Pauly, D. 2011. Foreword, p. 15-17 In: R. Chuenpagdee (ed.) World Small-Scale Fisheries: Contemporary Visions. Eburon, Delft.

The importance of fisheries is not lost in the global policy arena. What is often overlooked in the general discourse, however, is the significant difference between small- and large-scale fisheries. Major rethinking about all aspects of small-scale fisheries is required, including their contribution to catches, employment, livelihood, food security and conservation.

This book is a collection of essays about the diverse, complex and dynamic contexts that characterize small-scale fisheries around the world. The essays highlight the strengths, capacity, motivation and contributions associated with this fishing sector. They remind us that solutions and opportunities for the viability and sustainability of small-scale fisheries can be found, once the issues are understood from a holistic perspective and possible options, including inventive governance arrangements, are fully explored.

The authors are scientists and practitioners who work in small-scale fisheries in various parts of the world, many of whom participated at the first World Small-Scale Fisheries Congress (WSFC), held in Bangkok in October 2010, and are members of the global research network for the future of small-scale fisheries, *Too Big To Ignore*. The editor, Ratana Chuenpagdee, the initiator of the WSFC, is Canada Research Chair in Natural Resource Sustainability and Community Development at Memorial University of Newfoundland, Canada.

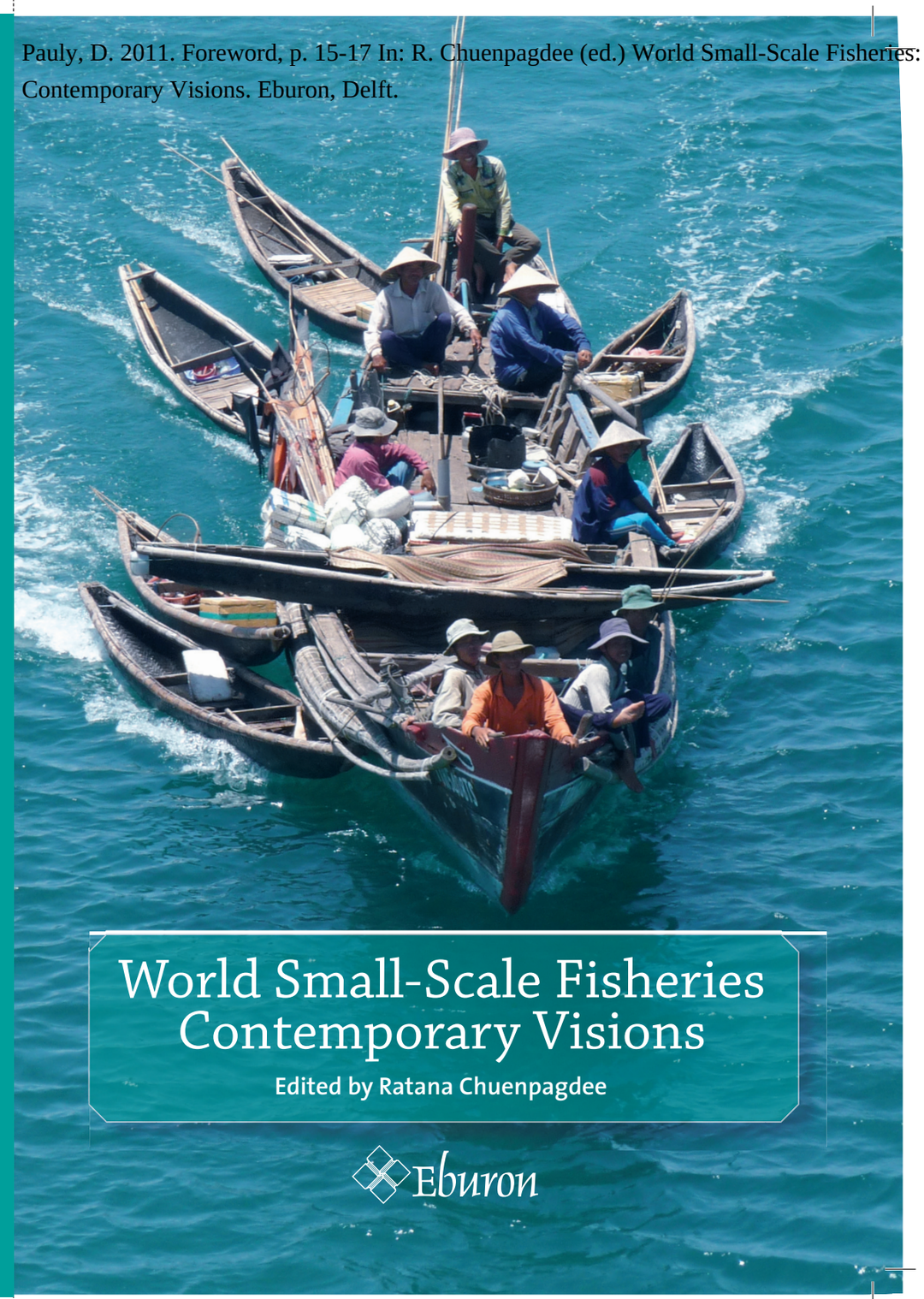
"[These essays] span the entire gamut of small-scale fisheries operations and management, showing that they are indeed, too big to ignore" Daniel Pauly

