



Gender dynamics in small-scale fisheries and aquaculture

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Presentation outline

- Introduction
- Importance of fisheries and aquaculture to livelihood security
- Gender dynamics in small-scale fisheries and aquaculture
- Knowledge and evidence gaps in the literature
- Moving the needle – gender research in small-scale fisheries and aquaculture
- Conclusion



A woman harvesting mud (or mangrove) crabs in Solomon Islands

Mission

To offer leading research partnership that facilitates agricultural solutions to hunger, poverty, and natural resource degradation throughout sub-Saharan Africa

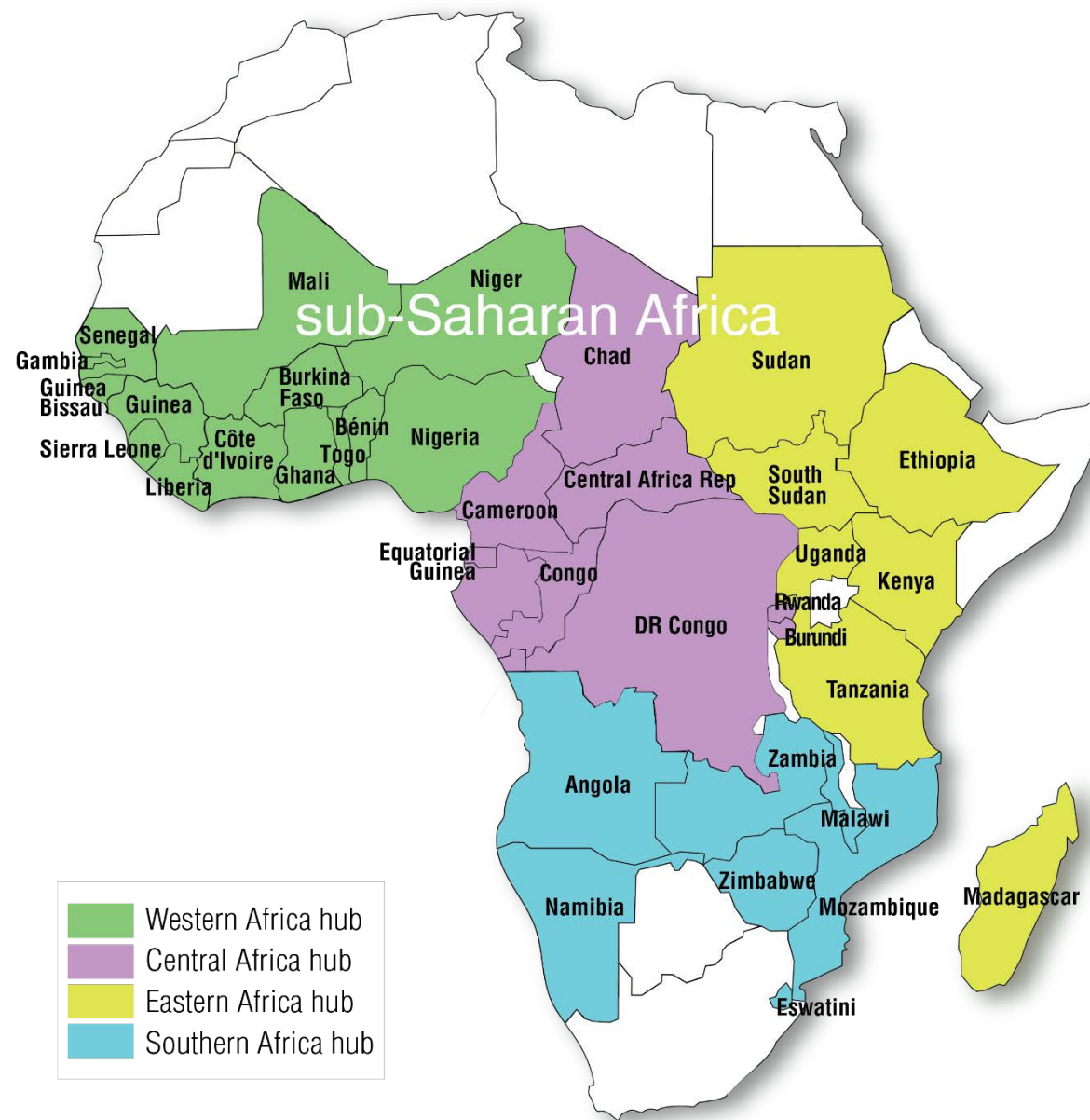
Vision

To be the lead research partner facilitating agricultural solutions to overcome hunger and poverty in the tropics



IITA Research Themes

- Biotechnology and Genetic Improvement
- Natural Resource Management
- Social Science and Agribusiness
- Plant Production and Plant Health Management



