

Advancing gender equality and women's empowerment in fish agri-food systems: Four pathways

Gender equality and women's empowerment are globally recognized priorities,¹ yet gendered inequalities and barriers remain prevalent. Fish agri-food systems are intersected by macro- and micro-patterns of social and gender inequalities and inequities.² At the micro-level, women have less ownership and control of assets that generate income (land, ponds, fish, technology) and bear a greater share of unpaid work. At the macro-level, they are disproportionately involved in low-return employment and less profitable nodes of value chains, receive an inequitable share of benefits and have unequal power in governance.³ These pre-existing inequalities have been exacerbated by the effects of COVID-19.⁴

Through its [Gender Strategy](#), the CGIAR Research Program on Fish Agri-Food Systems (FISH) has examined gendered patterns and barriers in fish agri-food systems and identified strategies to address inequities. These strategies focus on four impact pathways:

1. gender-inclusive and gender-responsive innovations
2. inclusive livelihoods and wealth generation
3. inclusive governance
4. gender-transformative approaches to address underlying structural barriers.

These pathways connect to gender and social justice themes of voice and choice, women's economic empowerment, gender equality, equity and human rights, and food systems transformation. They aim to recognize intersecting forms of marginalization and power dynamics, take a multiscale approach and engage the knowledge and agency of women and men in generating insights and ways forward.

FISH's four pathways to gender equality and women's empowerment

1. Resilience of fish agri-food systems relies on gender-inclusive and gender-responsive innovations

Although development programs and research in the sector increasingly commit to women's empowerment and gender equality, these aims are often not fully implemented in practice.

Key messages

- It is crucial to address gender equality and women's empowerment if fish agri-food systems are to contribute more to food security, nutrition, livelihoods, and poverty reduction. However, systemic gendered inequities and barriers persist, undermining progress toward achieving the UN Sustainable Development Goals. To address this, FISH identified and progressed four pathways to advance gender equality and women's empowerment in fish agri-food systems.
- Pathway 1: Gender equity considerations must be integrated into every stage of innovation development, dissemination and uptake. This involves moving beyond male-focused innovation processes to include explicit assessments of women's needs and engaging women as innovators.
- Pathway 2: Inclusive livelihoods and wealth generation, including women's economic empowerment, require building of enablers, including supportive familial relations and women's education, strategies to avoid further loss of assets such as social protection, investments in women's social networks, and equitably engaging women in decision-making at all scales.
- Pathway 3: Inclusive governance of small-scale fisheries and aquaculture can be achieved by implementing gender-responsive and rights-based policies, closing gender data gaps and amplifying women's voice and leadership.
- Pathway 4: Gender-transformative approaches are needed to engage women and men together to address structural barriers, like constraining gender norms and relations, in fish agri-food systems.
- FISH resources can help researchers and development practitioners focused on fish agri-food systems apply gender and intersectional lenses in their work.

There remains a common (mis)perception that “fishers,” “fish farmers” and “household heads” are men.^{5,6,7} This, and a lack of gender capacity in organizations, translates to gender-blind innovation processes too frequently being the norm.⁸ A lack of responsiveness to women’s experiences and needs, combined with top-down innovation approaches, limits opportunities for greater fit, use and benefits of innovations.

FISH has aimed to counter this trend with empowerment-oriented research. For example, a climate-smart aquaculture study in Bangladesh engaged [women as fish farmers and co-researchers](#), rather than as “wives of fish farmers” or “research subjects.” As a result of their enhanced knowledge, improved access to inputs, and the increased income they brought into the household, over 75 percent of women in the study reported positive changes in their household decision-making power. This approach has helped build women’s leadership and agency in innovation processes and ensure aquaculture inputs and income are in the hands of both men and women.

FISH also undertook novel research to generate higher-level guidance for public sector breeding programs. Researchers collaborated with those studying gendered trait preferences for crops and livestock⁹ to identify gender-disaggregated preferences of fish traits in [Bangladesh, India, Egypt](#) and Zambia. In India and Bangladesh, women and men had a shared interest in fish size, growth, appearance and taste, but women more often prioritized traits relating to household food and nutrition security while men prioritized market-related characteristics like price. Preferences were found to be neither homogeneous nor completely separate between genders, but tended to relate to gendered division of labor and gender dynamics in fish agri-food systems.¹⁰ Breeding programs that engage explicitly with women and men as clients to assess their needs along fish value chains, in pre-harvest, production and post-harvest roles, are anticipated to enhance adoption of improved fish and better address the needs of poor and nutrition-insecure consumers.

2. Inclusive livelihoods and wealth generation in fish agri-food systems help ensure women’s economic empowerment

Gender norms and relations that constrain mobility and time use and increase labor burdens contribute to women receiving lower economic returns and disproportionately occupying [informal and less-profitable roles in fish value chains](#). Even in the same roles, profit gaps between men and women fish retailers persist. In Egypt, for example, the value of fish sold by men retailers was almost [double that of fish sold by women retailers](#).



