

Global partnership for small-scale fisheries research: Too big to ignore¹

Ratana Chuenpagdee²

Abstract

Fisheries support about 8% of the world's population. Fishers tend to be small-scale operators, and so information and knowledge about them is scattered and scarce. Contributions of small-scale fisheries to food security, well-being and resource conservation are mostly unaccounted for in policy and decision-making. The lack of detailed information about small-scale fisheries has resulted in systematic underestimation of their importance in addressing global crises, including malnutrition, poverty and biodiversity loss. The Global Partnership for Small-Scale Fisheries Research, "Too Big to Ignore", has been established to rectify the marginalisation of small-scale fisheries in national and international policies, and to develop research and governance capacity to help address global fisheries challenges.

Introduction

Fisheries support about 560 million people, or approximately 8% of the world's population, and the number is growing (Eide et al. 2011). Of about 34 million active fishers, more than 90% are small-scale operators (Béné 2005; FAO 2010). Small-scale fisheries are known for the diversity of their fishing techniques, methods, and gear types, their intimate knowledge of aquatic ecosystems, their household livelihood diversity, the significant proportion of catches that is shared and consumed at household and community levels, and their contributions to the local and global trade in fish products (Allison and Ellis 2001; Bavinck 2011; Chuenpagdee 2011). Despite their social, cultural, and economic importance, small-scale fisheries have been largely marginalised, ignored or dismissed (Pauly 2006). In many countries, this marginalisation is shown by inadequate financial, institutional, and scientific support for small-scale fisheries, and an under-representation of the concerns of people working in this sector in policy discussions (Béné and Friend 2011; Salas et al. 2007). The prevailing narrative about the dismal state of world fisheries has further obscured evidence about the contribution of small-scale fishing communities to conservation, food security, poverty alleviation, social well-being and resilience, and cultural heritage (e.g. Srinivasan et al. 2010; Symes and Phillipson 2001; Thorpe et al. 2007). In addition, the under-appreciation of the economic importance of small-scale fisheries in sustaining coastal livelihoods is a global phenomenon and concerted efforts are required to preserve the ability and "freedom" of small-scale fishers to provide economic and social well-being locally, and to contribute to global environmental sustainability (Jentoft 2011).

Following the inaugural World Small-Scale Fisheries Congress (WSFC), held in Bangkok, Thailand in October 2010, the Global Partnership for Small-Scale Fisheries Research, "Too Big to Ignore", was established as a forum for collaborative research, policy dialogue and advocacy on issues pertinent to small-scale fisheries around the world. The partnership aims to elevate the profile of small-scale fisheries, to argue against their marginalisation in national and international policies, and to develop research to address global food security and sustainability challenges in fisheries policy. The specific objectives of the partnership are to:

- provide evidence to promote recognition and understanding of the importance of small-scale fisheries to livelihoods, well-being, poverty alleviation and food security;
- explore their potential contributions to economic growth and development, environmental sustainability, stewardship, and community resilience;
- assess their vulnerability to anthropogenic global change processes such as the growth of large-scale fishing operations, climate change, aquaculture development, tourism, marine protected areas, the private enclosure of coastal spaces, urbanization and migration;
- encourage policy discussions and contribute information for improving decision-making about small-scale fisheries; and
- advance knowledge and build local and global capacity in research and governance for the future of small-scale fisheries.

¹ Based on the partnership proposal submitted to Social Sciences and Humanities Research Council of Canada; see www.toobigtoignore.net for more information.

² Canada Research Chair, Natural Resource Sustainability and Community Development, Department of Geography, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, Canada. Email: ratana@mun.ca

Key components

The “Too Big to Ignore” partnership consists of three related components. First, the Information System for Small-Scale Fisheries (ISSF) will be developed to capture key parameters of small-scale fisheries, for the undertaking of multi-level and multi-scale analysis of their contributions. Building on the early effort by Chuenpagdee et al. (2006), the ISSF will include, among other things, information about small-scale fisheries across the “fish chain” from aquatic ecosystem to plate (Johnson et al. 2005), including the nature and type of fisheries and fishing activities, fishers’ livelihood portfolio, their relationships with fish buyers and money lenders, rules and norms governing the fisheries, and key issues and challenges. ISSF will be an online, open access, web-based system, made available freely to anyone interested in data sharing and learning about small-scale fisheries. User-friendly interface, analytical tools and visualisation will be key features of the database to encourage user participation, facilitate communication and support decision-making.

The second component of “Too Big to Ignore” is concerned with the major research questions about small-scale fisheries that are important to address given the challenges they face. Based on contributions from WSFC participants, research priorities submitted by 161 people through an online survey, and regional discussions with stakeholders, including members of fishers’ groups and environmental organisations, five main research questions have been formulated to guide in-depth studies of small-scale fisheries. 1) *What options exist for improving economic viability of small-scale fisheries and increasing their resilience to large-scale processes of change?* This question stems from the realisation that the contributions of small-scale fisheries to income and employment have been noted, but there is insufficient understanding regarding the economic viability of this sector. Similarly, large-scale economic, social, political, and ecological change processes are known to affect small-scale fishing people everywhere, but the extent to which these people cope with these impacts is not known. These knowledge deficits create an environment of uncertainty for policy interventions and responses to changes, such as those related to climate change (Cheung et al. 2009), trade and subsidies (Sumaila et al. 2007) and product certification schemes (Goyert et al. 2010; Ponte 2008), which will likely increase the vulnerability of small-scale fisheries.