www.eburon.nl

ISBN 978-90-5972-539-3

World Small-Scale Fisheries
Contemporary Visions

Chuenpagdee (Ed.)



World Small-Scale Fisheries Contemporary Visions

Edited by Ratana Chuenpagdee

Eburon

World Small-Scale Fisheries
Contemporary Visions

Edited by
Ratana Chuenpagdee

Eburon Delft
2011

ISBN 978-90-5972-539-3

Published by Eburon Academic Publishers,
P.O. Box 2867, 2601 CW Delft, The Netherlands

On the cover: Small-scale marine 'group' fishing in Thua Thien Hue, Vietnam. Photograph by Anthony Charles.

Cover design: Studio Hermkens, Amsterdam
Graphic design: Textcetera, The Hague

CONTENTS

PREFACE

Small-scale fishing is an occupation, a source of livelihood and a way of life for millions of people around the world. It also contributes food security, economic growth and development to communities and nations. However, its conditions are not always favorable. The sector needs better governance, designed to ensure a healthy ecosystem while enhancing fishers' well-being. Small-scale fishers and their families must have an active role in this process

Several efforts have been made in the last decades by intergovernmental organizations like the Food and Agriculture Organization of the United Nations (FAO), fishers' associations and community groups – notably the International Collective in Support of Fishworkers (ICSF) – funding agencies, and scientific communities to support and protect the interests of small-scale fisheries. Yet, more can be done to improve our understanding about this important sector and to elevate its status on the policy agenda.

As this volume illustrates, fisheries are lived experience, and thus need to be examined in their own contexts, namely through in-depth analysis often conducted in social science research. Together, and individually, the 25 essays make a case for why we must pay more attention to small-scale fisheries. The essays cover a broad range of topics that illustrate the diversity, complexity and dynamics of small-scale fisheries in several places around the world, emphasizing their vulnerability and their strengths, their contributions and their limitations, as well as reflecting on their future. The unifying message from these essays is that small-scale fisheries are too big and too important to ignore. This volume is also a testimony of how social science research contributes to de-marginalizing this sector, as well as the role of this discipline in fisheries policy.

The essays are organized into seven parts. In *Chapter 1* (**Section 1**: Introduction) I recount how small- and large-scale fisheries have coexisted, describe their dynamic relationships in the shared space, and discuss the conditions needed to support the viability of small-scale fisheries. **Section 2** (Challenges and Issues) contains four essays illustrating the struggles of small-scale fisheries in maintaining their existence and livelihoods. Learning from their experience working for a community-based organization, Lokuge and Munas (*Chapter 2*) give a full account of how small-scale fishers struggle to make a living in post-war Sri Lanka. Their situation is worsened with the small-scale trawler fleet from Palk Bay, India, competing for resources, as explained by Sathyapalan and colleagues (*Chapter 3*). The Palk Bay trawl fishery has its own problem of over-capitalization and inefficient measures

to reduce capacity, due also to ineffective enforcement. In both cases, the authors offer their thoughts about what needs to be done to address the problems. In *Chapter 4*, Khattabi and Jobbins present another major threat facing small-scale fisheries – climate change. Drawing from an adaptation research project in Morocco, they explain fishing communities' vulnerability and what can be done to enhance their adaptive capacity and strengthen their resilience. The last essay in this section by Walsh (*Chapter 5*) brings us to Newfoundland, Canada where the collapse of the cod fishery resulted in major hardship to small-scale fishing people. Recovery and rebuilding efforts have not worked and the latest recommendations to restructure and rationalize the industry created more debate rather than resolution.

