



Women in Freshwater Fisheries in South Asia: Scoping Case Studies from India and Bangladesh

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Introduction

- India and Bangladesh are two important South Asian countries rich in freshwater resources which contribute to livelihood of small-scale women fishers.
- Women fishers engage in subsistence fishing and assist their families in ancillary activities.
- Women in freshwater fisheries have received little attention in spite of the different challenges in their participation in contrast to coastal fisheries.



Objectives

- Women's role in freshwater fisheries comprising lakes, reservoirs, floodplain wetlands, and rivers
- Women's contribution in post-harvest activities
- Women's position in *vis-à-vis* policies and regulations in both the countries as a part of an emerging global effort to provide a better focus on women's contribution and their status in freshwater fisheries



Methodology

- Literature qualified for review was primarily sourced by using the *Google Scholar* search engine to perform sequential online searches for participation of women in fisheries in the particular freshwater fisheries resource in India and Bangladesh and similar pre-identified terms (Hind, 2015).
- A systematic approach was used where all papers, reports, and books were included that met a criteria of documenting information that authors believed could be attributed to women's participation in freshwater fisheries.
- Searches were terminated when fewer than 5 of 10 publications on a results page met inclusion criteria.
- More than 100 research outputs ultimately fit the inclusion criteria and some are referenced here.

Reviews in Women's Participation in Freshwater Fisheries Resources

Country	Type of Freshwater Resource	Comments	Selected References
India	Lakes	Gender in smoked fish value chain, women in Wular lake	Upadhyay et al., 2020; Habib, 2020; Shah et al., 2020; Atufa et al., 2022
	Reservoirs	Women fishing in reservoirs; gender inequities	Gopal and Ananthan, 2022; Paul et al., 2020; Paul et al., 2021
	Rivers	Socio-economic condition of women, women in employment generation	Das et al., 2022; Katiha and Ekka, 2012; Pownkumar et al., 2022; Katiha et al., 2013; Katiha et al., 2017; Chakraborty et al., 2024
	Wetlands	Indigenous fishing techniques by women	Das et al., 2017; Adhya and Banerjee, 2022; Kalita et al., 2019; Singh et al., 2022; Dubey et al., 2023; Hoque and Sharma, 2020; Sonowal, 2020; Inaotombi and Mahanta, 2016

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Bangladesh	Rivers	Climate-induced vulnerabilities for women	Hossen et al., 2021; Sharmin and Islam, 2013; Ferdous and Mallik, 2019; Rokunuzzaman et al., 2024; Mustafa, 2020
	Wetlands	Women's participation in fish drying, climate-induced vulnerabilities for women	Ahmed et al., 2008; Rahman et al., 2017; Belton et al., 2017; Roy et al., 2022; Ali and Grobicki, 2016; Sultana and Thompson 2008; Rahman, 2022; Sharmin and Khan, 2012



Map not to scale

Results

Women's roles in lake fisheries in India

- The activities where women participate in lake fisheries are fishing, fish marketing, water chestnut harvesting and fish drying (in Wular lake in Jammu and Kashmir).
- The native fishing community of Wular lake in Jammu and Kashmir are called Haanz which witnesses women's traditional participation in fisheries in fish marketing throughout the year, and water chestnut (trapa) harvesting from August to September and its processing from August to March.
- In Loktak lake in the North-Eastern state Manipur, women fish using small canoes with dip nets, scoop nets and traps using locally fabricated bamboos.



Women in reservoir fisheries

- In reservoirs, women go for fishing in small groups in coracles or in small canoes for gill net fishing (peninsular southern region of India).



Women in wetland fisheries

- Floodplain wetlands, which are a characteristic of West Bengal, Bihar, Uttar Pradesh and the North-Eastern region and rich in small indigenous fishery, witness women's participation in group fishing in shallow fishing grounds using canoes.
- Women also carry out fishing in groups in the margin of paddy fields, ditches and other water-logged areas.
- Mollusc collection and the hardships associated with it such as searching for molluscs in waist-deep water in wetlands and then selling them door-to-door for higher profit margins, are also depicted in the role of women fishers in Dankuni wetland in the lower Gangetic floodplains in West Bengal.



Women in riverine fisheries

- Women participate in fishing when they accompany their husbands during fishing, and also engage in net fabrication, fish marketing, live bait collection, fish sorting and post-harvest activities.
- Women in river Cauvery have been noted to make significant economic contributions in its fisheries where female fishers were actively engaged in both fishing and fish marketing.
- Tribal women fishers in Vazhachal Forest Division on the bank of Chalakudy river in Kerala opted for active mode of fishing with gears that can be moved or dragged like hooks and lines.