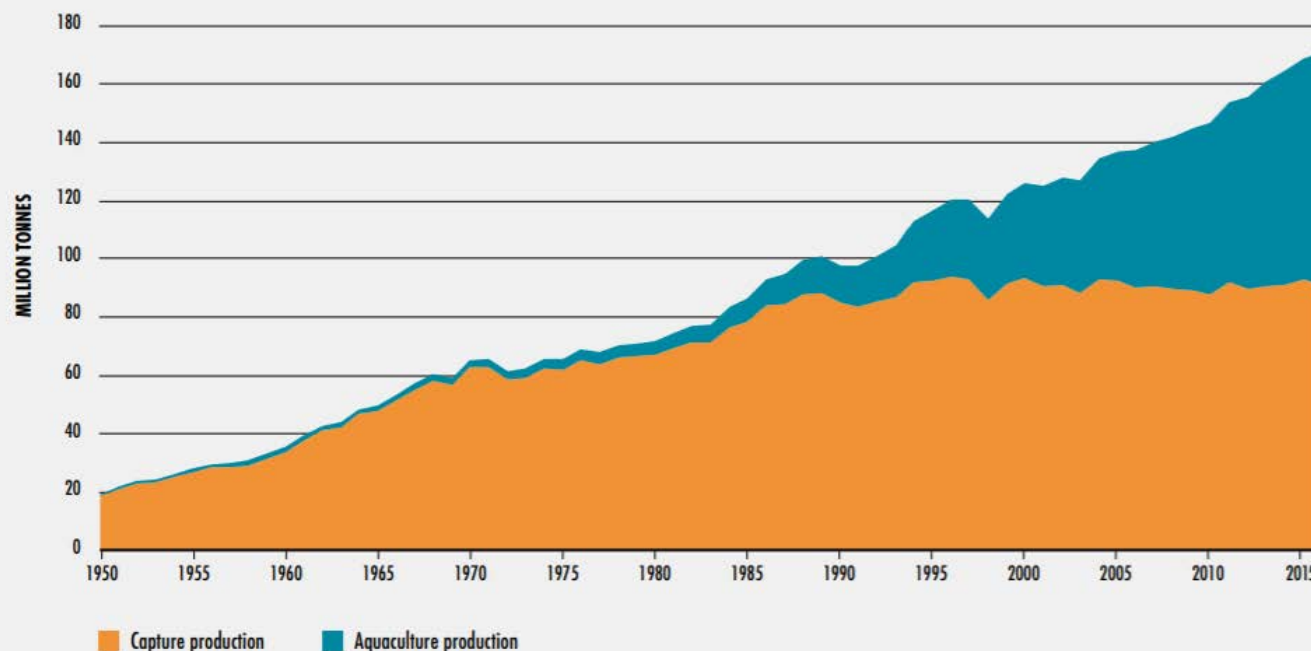
Gender

“Gender refers not to male and female, but to masculine and feminine - that is, to qualities or characteristics that society ascribes to each sex.

Perceptions of gender are deeply rooted, vary widely both within and between cultures, and change over time. But in all cultures, gender determines power and resources for females and males” (FAO 2017: 4)

Importance of fisheries and aquaculture to livelihood security

FIGURE 1
WORLD CAPTURE FISHERIES AND AQUACULTURE PRODUCTION



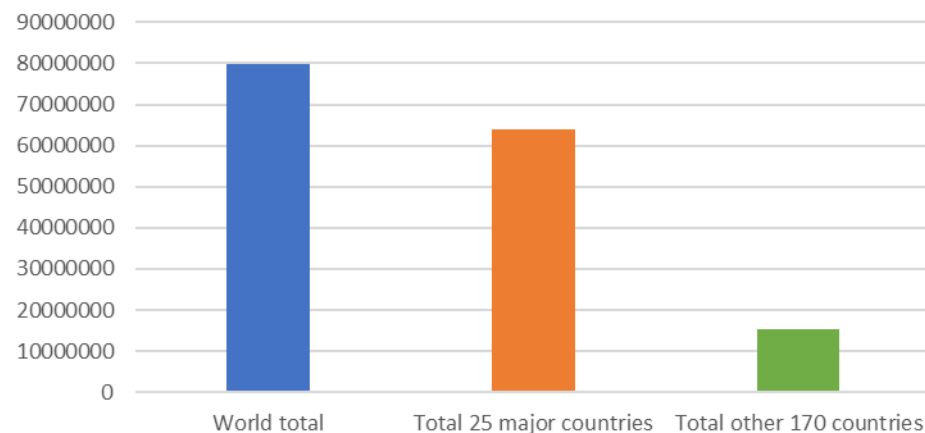
NOTE: Excludes aquatic mammals, crocodiles, alligators and caimans, seaweeds and other aquatic plants

Source: FAO (2018).

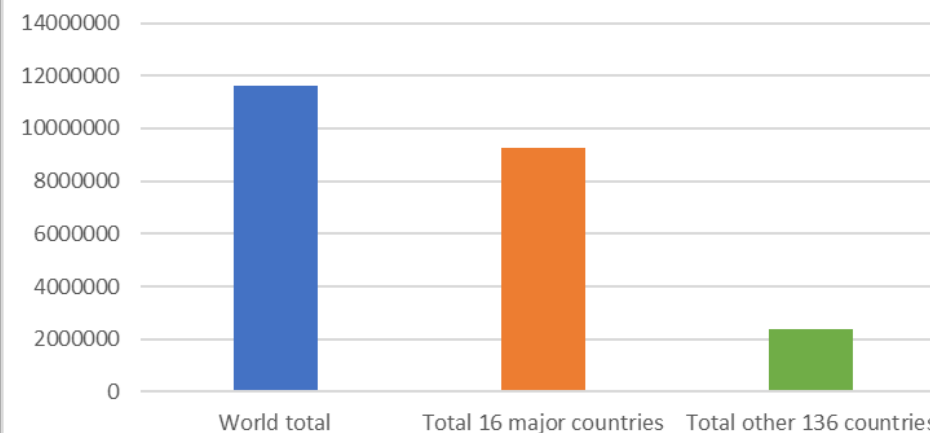
- 171 million tonnes of fish were produced in 2016 (FAO 2018)
- Human consumption accounted for 88%
- Share of production from capture fisheries was 53% and 47% from aquaculture

