity in innovation processes, resource governance and development decisions. In close consultation with local communities, our gender research aims to identify:

- enabling factors to enhance women's control over productive assets and resources (including land, ponds, financing, technologies and information)
- opportunities for women's successful wealth generation through entrepreneurship and employment in fish value chains

- strategies to enhance women's equitable participation in household and community decisions about small-scale fisheries management and food distribution
- how aquaculture technologies fit with women's needs and preferences
- strategies to influence formal and informal gender rules, norms and behaviors toward gender equality, including the effective engagement of men and boys together with women and girls in gender-transformative strategies.



Entrepreneurship

Achieving impacts at the scale of our ambition can only happen by leveraging the dynamism of private enterprise. In the aquaculture sector in particular, this must cover the spectrum from family homestead pond production to medium- and large-scale commercial input, production and processing operations, where these offer efficient vehicles to sustainably increase the supply and availability of affordable, nutritious fish for poor consumers.

In both fisheries and aquaculture value chains, we emphasize livelihood opportunities for women and youth in fish processing and trade, in the supply of inputs such as locally produced feed and seed for aquaculture and in the marketing and distribution of nutritious fish-based products for maternal and child health.

For young women and men, barriers to participating in fisheries and aquaculture value chains range from limited access to fishing grounds, capital and training to perceptions of risk in the sectors. Youth are often neglected as a specific target group in policies and as agents of change within small-scale fisheries and aquaculture. We adopt a youth-responsive research agenda to increase opportunities for safe and rewarding employment and entrepreneurship, engaging youth to determine the factors that enable or hinder their participation in decision-making, as well as access to training, technology and financing.



A community meeting to discuss marine resource management, Santupaele village, Western Province, Solomon Islands.

Delivering impact through partnership

WorldFish's most effective impacts are delivered through multistakeholder partnerships that share a common vision of how innovation and science underpins the development of fisheries and aquaculture systems in developing economies.

Our capacity enables us to engage in partnerships from research to impact. We achieve effective development outcomes in our partner countries and for our donor partners via diverse pathways, including adoption of technologies and practices; civil society engagement; policy and institutional strengthening; and private sector investment.

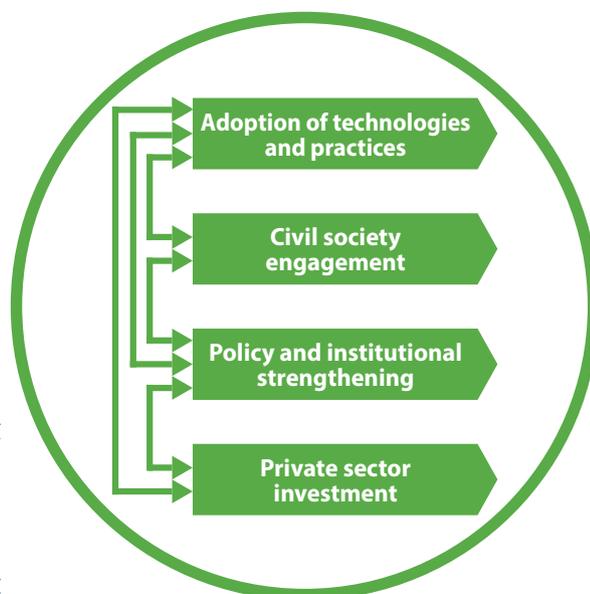
At the national level, our engagement with **national agricultural research and extension systems** (NARES) is critical, particularly in terms of scaling through capacity development and policy influence. This is augmented by partnerships with **development institutions**, including government ministries, and national and international NGOs who play a critical role at all stages in our impact pathways.

Additionally, our partnerships with **advanced research institutes** (ARIs) complement WorldFish's capacity directly with skills in specific areas of research, as well as extended networks and opportunities for capacity development and scaling.

To ensure our research contributes to broader global challenges where fish makes a contribution, and to achieve gains in priority countries for site integration, WorldFish partners with **CGIAR centers and programs** where there is close alignment of goals and complementarity of skills and capacities.

WorldFish will expand its collaboration with the **private sector** as a partner for research and delivery of impact at scale. These partnerships are essential for successful scaling and extensive use of the technologies developed, in particular our aquaculture, nutrition and value chain research. As a result, private sector engagement is being pursued at all stages from development and testing of technologies (discovery and delivery) through to design and implementation of scaling strategies—with appropriate safeguards to ensure the broadest public benefits in support of our goals.

Diverse pathways to impact





Young women share ideas on the challenges facing wetland livelihoods in Nanikelako, Mongu District, Zambia.

Going to scale

Achieving significant impacts at scale requires long-term vision and an ability to understand and profit from complementarities across the breadth of WorldFish partnerships. Our pathways to scale will be achieved in the following ways:

A diverse portfolio of investment vehicles

We pursue development impacts through three main investment vehicles:

1. long-term research and development initiatives supported by a mix of CGIAR research program (CRP) and bilateral grant investment from development agencies, and foundations;
2. policy dialogue, capacity building and advisory services, which may be shorter term and responsive to particular windows of opportunity;
3. private sector agreements, with joint investment to enable research innovation and scaling in support of our mission.

Our resource mobilization efforts aim to diversify funding streams from the multilateral and bilateral development agencies that have traditionally provided the majority of funding to the CGIAR, while significantly increasing revenue from foundations, emerging economy governments and private sector partnerships.

A commitment to learning and sharing lessons

To achieve our targeted impacts, WorldFish uses results-based management focused on research and development outcomes to improve learning and accountability, track progress toward our objectives and engage in adaptive program management. The internal results-based management system is augmented by rigorous, external evaluation and impact assessment to help us maximize learning, identify the most effective implementation strategies and share these broadly with partners, investors and policy stakeholders.

A multiplier effect

Our ultimate impact extends well beyond the projects and programs we implement directly. Our aim is to leverage our research, partnerships and communications to directly influence a scale of investment by governments, development agencies and the private sector that reaches 10x our own annual expenditure.

The learning cycle



WorldFish values



Integrity and Trust

We are honest, open and accountable with the resources invested in us, and we deliver on our commitments.



Fairness and Equity

We respect and celebrate diversity and actively challenge social and gender inequities that impede progress toward our goals.



Excellence and Innovation

We pursue high standards of scientific and professional rigor and embrace impartial evaluation, critical reflection, learning and adaptation.



Teamwork and Partnership

We seek to leverage our complementary strengths within teams and across institutional boundaries to achieve the greatest impact.



Photo credit: WorldFish

At WorldFish, we're committed to living our values across the breadth of our partnerships and geographies.



Photo credit: Backcover, Sylvain Borel/WorldFish

About WorldFish

WorldFish is an international, nonprofit research organization that harnesses the potential of fisheries and aquaculture to strengthen livelihoods and improve food and nutrition security. Globally, more than 1 billion people obtain most of their animal protein from fish and 800 million depend on fisheries and aquaculture for their livelihoods. WorldFish is a member of CGIAR, a global research partnership for a food-secure future.

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For updates on progress in implementing this strategy, details on partnerships and individual country priorities, and a look at the underlying science that informs our research priorities and impact pathways, visit us at: www.worldfishcenter.org



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