

Too Big To Ignore

Number 03.1/2015



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Global Partnership for Small-Scale Fisheries Research

TBTI “Inland Fisheries Cluster”

Concept note

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RESEARCH

POLICY

MOBILIZATION

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Number 03.3/2015

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Introduction

Where do inland fisheries stand in the world of small-scale fisheries? Both in terms of policy and research, this is a question not frequently asked and even less frequently answered. Yet, we know that inland fisheries have occurred since time immemorial and still abound in many different contexts and locations – both in the Global South and North, and for commercial, subsistence and recreational purposes. With few exceptions, inland fisheries, either capture or culture, are small-scale. According to the Food and Agriculture Organization, inland fisheries production has steadily increased in the last decade, contributing over 30 percent of the total fisheries catch in 2012.¹ Another estimate by Robin Welcomme, a leading scholar in the field, suggests that inland fish production could rival that of marine when all bodies of fresh water (e.g., small streams, ponds, lakes, and rivers which are currently not assessed) are accounted for globally.² Inland fisheries are crucial sources of animal protein and micronutrients, particularly in developing countries, playing an important role in ensuring global food security.³ They also generate large economic values, as demonstrated by the total multiplier effect of over US\$7 billion in the North American Great Lakes recreational fishery, for instance.⁴ Furthermore, since nearly 60 percent of the world's freshwater falls within a transboundary basin, in which at least one of the tributaries crosses a political boundary⁵, governance of inland fisheries is a challenging endeavour. Major issues that face the sector include overfishing, biodiversity loss, habitat degradation, invasive species as well as socio-political factors that relate to tenure rights or large-scale hydro development.

Despite the inland fisheries' significant contributions and challenges, which are in many ways not unlike those of marine counterparts⁶, they have so far failed to capture adequate attention of the public and thereby generate political will deemed necessary to sustain effective conservation and management efforts.⁷ Introspectively, within the sphere of small-scale fisheries research, one may wonder if the same thing is happening. Is the research community paying insufficient attention to inland fisheries? Have we failed to emphasize inland fisheries even though they are in reality *too big to ignore*?

Setting the scene

The Global Conference on Inland Fisheries (<http://inlandfisheries.org/>) held at the FAO headquarters in Rome in January 2015 was a landmark event that gave undiluted attention to inland fisheries from multiple angles. Through active participation of delegates from around the world, it aimed to deliberate a concerted statement on urgent research agenda and on-the-ground implementation needs. It also focused on raising political action required to better incorporate the concerns of inland fisheries into policy. The conference resulted in several key messages, including:

- Improving biological and production data assessment: Obtaining accurate and complete information about inland fisheries production is a difficult process because most inland fisheries activities are small-scale, highly dispersed, wherein the harvest is for subsistence, or traded or consumed locally and generally unreported to governmental agencies. Similarly, considerable numbers of fish caught by recreational fishing are consumed but remain unreported. This points to a need to put efforts in developing standardized methods of biological assessment of inland fish populations and harvest, which would include data collection, database management, data sharing and reporting at the appropriate local, national and global scales.
- Adequate valuing of economic, social and cultural dimensions: There has often been a lack of recognition of the cultural values, beliefs, knowledge, social organization and diverse livelihood practices of inland fishers, fish workers and their communities including indigenous people. This has often resulted in policies that exclude these groups and increase the vulnerability of fishing communities. Such exclusion deprived them of culturally and economically important connections and access to aquatic ecosystems and the services they deliver. A comprehensive “valuation” of inland fisheries’ economic, nutritional, and cultural contributions to ecosystem health and human societal wellbeing is required to avoid underestimation of the true economic and social value of well-governed inland fisheries.
- Negotiating external threats and seeking cross-sectoral integration: The production of inland fisheries is dependent upon the quantity and quality of freshwater and freshwater aquatic habitats and is predominantly influenced by factors external to the fisheries. Many of the competing uses of freshwater resources, such as agriculture, domestic use and power generation, and the lack of cross-sectoral integration among them are negatively impacting them. With the human population

expected to exceed 9 billion by 2050, increasing demands for freshwater will further impact the productivity of inland waters. There is an urgent need to promote cross-sectoral fora to facilitate discussions about the trade-offs and synergies of inland freshwater development options that consider the fishery sector as an equitable partner in resource management.