Importance of fisheries and aquaculture to livelihood security

**MARINE CAPTURE PRODUCTION
(TONNE)**

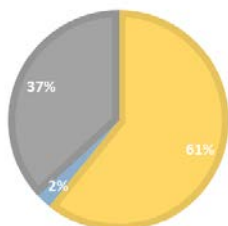


**INLAND WATERS FISHERIES PRODUCTION
(TONNE)**



SHARE OF TOTAL MARINE CAPTURE PRODUCTION FROM 25 MAJOR COUNTRIES

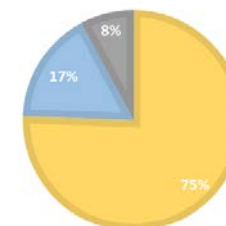
■ Asia ■ Africa ■ Other



- Small-scale fisheries contributes about 50% to the global capture fisheries production (Bennett et al. 2018)

SHARE OF TOTAL INLAND WATERS FISHERIES PRODUCTION FROM 16 MAJOR COUNTRIES

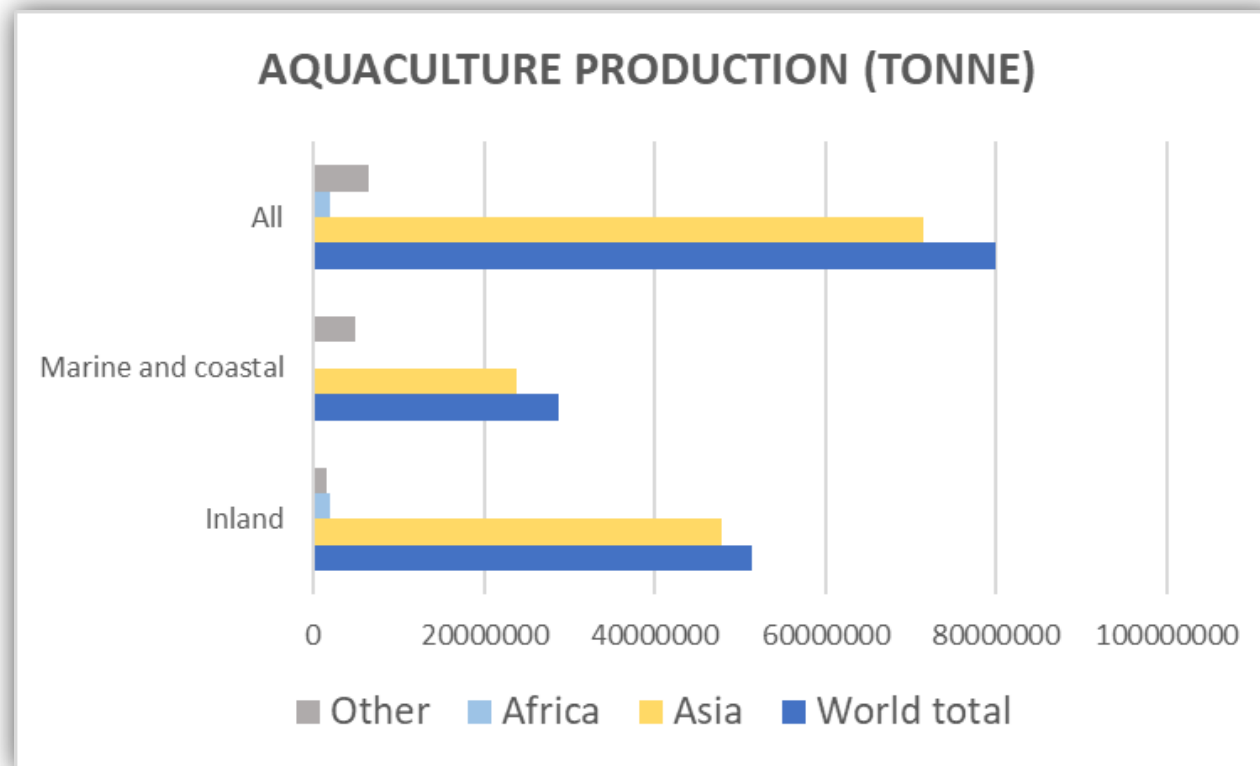
■ Asia ■ Africa ■ Other



Source: FAO (2018).

Importance of fisheries and aquaculture to livelihood security

- Asia produces over 85% of farmed fish globally (Bhujel 2012)
- 80% of farmers are termed 'small-scale' in Asia (Phillips et al. 2016)
- 90% of fish production in Egypt is produced by small-to-medium-sized enterprises (MacFadyen et al. 2012)
- In Zambia, production by larger-scale enterprises now dominates (Kaminski et al. 2018)



Source: FAO (2018).