Decades of social science research have shown that small-scale fisheries are integral to community well-being and contribute significantly to food security, men’s, women’s, and children’s livelihoods, health, community identity, and social cohesion (e.g. Acheson and Gardner 2010; Bennett 2005). The fact that

these contributions are unaccounted for in fisheries policy suggests that comprehensive evaluation may be beneficial. Thus, question 2) asks, *What aspects of small-scale fisheries need to be accounted for and emphasised in order to increase awareness of their actual and potential social contributions and their overall societal importance?* Research to address this question will focus on understanding values of small-scale fisheries beyond economic benefits to consider, for instance, cultural, historical and inter-generational aspects.

The next big question — 3) *What alternatives are available for minimising environmental impacts and fostering stewardship within small-scale fisheries?* — recognises the various levels of impacts from different gear types (Chuenpagdee et al. 2003) and the need for a balanced consideration of factors such as differential capacity and flexibility of gears and fleets in fisheries management (McConney and Charles 2010). Because small-scale fisheries are large in number, and often operate in remote areas, often in the absence of monitoring systems, assessing the impacts of this sector on the environment is a major challenge. An integration of scientific methods, modelling and local knowledge is required to fully capture small-scale fisheries’ footprints, along with efforts to promote sensible conservation and stewardship initiatives.

Fishing is certainly not the only activity taking place in coastal areas. Population expansion, aquaculture, a growing tourism sector, marine protected areas, the emergence of other marine industries such as offshore oil and gas extraction and transportation, and increasing demands on fish and other seafood products have contributed to intensifying competition within coastal zones (e.g. Chen 2010; Pascual 2004). Effects of such competition are mostly felt by small-scale fishers who depend heavily on access to shorelines that are their homes for activities such as shellfish gathering, gleaning, and near-shore or beach seine fisheries, landing and anchoring boats. Thus, we ask, 4) *What mechanisms are required to secure livelihoods, physical space and rights for small-scale fishing people?* Research into factors and conditions underlying displacement of small-scale fishers and reallocation of their *de facto* access, use and management rights are at the heart of this research question (Pinkerton and Edwards 2009).

The final big question is related to governance is 5) *What institutions and principles are suitable for the governance of fisheries?* The underlying observation is that current governance systems are aimed largely at large-scale fisheries and do not sufficiently address the interests of small-scale fishing people, nor enable them to become directly involved in the process of governance. The diversity, complexity and dynamics of small-scale fisheries worldwide,

and the differences between small- and large-scale fisheries, pose major challenges to governance (Jentoft and Chuenpagdee 2009). More effective institutions or new ones may be needed in order to provide places for small-scale fishers to manoeuvre in the changing economic, social and political landscape within which they operate. Recognising that governance principles, norms and values that align well with those of small-scale fisheries are likely to be different from those applicable to large-scale fisheries (Kooiman and Jentoft 2009), research will examine the extent to which existing institutions and governance systems contribute to fostering or inhibiting the quality of fisheries governance.

The final component of “Too Big to Ignore” encompasses synergy creation, knowledge mobilisation and capacity building. Findings from the global analysis of small-scale fisheries, based on ISSF data, and from the in-depth research in multiple case studies to address the big questions will be integrated, synthesised, and communicated to fisheries stakeholders and policy-makers. They will also provide the basis for the development of a trans-disciplinary fisheries course, offered in various languages, and in appropriate ways, such as distance learning, online and off-line self-taught packages, field course training, or as part of the curriculum for degree programmes and other educational initiatives. Innovative tools and approaches in teaching and learning that encourage multidirectional flows of knowledge about small-scale fisheries will be introduced in each module of the training course. The practicum will contain both region-specific and globally applicable case studies. Trainees will be able to interact and communicate with “resident experts” from the partnership group and elsewhere, and among themselves to encourage exchange and learning. Institutions and community groups interested in using the courses will be invited to contribute to the case studies to enrich our knowledge about small-scale fisheries around the world.

Conclusion

Small-scale fisheries are complex and dynamic social-ecological systems. As such, they pose major research and governance challenges, which require a comprehensive research framework to address, one that not only draws on multiple disciplinary foundations but also moves beyond individual disciplines towards a transdisciplinary approach (Tress et al. 2003). While the theoretical and methodological framework for in-depth case study research will be based on disciplinary foundations, and involve the use of tools and approaches drawn from anthropology, conservation biology, ecology, economics, geography, history, political science, public administration, and sociology, a transdisciplinary research approach to fisheries will be

formulated and tested in several small-scale fisheries contexts. “Too Big to Ignore” brings senior and junior scholars from a wide range of disciplinary backgrounds to work in partnership and to interact with fishers, fisheries management professionals, and other non-academic and community members in problem-driven and context-specific research and comparative analysis of fisheries at the global scale. Lessons from these case studies and global syntheses will lead to knowledge synergy and new ways of understanding the dynamics of small-scale fisheries, and offer guidance to help reduce the vulnerability of small-scale fisheries to natural and economic shocks, while increasing their adaptability and empowerment in the face of global change processes. Ultimately, the partnership will augment the profile and capacity of small-scale fisheries in policy agendas and in areas of food security, poverty alleviation, local community development, and environmental and economic sustainability.

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