- Achieving transboundary and inter-jurisdictional coordination: Many international and transboundary inland water bodies do not have a governance structure that holistically governs the use and development of fishery resources. This often results in decisions being made in one location that adversely impact resources, food security, and livelihoods in another area. Establishing joint governance institutions, e.g., river or lake basin authorities, or expanding the mandate and capacity of existing institutions to address or incorporate inland fisheries in the multilateral decision making processes need to be considered. This is also to be accompanied by governments committing to implement internationally agreed decisions through their national policies.

Potential research questions

TBTI Inland Fisheries cluster is poised to utilize the momentum gathered in the Rome conference (and also from other similar regional and global efforts). Taking a global perspective, our research can thus be closely aligned with the key messages, so that three inter-related research possibilities outlined below can collectively aim towards raising the profile of inland small-scale fisheries in multi-sectoral, transboundary policy setting and inform ways to achieve a more accurate capture of production data and diverse social-cultural-nutritional values.

- How can the cultural values of inland fisheries (e.g., recreational, spiritual, heritage values), societal benefits (e.g., in terms of nutrition and livelihood), contribution to ecosystem health (e.g., stewardship) be more meaningfully captured and what do they amount to? Can we design or utilize existing or currently developing tools to empirically assess their societal contributions in multiple locations?
- What would an inter-sectorally coordinated governance mechanism for inland fisheries look like? Are there synergistic linkages with other sectors that benefit inland small-scale fisheries, as observed from tropical floodplain rice-fish cultivation, for instance? Otherwise, what are the threats and vulnerabilities they face from the

development of external sectors such as irrigated agriculture and large-scale hydroelectric projects? Similarly, are there conflicts between different sectors within inland fisheries, for example, between recreational and commercial fishery? What are the experiences around the world from which lessons can be drawn? How are the unique sectoral challenges facing each setting being dealt with?

- What would a coordinated transboundary or cross-scale governance mechanism for inland fisheries look like? Are decision-making structures and processes set up for one jurisdictional level adequate for another level, or are there mismatches? Is a joint management institution an answer? What are the experiences around the world from which lessons can be learned? How are the unique challenges facing each setting being dealt with?

Research methods

Several methodological approaches will be considered in conducting this research, each of which could entail a range of methods and techniques. The general plan involves a step-wise process, although the detailed outline of full methodology is to be designed with the input of TBTI network members and especially cluster participants. The first part will aim at producing a “global overview” that synthesizes as many responses around the world as possible about 4-5 specific key questions. Soliciting rapid response from all involved cluster participants, this approach can help generate general patterns enclosed in the questions above. In addition, this work can be combined with a concise set of questions (“Top 20 questions”) that seeks to identify the key attributes of an inland fishery, which will form part of a freely accessible global database of small-scale fisheries (i.e., the TBTI Information System on Small-Scale Fisheries (ISSF)).

The second part could involve targeting a smaller number of cases (like 10-15) to receive greater details about each inland small-scale fishery. This format is expected to produce a synopsis that not only gives adequate depth but also illustrates a wider trend that takes place beyond a particular fishery setting. As the possible third step, another option might be to connect with ongoing or finishing case studies of a few inland fisheries locations (like 2-3) to compile in-depth and context-rich understanding of the research topics suggested above. In the latter, ethnographic or survey-based methods that document traditional ecological knowledge or other ‘transdisciplinary’ evidences might be expected.

Cluster communication

The Inland Fisheries cluster will primarily rely on online, web-based meetings to discuss ideas and communicate results. The dates of these meetings will be announced in advance on the TBTI website as well as other appropriate channels (e.g., group email list). For those attending the MARE conference in Amsterdam in June 2015, there will be an opportunity to discuss cluster activities in the TBTI Cross-Cluster Meeting to be held on June 22-23, prior to the conference. Although this particular meeting is for all clusters, it is expected that it will present a useful venue for sharing updates and engaging in informal, ad-hoc chats about the Inland cluster. As the cluster activity shapes up down the road, there may arise a possibility to plan for a dedicated in-person cluster meeting (e.g., a special session at the World Fisheries Congress in Busan, South Korea, May 2016).

Expected cluster outcomes/deliverables

The results of this cluster's activities will be presented in standard academic outputs in terms of research articles. Furthermore, depending on the methods used to conduct the research, the cluster can consider production of a series of research/policy briefs suited for a speedy and high-impact dissemination of findings to a wider audience or an e-report that shall function as a resource book for addressing some of the inland fisheries' urgent issues that require global deliberation. In the process, this cluster will be aware of ongoing work and initiatives of other inland research groups to better coordinate with their work to avoid duplication and create synergy.

If you are interested in participating in the work of the Inland Fisheries cluster or have questions and/or suggestions, please contact toobigtoginore@mun.ca.

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