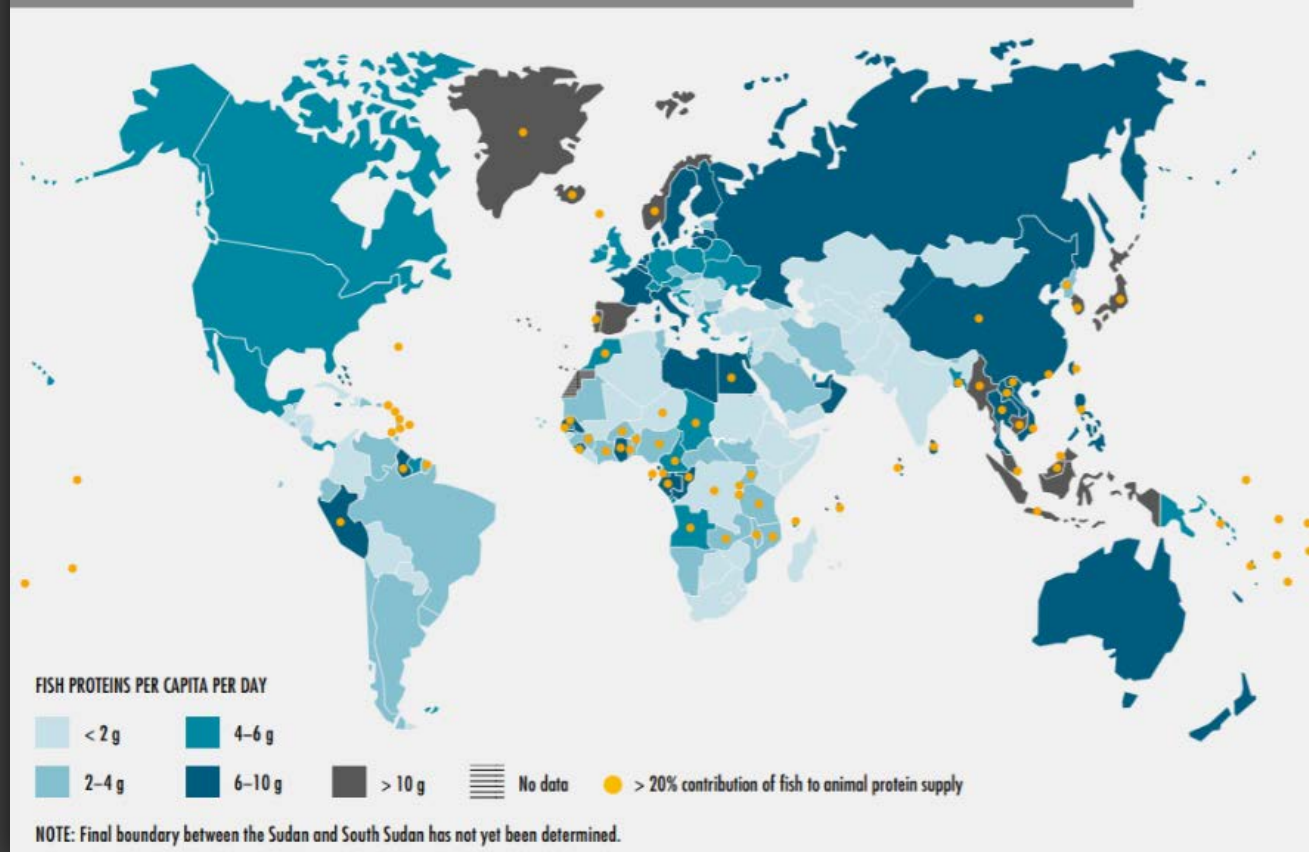
Importance of fisheries and aquaculture to livelihood security

- 59.6 million people were employed in the **primary sector** of capture fisheries and aquaculture in 2016 (FAO 2018)
 - 68% in capture fisheries
 - 14% were women
 - 85% were from Asia, 10% from Africa
 - 96% employed in aquaculture were from Asia
- Broadly, fisheries and aquaculture support the livelihoods of more than half a billion people, of which 95% come from low-income countries (FAO 2014; WorldFish 2011)

Importance of fisheries and aquaculture to livelihood security

- Fish is a key source of macro and micronutrients (Béné et al. 2015), and important for women and children in the 1,000 critical days period (Longley et al. 2014)
- Fish plays an important dietary role where staple crops make up a large portion of diets (FAO 2016)
- Fish is often more affordable than other animal-source foods (Kawarazuka and Béné 2010)

FIGURE 29
CONTRIBUTION OF FISH TO ANIMAL PROTEIN SUPPLY, AVERAGE 2013–2015



Source: FAO (2018)

Svein Jentoft
Ratana Chuenpagdee
María José Barragán-Paladines
Nicole Franz *Editors*

