

Transboundary water governance between India and Bangladesh: A Small-scale Fisheries Perspective

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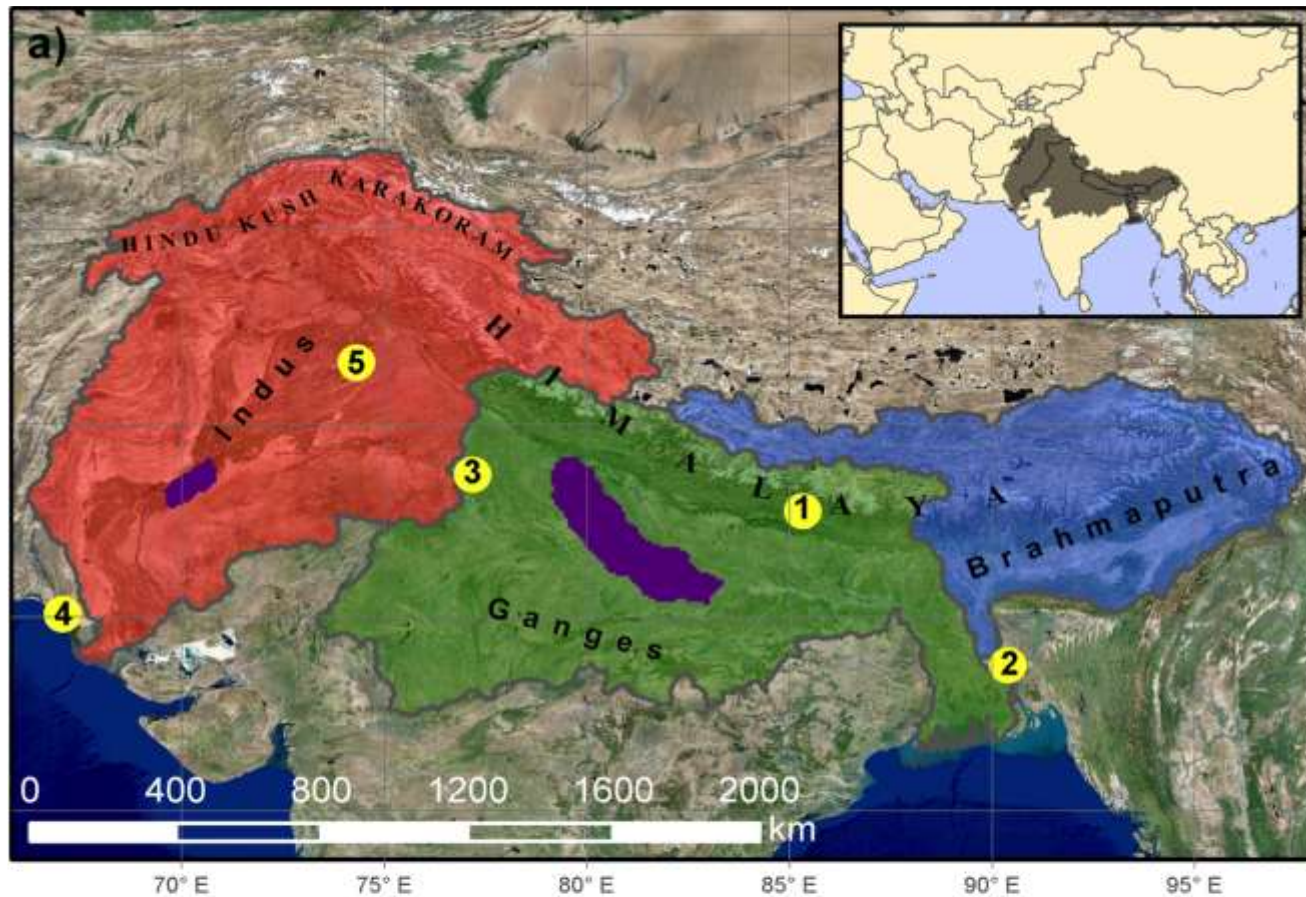
International Collective in Support of Fishworkers (ICSF) Trust

Fisheries Governance: Transboundary Cooperation between
Bangladesh and India

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Wetlands and watercourses in India and Bangladesh

- India has the fourth largest freshwater surface area in the world, an area of about 314,070 km² or 9.55% of the country. Freshwater resources cover 7% (10,080 km²) of the total area of Bangladesh.
- Inland waters comprise river systems, upland lakes, reservoirs, freshwater ponds, floodplain wetlands, lagoons, brackish water ponds, and estuaries and estuarine wetlands.
- India and Bangladesh share 54 rivers – the Ganges-Brahmaputra-Meghna are the main transboundary river systems.



River basins

- Indus
- Ganges
- Brahmaputra

Major cities

- 1 Kathmandu
- 2 Dhaka
- 3 Delhi
- 4 Karachi
- 5 Lahore

- Command areas irrigation

Freshwater fish production systems

- Most freshwater fish production systems in the two countries fall within one of their numerous **river basins**.
- **Diverse inland fish production systems**: capture fisheries systems in watercourses and wetlands; culture-based fisheries systems in seasonal reservoirs and floodplain lakes; enhancement fisheries systems in permanent large reservoirs and open floodplains; and aquaculture systems
- The **aquaculture systems** include: (i) freshwater aquaculture and cage aquaculture systems; (ii) integrated culture systems; and (iii) coastal aquaculture systems

Freshwater fish production in India and Bangladesh

- In 2018, India produced 13.76 mmt of fish (56% inland culture, **6% inland capture**, 38% marine capture). In 2017, Bangladesh produced 4.27 mmt of fish (**28% inland capture**, 56% inland culture and 16% marine capture)
- All inland capture and culture-based fisheries in India and Bangladesh are **small-scale**
- Almost all freshwater fish is consumed as food **domestically** (except hilsa from Bangladesh).