In partnership with the Food and Agriculture Organization of the UN, case studies in [Bangladesh](#) and [Indonesia](#) illustrate that women’s entry and control of their own income in fish value chains is necessary, but not sufficient, to achieve women’s economic empowerment. Structural enablers are also required, including spousal and family support, education, ownership of productive resources, and social networks as they relate to market access. Digital enablers are also important, as [information communication technologies can allow women to work, train and receive payments](#) from home, offering a way around gendered mobility constraints to economic empowerment.¹¹

The COVID-19 pandemic and associated containment measures particularly impacted low-income women. Working with the African Women Fish Processors and Traders Network, FISH and partners, On Our Radar, University of Lancaster and University of Birmingham, rapidly began research to understand women’s experiences, coping strategies and limits to adaptation. Existing gender inequalities and dynamics, including unequal care burdens, women’s constrained access to and control over finances, as well as gender-based harassment and transactional sex-for-fish, led to dire economic hardships and impacts on well-being. Findings indicate that an equitable and effective COVID-19 recovery must include (i) government and development agency strategies that protect women’s assets and avoid business losses, such as gender-responsive social protection (e.g. cash or in-kind transfers) and debt forgiveness, (ii) investing in women’s social capital, as networks help provide financial buffers, information and market reach, and (iii) involving women in decision-making at all scales, especially as leaders and decision-makers in pandemic recovery and policymaking that affects fish trade.¹²

3. Inclusive governance is the foundation of equitable and resilient fish agri-food systems

The persistent gender and social exclusions in the sector have structural roots in policy, governance and data systems. For example, small-scale fisheries governance policies in the Pacific often make explicit commitments to gender equality, but FISH research shows that [commitments tend to be overly narrow and outdated](#). Prevailing perspectives tend to view gender equality as a means to an end instead of a valuable end in itself, and they focus on the individual, emphasizing improvement to women, instead of driving for societal responsibility and change. Locally, gender-blind programs and extension have led to processes that are participatory in name but exclusionary in practice, with women and people from less powerful socioeconomic groups having relatively little voice in decision-making.^{13,14}

At the global scale, FISH researchers [have called for ocean governance](#) to reflect a diversity of local voices and visions, in particular those of women and marginalized groups, protect human rights and equitably improve human well-being. FISH has worked at national scales to put these principles into practice, adopting integrated, cross-sectoral approaches to create pathways for women’s empowerment. In Myanmar, FISH identified that shifting to joint land ownership in households of married couples is an important foundation if integrated rice-fish production systems are to equitably benefit women and men.¹⁵ At the local scale, FISH promotes gender-inclusive facilitation of community-based natural resources management in the Pacific¹⁶ and has piloted strategies to enhance inclusion in rice-fish system governance in Cambodia.¹⁷

Globally, persistent and systemic gender data gaps are another structural barrier to inclusion.⁷ To close gender data gaps, FISH, FAO and Duke University recommend that government and non-government research and monitoring agencies must systematize the collection, analysis and reporting of sex-disaggregated data as a foundation of quality information systems. Key recommendations also include expanding the definition of “fishing” to include [gleaning](#) and integrated fisheries, and to count the many roles in pre- and post-harvest as “work,” including the unpaid and informal labor often carried out by women.⁷

4. Gender-transformative approaches are necessary to overcome invisible barriers to gender equality

Gender norms are the invisible but powerful informal social rules around behaviors and roles that are considered appropriate for women and men, and how they should relate to each other. Gender norms that reinforce gendered power hierarchies and unequal division of labor perpetuate gender inequalities. For instance, FISH evidenced that in Malawi women are expected to be responsible for care and domestic work, which [precludes them from participating fully and freely in fish agri-food systems](#). In Myanmar, traditional perceptions that only men are “real” fishers and income earners lead to [gender-imbalanced entitlements and control](#) over household assets, male dominance in livelihood decisions, and exclusion of women from extension services and opportunities in small-scale aquaculture.

Gender-transformative approaches aim to improve gender equality by challenging and changing these underlying structures, including shifting constraining gender norms. At the community scale, FISH has piloted participatory processes that engage men and women together

to critically assess their gender norms and stereotypes, how these shape gender dynamics and relations, including inequitable divisions of labor, and how these in turn influence opportunities and well-being of individuals, households and communities. In Zambia, [gender-transformative approaches combined with participatory testing](#) of post-harvest technologies led to significant changes in gender attitudes and women’s empowerment. The transformative approaches contributed to more gender-equal attitudes among men and greater women’s control over income and exercise of choice and voice than standard gender mainstreaming approaches.¹⁸ In Bangladesh, the introduction of low-cost gill nets made it possible for women to harvest fish without entering the water.¹⁹ However, because harvesting fish and using technologies were seen as men’s domain, women were still restricted from using the nets because of constraining norms and unequal power relations. Embedding gender-transformative exercises within the related technical training programs, including [participatory processes with the women, their spouses and in-laws](#) to identify and understand the effects of constraining notions of “men’s work” and “women’s work” and unequal relations, increased social acceptance of women’s use of the nets to harvest fish and helped secure women’s regular access to nutrient-rich fish.