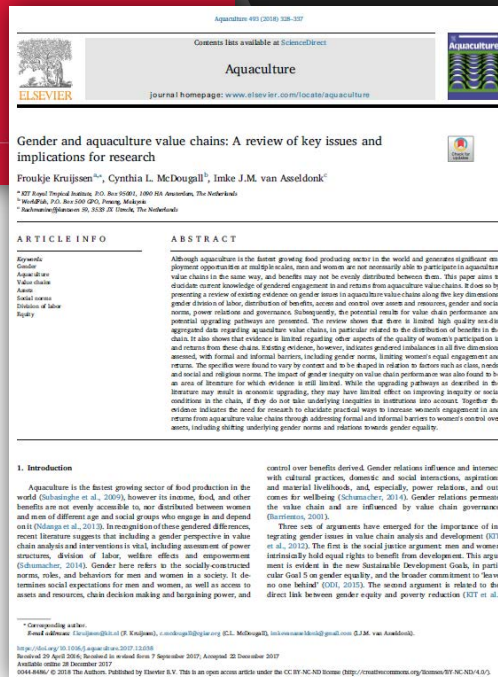
The Small-Scale Fisheries Guidelines

Global Implementation

Analytical framework

Gender dynamics in small-scale fisheries and aquaculture

- Division of labor and equal pay
- Access and control over assets and resources
- Access to markets and marketing resources
- Food and nutrition security
- Education and capacity development
- Occupational health and safety and violence
- Tenure rights
- Policy coherence
- Research and monitoring



Sources: Kleiber et al. (2017); Kruijsen et al. (2018)

Division of labor and equal pay



Women processing fish in Cambodia

- Women's involvement in aquaculture production-related activities is significant, yet they often get under-recognized in value chain analyses (Rutaisire et al. 2010; HLPE 2014)
 - Women's involvement as wild shrimp fry catchers in Bangladesh is significant (Gammage et al. 2006)
 - Women's roles processing fish is significant, yet in trading and retail women's participation varies greatly according to the context (Kruijssen et al. 2018)
 - Women are the main traders of commercial feed in Vietnam and homemade feed producers in Nigeria (Veliu et al. 2009)

Division of labor and equal pay

- Gender division of labor prohibit women from taking part in certain fisheries activities
 - Globally, women participate throughout fisheries value chains, although mainly in post-harvest activities that often remunerate less than jobs in the primary sector (FAO 2016; WorldFish 2010)
 - In Asia and West Africa, women represent 50% of inland fisheries' workforce, and market 60% and 80% of all seafood, respectively (GIZ 2013)

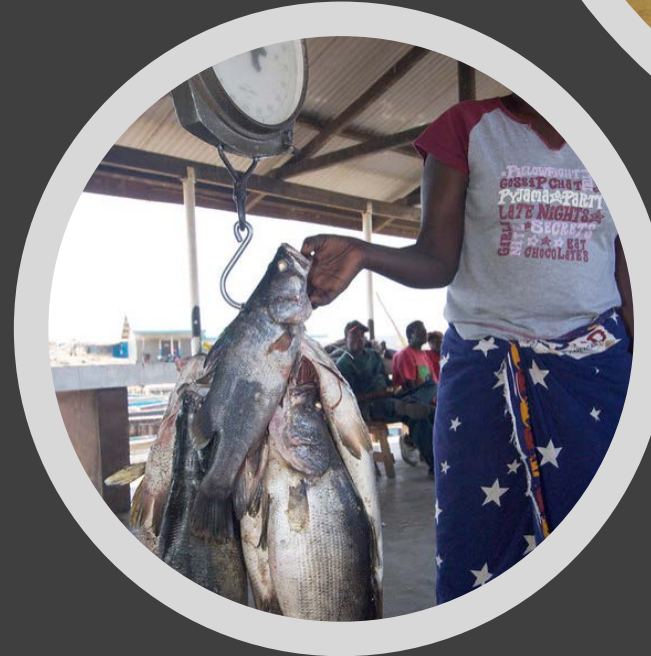
Women buying fish from male fishers in Zambia



A woman processor drying fish in Cambodia



A female fish trader in Lake Victoria



Division of labor and equal pay



Women collecting wild shrimp fry in Bangladesh

Source: <https://archive.thedailystar.net/forum/2010/january/aila.htm>

- Women's fisheries labor is often unpaid, or paid less
 - Women's labor in fisheries often goes unpaid or is characterized as being part of their household duties (Williams 2015)
- Women receive lower returns and are disproportionately represented in less-profitable nodes of aquaculture value chains (Kruijssen et al. 2013) or where jobs are regarded as especially insecure (Veliu et al. 2009)

Access and control over assets and resources

- Women may not, or are less likely to own fishing gear
 - In Zambia, women fish seasonally using homemade baskets in shallow waters
 - Men use large seine nets and dug-out canoes to fish in deeper waters
 - Results in smaller catches of smaller fish for women (Rajaratnam et al. 2015; Cole et al. 2015)



A woman and child going fishing using homemade baskets in Zambia

Access and control over assets and resources

- Aquaculture asset ownership and control among women and men is disproportionate across the globe (Kruijssen et al. 2018)
- Women lack access to or ownership of appropriate technologies (Morgan et al. 2015)
- Studies have also shown that women have less control over the income earned from their involvement in aquaculture (Halim and Ahmed 2006; Kantor and Kruijssen 2014)



A male carp farmer in his hatchery in Bangladesh

Access and control over assets and resources

- Access to financial services by farmers to invest in aquaculture is noticeably low or non-existent, and in particular women (AgCLIR 2016; Kruijssen et al. 2018b; Luomba 2013)
- Women's lack of access to credit confines them to engaging in lower-skill jobs in fishery value chains in the informal sector (Waldorff 2017)



Access to markets and marketing resources

- Fish markets may exclude or be dominated by women
 - In Kenya, both women and men participate in marketing fish, but men have access to the larger and more valuable catches (Matsue et al. 2014)
- Women may have access to inferior products than men
 - The 'loss transfer' phenomenon, where male fishers pass on lower quality fish to women processors or traders (Diei-Ouadi et al. 2015)