Importance of inland fisheries and aquaculture

- Inland fisheries and aquaculture are a source of accessible and affordable animal protein, particularly to the rural population.
- Wide variation in fish consumption in India (Annual per capita consumption: 3-4kg). In Bangladesh, annual per capita fish consumption is 22 kg. Fish contributes 60% of animal protein supply.
- Inland fishers number over 1 million in both countries. Several million in pre- and post-harvest activities. Women dominate post-harvest fisheries.
- Three-quarters of India's fishing community are estimated to be in freshwater fish production systems. They belong mostly to backward classes and also to scheduled castes and tribes.
- Freshwater fish production systems contribute to food security and nutrition, public health, employment and poverty eradication

Challenges

- Riverine capture fisheries are very stressed due to water abstraction for irrigation and power generation, poor flows (due to dams and barrages), pollution, conflicts and domination of the State over fishing rights.
- In floodplain lakes and seasonal waterbodies, siltation, weed infestation and human encroachment have affected fisheries.
- Destructive fishing practices such as the use of poison, electrofishing, dynamite, fine-meshed nets, etc. have harmed riverine biodiversity.
- Climate change and disaster risk affect both marine and inland fishing communities

Transboundary river management 1

- International issues related to watercourses are most often dealt with bilaterally. The 1997 Watercourses Convention is yet to be ratified by India and its neighbours.
- 1996 Treaty between India and Bangladesh on Sharing of the Ganges Waters at Farakka contains no mention of fisheries. (“optimum utilisation of the water resources ... in the fields of **flood management, irrigation, river basin development and generation of hydro- power**”). No other agreements between the two countries – though several MoUs signed in 2019.
- Other than the Indus Waters Treaty (1960), the interests of fisheries and aquaculture, however, are yet to be upheld in other transboundary or interstate agreements.

Transboundary river management 3

- India's Draft National Fisheries Policy 2020 envisions that "the regional dimensions will also be adequately reflected in the NFP to ensure cooperative arrangements in the trans-boundary management of shared fisheries ecosystems and the resources contained in them and in the interest of their long-term sustainability."

Transboundary river management globally

- The Nile Basin Initiative (NBI) is an intergovernmental partnership of 10 Nile Basin countries, namely Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, The Sudan, Tanzania and Uganda
- The Mekong River Commission is an intergovernmental organisation for regional dialogue and cooperation in the Lower Mekong River Basin, established in 1995 based on the Mekong Agreement between Cambodia, Lao PDR, Thailand and Viet Nam. (China and Myanmar are dialogue partners.)

Water governance and inland small-scale fisheries in Bangladesh

- The construction of the **Farakka Barrage** on the Ganga has impacted hilsa migration and hence its abundance further upstream in India and downstream in Bangladesh (IUCN).
- Since the 1960s, the **share of fish from inland watercourses in Bangladesh** has declined from 90% to 28% of total production, while marine capture and aquaculture operations have increased rapidly.
- In 1987, 43% of Bangladesh's total Hilsa catch came from inland fisheries and 57% from the marine sector. In 2015-16, 35% came from inland and 65% from the marine sector.
- **Bangladesh National Water Policy, 1999** explicitly recognizes the contribution of fisheries to poverty alleviation, nutrition, and employment generation, and the need for reasonable allocation of water for fisheries livelihoods.

Human right to water

- The human right to water is indispensable for leading a life in human dignity (UN CESCR)
- The UN 2030 Agenda for Sustainable Development reiterates the right to water as a human right.
- SDG 6 (“to ensure availability and sustainable management of water and sanitation for all”) and its targets call on States to ensure sustainable access to water resources, also for purposes including fisheries to realize the right to food and secure livelihood.

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (The SSF Guidelines)

- Where transboundary and other similar issues exist, e.g. shared waters and fishery resources, States should work together to ensure that the **tenure rights of small-scale fishing communities** that are granted are protected. (5.19)
- States should recognize and address the underlying causes and consequences of **transboundary movement of fishers** and contribute to the understanding of transboundary issues affecting the sustainability of small-scale fisheries. (6.11)
- All parties should promote the **availability, flow and exchange of information**, including on aquatic transboundary resources, through the establishment or use of appropriate existing platforms and networks at community, national, subregional and regional level, including both horizontal and vertical two-way information flows. (11.8)

Recommendations

- Uphold interests of fisheries and aquaculture by recognizing them as non-consumptive uses of water in national water policies (India) and in transboundary agreements.
- Make provisions for fisheries and aquaculture stakeholders to influence and participate in water management.
- Develop a viable mechanism for allocating freshwater resources between competing uses of water.
- Responsibly manage freshwater sources for consumptive use, including sustainable farming and irrigation practices, adopting a basin approach.
- Share information, not only on hydrological flows but also on fish and other aquatic biodiversity



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