The FISH Toolbox for gender-inclusive and gender-responsive research

The following resources were developed for each pathway to enable, enhance or ensure research contributes to gender equality and women’s empowerment.

1. Gender-inclusive and gender-responsive innovations

- [Ten strategies for research quality in distance research during COVID-19 and future food system shock](#). Framed within the [One CGIAR Quality of Research for Development Framework](#), these strategies draw on multiple international sources of best practices and are crucial for effective, inclusive and ethical research during COVID-19 social distancing and for distance research during future shocks.
- [Tool Navigator: Using market-based research methods for user-responsive innovation](#). The Tool Navigator offers a suite of tools to guide data collection in informal markets. Together these inform user-responsive innovation, focusing on understanding farmers’, retailers’ and consumers’ needs, perspectives and preferences.

2. Inclusive livelihoods and wealth generation

- Conceptual framework for gendered aquaculture value chain analysis and development. This framework, to be released in 2021, was developed by FISH and KIT Royal Tropical Institute to address gender blindness in value chain approaches in fish agri-food systems. This framework, piloted in Bangladesh, embeds an explicit gender social relations approach with functional and economic value chain analysis.
- Identifying niches for women’s entrepreneurship in aquatic food chains: A methods package. This resource, to be released in 2021, highlights a market-based, participatory approach to decipher women’s interests, constraints and best-bet opportunities in fish value chains. The package was developed with the BoP Innovation Center and piloted in Nigeria under the Technologies for African Agricultural Transformation project.

3. Inclusive governance

- Assessing inclusion in community-based resource management: A framework and methodology. This framework was created to address the conflation of “inclusion” with “attending a meeting,” which plagues development. [Building on critical foundations from governance literature](#), this resource uses a bespoke “five degrees of inclusion framework” and offers methodologies for assessing inclusion and exclusion through an intersectional lens in local-scale natural resource governance. It was piloted in the Solomon Islands.
- [Rights, equity and justice: A diagnostic for social meta-norm diffusion in environmental governance](#). This diagnostic examines eight drivers of and responses to norm diffusion that shape the spread of social principles on gender equality and social equity. It generates insights into why meta-norms often fail to be absorbed and operationalized by local governments or actors despite policy commitments. Applying this lens in research and investment has potential to improve the meaningful diffusion of equity and equality in multiscale environmental governance.

4. Gender-transformative approaches to address underlying structural barriers

- [The SILC+GTA Facilitation Manual: The Savings and Internal Lending Communities Plus Gender-Transformative Approach](#).²⁰ Savings group programs often only target women, but engaging men and improving equity in decision-making processes can enhance outcomes. The manual is intended for coordinators and facilitators of savings and internal lending communities, and was piloted in the Barotse Floodplain of western Zambia.²¹
- The women’s empowerment in fisheries index (Pro-WEFI) and methods guidance. This survey and focus group-based package, to be released in 2021, is designed for small-scale fisheries and aquaculture projects to assess before and after changes in empowerment and gender attitudes. It is based on work in Zambia, Egypt and Bangladesh, with cognitive testing underway in India and Bangladesh.

Looking ahead

The four pathways outline strategies for improving gender equality and women's empowerment in fish agri-food systems, but accelerating progress requires amplified commitment and collaboration by government, civil society and private sector actors. This is especially true in the face of the COVID-19 pandemic, which has exposed and exacerbated inequalities. Progress will rely on better use of evidence to inform gender-responsive, inclusive and transformative policy and programs, and on bold thinking and action to recognize and address underlying barriers.

Notes

- ¹ Sustainable Development Goal 5 is "Achieve gender equality and empower all women and girls."
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- ⁹ The CGIAR Gender & Breeding Postdoctoral Fellow Capacity Development Initiative was hosted by WorldFish and involved the following CGIAR Research Programs: Fish Agri-food Systems (FISH), Roots, Tubers and Bananas (RTB), Livestock (L), and Grain Legumes and Dryland Cereals (GLDC). The programs are supported by contributors to the CGIAR Trust Fund. Funding support for the Initiative's work was provided by CGIAR through its Senior Gender Advisor
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- ¹⁹ Choudhury A, Newton J, Kruijssen F, Hasiba Z and McDougall C. In prep. "Walking the line": Balancing gender accommodative and gender transformative approaches: Tales from mixed methods assessment of women empowerment in aquaculture in Bangladesh.
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- ²¹ FISH. 2021. In press. Changes in intra-household decision making powers: Effects of a gender transformative approach in the Barotse Floodplain, Zambia. FISH Working Paper. Penang: FISH.



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