A woman fish retailer in a market in Egypt



Men in a fish market in Bangladesh

Food and nutrition security



A woman's small catch from fishing in Cambodia

- Women's fishing often focused on small but reliable subsistence catch
 - In the Philippines, women are more likely to be solely subsistence fishers and their catch is more reliable when other forms of fishing are not available (Kleiber 2014)
 - In Eastern Brazil, women's catch concentrates on their households' daily consumption needs, while men's larger but more variable catch is distributed throughout the community (Santos 2015)
- Partial harvest and cultivation of untargeted species in Zambia and Sierra Leone provide important sources of nutrients to women and children

Education and capacity development

- Differences in access to education can impact women's and men's fisheries labor
 - Lack of training in fish processing and storage leads to high post-harvest losses and waste by women (Diei-Ouadi et al. 2015; Cole et al. 2018)
- Lack of technical and formal fisheries training programs that are targeted to or include women
 - Women attend fisheries tertiary learning institutions in fewer numbers than men
 - Partly explains women's low participation as fisheries officers (WorldFish 2018; Adeokun and Adereti 2003)



A woman open-air sun drying fish in Zambia

Credit: Alexander Kaminski

Occupational health and safety and violence

- Men and women are exposed to different risks due to their different roles in value chains
 - Risks involved in fishing are high and can be fatal (Power 2008) – men are assumed to be at greater risk given their dominance as fishers
 - High alcohol and drug use by men in certain small-scale fisheries (McGoodwin 2001; Béné et al. 2007; Cole et al. 2015)
 - Low access to financial resources has led to women fish processors and traders exchanging sex for fish, putting them at higher risk of HIV infection (Seeley and Allison 2005; Béné and Merten 2008; Nagoli et al. 2010; Kwená et al. 2012)
 - As aquaculture production systems intensify, health and safety risks increase (Erundu and Anyanwu 2005)



Male fisher in Lake Turkana, Kenya

Tenure rights

- Fishing policy can displace women
 - Creation of a marine protected area displaced women seaweed collectors in India (Rajagopalan 2007)
- Women may be less likely to be granted lease or tenure over water and land resources
 - Residence norms in Zambia and Sierra Leone create challenges for women to access water bodies (Cole et al. 2015; McFerson 2012)



Women collecting shells in mangroves in Solomon Islands

Policy coherence

- Many national gender equality policies are relevant to small-scale fishing and fish farming communities, yet go unimplemented for a variety of reasons (Kleiber et al. 2017)
 - Lack of human and financial resources
 - Lack of capacities
 - Male dominated sector
- Women are rarely involved in fisheries co-management or governance decision-making processes at community, regional or national levels due to a variety of reasons (WorldFish 2010; Di Ciommo and Schiavetti 2012)



Women fish traders in Mali

Research and monitoring

- Lack of sex-disaggregated data collection
 - Data on fishery employment are biased towards the harvest rather than the post-harvest sector, thus ignoring the role of women (Funge-Smith and Bennett 2019)
 - Employment data are often not sex disaggregated
 - Leads to an underrepresentation of the role of women in fisheries and aquaculture (Kleiber et al. 2015; Siason et al. 2002; Kruijssen et al. 2018)



Knowledge and evidence gaps

- Gender inequalities in small-scale fisheries and aquaculture are pervasive and limit the extent to which these sectors can contribute to enhancing people's food, nutrition, and economic security (Weeratunge-Starkloff and Pant 2011; Cole et al. 2014; Cole et al. *forthcoming*)
- Unequal gender norms, attitudes and power relations are the underlying (or root) causes of gender inequalities in small-scale fisheries and aquaculture (Cole et al. 2014; Kruijssen et al. 2018)
- Gender norms "...are collectively (rather than individually) held definitions of socially approved behavior...deeply engrained in our identities and sense of self" (van Eerdewijk et al. 2017, p. 40). They shape what women and men can do, who they can interact with, their mobility, etc.
- Attitudes about gender norms are important components of institutional structures that determine the empowerment of women and men, girls and boys (van Eerdewijk et al. 2017)