Women's contribution in post-harvest activities

- In India, women are engaged in post-harvest activities such as drying and processing fish, and marketing, and engaging in door-to-door sales.
- Their contributions also include fabricating fishing gear and collecting live baits.
- Women's participation in Hilsa fish marketing was also visible in the lower stretch of river Hooghly in West Bengal.
- In Hogenakkal, a popular waterfall in the river Cauvery basin, women run and manage fish restaurants to supplement their families' income from fishing.



Women's position in *vis-à-vis* policies and regulations

- Inland fisheries is an exclusively state subject in India with policies and legislations varying from state to state.
- Access rights are granted to private co-operative societies and contractors through licensing and leasing in many water bodies and gender inequity is common in women's representation.
- Gender inequities such as dominance of male fishers in the activities of co-operative societies and decision-making activities were also identified in Peechi reservoir fisheries in Kerala.
- A significant policy issue is access to fishing rights, considering gendered fishing practices, spaces, and gears. Government policies and programmes should be sensitive to address women's practical and strategic needs for gender transformative changes to happen.

Women's roles in freshwater fisheries resources in Bangladesh

- About 94% of the inland aquatic resources (6.7 million ha) of the country is used for open water capture fisheries.
- Rivers, canals and estuaries occupies an area of 1.032 million ha, while beels and haors occupy an area of 0.114 million ha (Alam et al., 2007).
- Fish and fish products are the country's second largest export earning commodity.
- Women's participation in inland capture fisheries was traditionally mostly by elderly and widowed women from among the Hindu minorities.
- They harvested fish for household consumption and sale in the southern part of the country.
- Women are also traditionally involved in collection of aquatic plants and snails in wetlands, while men are involved in fishing.

Women's contribution in post-harvest activities

- In Bangladesh, significant participation of women was observed in activities such as fish sorting and grading, cleaning and salting.
- Fish drying is an important commercial activity in Bangladesh in which the participation of women is traditional in nature.
- Significant participation of women was observed in activities such as fish sorting and grading, cleaning and salting, and fish drying in Chalan beel in the northern part of Bangladesh especially in Natore and Pabna districts, but is often accompanied by discriminatory practices in terms of pay.
- Women were responsible primarily for sorting fresh fish by species, tying pairs of churri and loitya together so that they can be hung up, and turning and further sorting of mixed fish species during the drying process.



Fish drying carried out by women in Bangladesh at Tanguar Haor

Women's position in *vis-à-vis* policies and regulations

- Some women fishers have gained community recognition as successful women leaders in Community Based Organizations.
- Women from Hilsa fisher families were provided with support to form Fisher Women Community Savings Group to teach them financial management during Hilsa ban period by ECOFISH Bangladesh.
- The way climate change is affecting freshwater ecosystems in Bangladesh is posing major socio-economic challenges for the marginalized populace, and for women in particular who rely on them.
- Women in the lower Teesta basin in northwest Bangladesh faced vulnerability through chronic social discrimination, lack of property ownership, illiteracy, early marriage, dowry system and domestic violence.
- Women's needs and aspirations were assessed in Tanguar Haor, an Ecologically Critical Area in fisheries co-management projects where it was found that women were marginalized in resource use and decision-making.

Summary

- In India, women participate in freshwater fisheries in lakes, rivers, and floodplain wetlands, often exhibiting similar engagement patterns along with some habitat-specific activities.
- Women suffer from inaccessibility to major markets in cities for fish sale, deal with absence of basic facilities such as drinking water, have limited access to resources and assets, face gender inequities in activities of co-operative societies, and are subject to domestic violence, besides dealing with poor infrastructural development in fishing villages, disadvantage of remoteness of location and connectivity, and social unrest.
- The way climate change is affecting freshwater ecosystems in Bangladesh is posing major socio-economic challenges for women who rely on them.
- Cultural norms and the extent to which women and men directly use or interact with resources affect women's participation in decision-making and community institutions.

Conclusion

- There are regional variations in women's participation in freshwater fisheries across the countries, which are influenced by cultural, traditional and societal norms.
- Despite such vital contributions, women rarely hold leadership positions, limiting their influence in management decisions.
- There are no data or official records of women involved in freshwater capture fisheries nor are the women given the status of licensed fishers.
- Government policies and programmes should be sensitive to address women's practical and strategic needs for gender transformative changes to happen.

Thank You