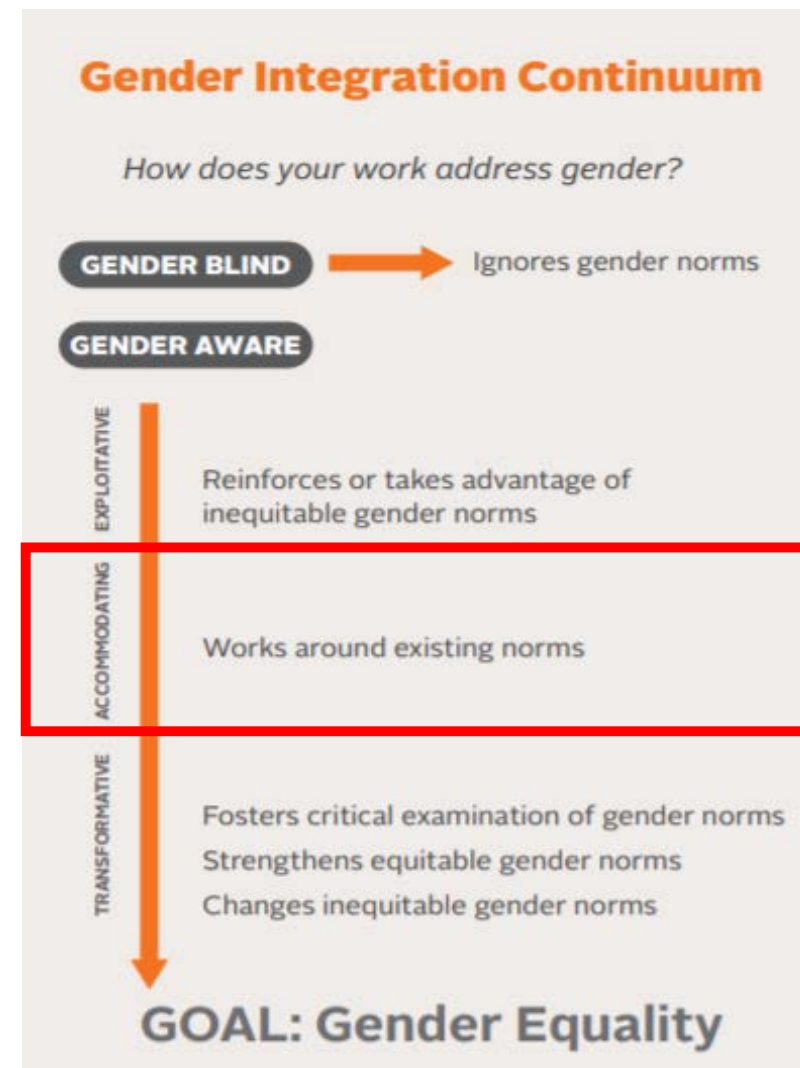
Knowledge and evidence gaps

- Unequal gender norms, attitudes, and power relations thus influence women's and men's participation in and benefit from small-scale fisheries and aquaculture value chains (Kruijssen et al. 2018; Kantor and Kruijssen 2014; Farnworth et al. 2015; Morgan et al. 2016)
 - The types and locations of reproductive and productive works considered acceptable for women and men
 - The time women and men have to do different types of work
 - Their decision-making powers and control over the income earned
 - Their adoption and use of fisheries and aquaculture knowledge, technologies and practices

Moving the needle

Gender accommodating approach

- Commonly referred to as the ‘business as usual’ approach
- Does not contribute to substantive or lasting shifts in gender imbalances in small-scale fisheries and aquaculture (Kantor 2013; Cole et al. 2014; McDougall et al. 2015)
- Recognizes gender-based constraints, but seeks to work ‘around’ these constraints to engage women rather than challenging the barriers that limit women’s participation in or capacities to derive benefits from value chains (Interagency Gender Working Group 2017)
- Thus, the approach only engages with visible gender gaps and not with the underlying structural barriers that create gaps such as unequal attitudes, norms, and power relations (Cole et al. 2015)

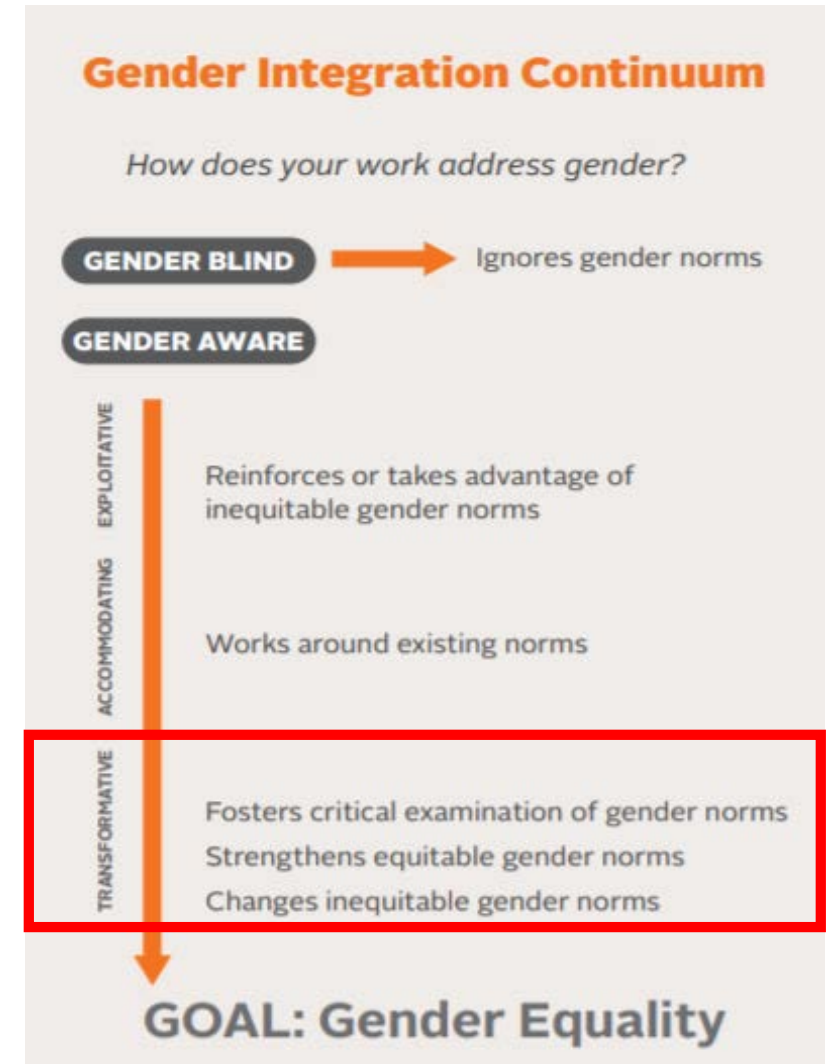


Source: [FHI360 Gender Integration Framework](https://www.cgiar.org/centers/hifi360/gender-integration-framework/)

Moving the needle

Gender transformative approach

- Recognizes gender-based constraints, but seeks to engage with and reduce or overcome the constraints, not work around them (Interagency Gender Working Group 2017)
- “Encourage critical awareness among men and women of gender roles and norms; promote the position of women; challenge the distribution of resources and allocation of duties between men and women; and/or address the power relationships between women and others in the community” (Rottach et al. 2009: 8)

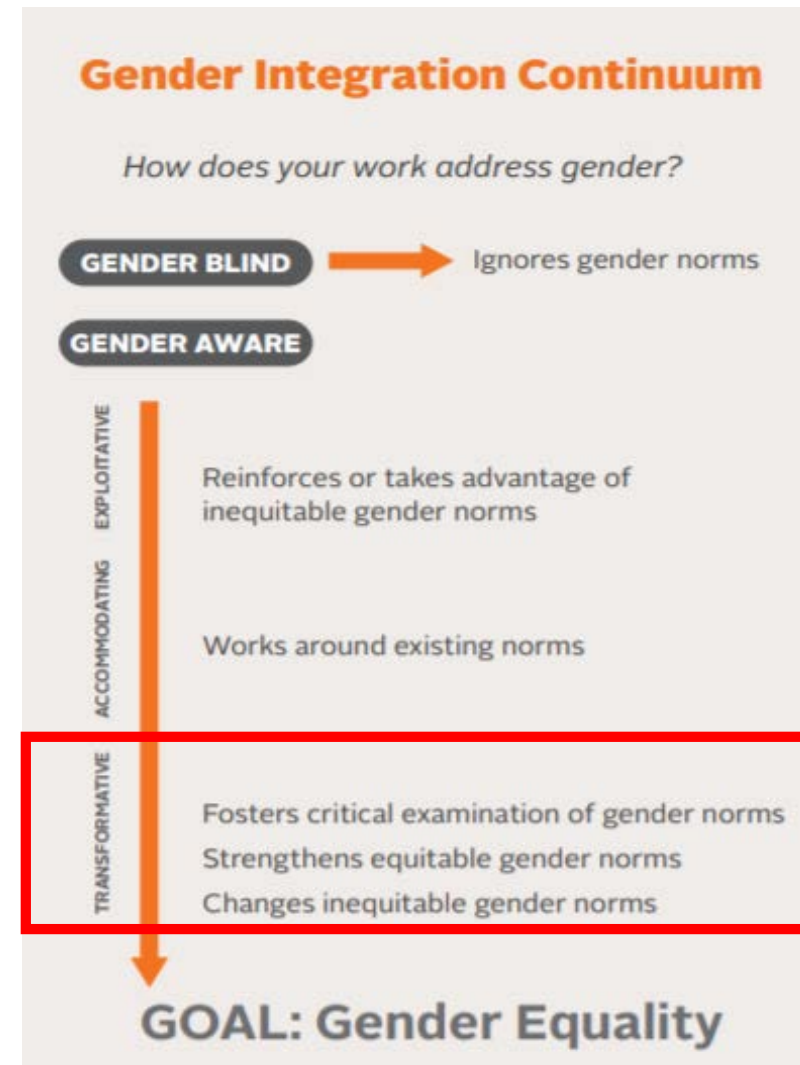


Source: [FHI360 Gender Integration Framework](https://www.fhi360.org/gender-integration-framework)

Moving the needle

Gender transformative approach

- Includes opportunities for women and men to jointly identify what shifts in norms, behaviors or other barriers they would like to see, as well as provides a space to try out new ways of being (Wong et al. 2019; Hillenbrand et al. 2015)
- It means building a ‘critical consciousness’, which is a “process of changing the way people see and experience their worlds that can raise awareness of inequalities, stimulate indignation about injustice and generate the impetus to act together to change society” (Cornwall 2016: 344)



Source: [FHI360 Gender Integration Framework](https://www.fhi360.org/gender-integration-framework)

Conclusion

- Gender dynamics in small-scale fisheries and aquaculture are complex, and require the use of different approaches to understand how and why and where gender inequalities exist
- Research that uncovers gender differences in small-scale fisheries and aquaculture can only inform how to fill gender gaps, but is not capable of uncovering the underlying causes of gender inequalities and determining ways development programs can address the root causes of gender inequalities
- Research that incorporates the use of a gender transformative approach enables a deeper understanding of the unequal norms, attitudes, and power relations that create the differences that exist between women and men in small-scale fisheries and aquaculture
- Gender transformative approaches use this knowledge to create opportunities for women and men to critically reflect on and challenge the unequal norms, attitudes and power relations
- Through their use, research and development efforts can have a greater impact on the lives of all people who depend on fisheries and aquaculture for their livelihoods

Acknowledgments

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<https://www.flickr.com/photos/theworldfishcenter/albums>





Thank you!