Section 3 (Livelihoods and Communities) includes four essays that bring us to the community level of analysis about small-scale fisheries. Starting with Frangoudes (*Chapter 6*), we learn about the prominent role of women in income and livelihood diversification, and how legislation can facilitate or inhibit their contribution in European small-scale fisheries. Lowitt follows in *Chapter 7*, with a colorful description of fish, especially cod, as a dietary staple and an important part of the traditional 'foodways' of the people in Newfoundland, and how present-day small-scale fisheries may be able to take advantage of the rise of culinary tourism to improve their food security. In *Chapter 8*, Felt and Natcher turn our attention to aboriginal communities in northern Canada, and explore challenges related to governance, integration of traditional knowledge and science, and impact of environmental change. Although we refer mostly to capture fisheries in our deliberation, we are reminded by Belton and Little (*Chapter 9*) about the importance of small-scale aquaculture in supporting livelihoods and alleviating poverty. Similar to capture fisheries, this sector faces challenges related to globalized trade, production regulation and climate variability that threaten its future. In all cases, direct policy interventions are required to promote and sustain small-scale fishing communities.

There is no shortage of tools and approaches employed to manage fisheries around the world. As exemplified in **Section 4** (Instruments and Reforms), not all of them are suitable in small-scale fisheries contexts. Property rights are among the most contentious ones, and its consequences in Icelandic fisheries are often discussed. In *Chapter 10*, Sabau offers her views on the formulation of the individual transferable quota (ITQ) in Iceland and discusses its consequences, in the short- and long-term, especially on small fishing vessels. She ends her essay with a suggestion that management systems such as ITQs are not as irreversible as they may seem, but it does

require more art than science to get it straight. Discussion about rights continues with the essay by Gasalla (*Chapter 11*) that examines fishing rights and the trade-offs with marine conservation, using territorial concepts. Based on her research on Brazil's community-based and territorial initiatives, she argues for an environmental stewardship program that considers fishers' perspectives and respects local territorial rights.

Another well-known territorial institutional arrangement is marine protected areas (MPAs). As illustrated by Pascual-Fernández and De la Cruz-Modino in their essay about MPAs in Spain (*Chapter 12*), application of this tool is not without challenges. MPAs may fuel existing conflicts or may help alleviate them. Given amenable conditions, they may provide small-scale fishers with increased control over their traditional fishing areas. Some governance arrangements can, however, undermine small-scale fisher rights. Isaacs (*Chapter 13*) provides a good example of this in her description of how the national legislation to legalize small-scale fishers in South Africa generated conflict with the practice of their livelihoods. She also calls for a new small-scale fisheries policy with clear rules about how resources should be regulated, who should participate in the harvesting, and how benefits from the fisheries should be distributed.

The other two essays in this section reinforce the importance of fishers' participation in resource management. Donda (*Chapter 14*) describes the shift from government-centered, conservation-based fisheries management to participatory fisheries management in Malawi in the early 1990s. Encouraged by the success of this management scheme, the Mbenje fishing community followed with their own initiatives, and unique achievement stories. Although public involvement in resource management is not new in Indonesia, legislation enacted in 2007 provided impetus for local governments to establish a new system of integrated and decentralized coastal management planning, focusing on marine conservation, poverty alleviation, alternative income generation and business development. The effectiveness of this program, Ginting (*Chapter 15*) submits, depends on the ability of government agencies to coordinate activities in coastal areas and to broaden coastal community empowerment.

For these various institutional arrangements to work, careful deliberation about the fundamentals of governance is needed. Five essays in **Section 5** (Governance and Principles) offer thoughtful perspectives on how to investigate them. Mahon and McConney (*Chapter 16*) provide a much needed examination of the structure and function of national fisheries departments and their suitability to manage small-scale fisheries. They submit that an appropriate mix of technical and organizational skills needs to be developed,

especially in small or developing country fisheries departments, to deal with the prevailing management issues facing small-scale fisheries. McConney and colleagues continue the discussion in *Chapter 17* calling for changes in the institutional arrangements for fisheries that aim at, among other things, creating enabling policy environments and facilitating self-organization. Drawing on the emerging concept of fisheries networks and their experience in the Caribbean, they argue that a shift in perspective is urgently needed, and is possible by translating the concepts of adaptive social-ecological systems into everyday thinking.

But as Charles suggests in *Chapter 18*, there are no universal solutions in small-scale fisheries governance. He identifies a set of 'good practices,' which include adopting a rights-based approach to fisheries, securing access rights, enhancing legal space and organizational capacity, adopting integrated system thinking and sustainable development, promoting food sovereignty and community well-being, expanding policy and livelihood options beyond fisheries, and ensuring effective communication. Whereas Charles suggests that progress can be made through international instruments on small-scale fisheries, Juntarashote and Chuenpagdee (*Chapter 19*) turn our attention to basic devices closer to home. Inspired by the concept of 'sufficiency economy,' which touches at the core values that people have about their lives and prospects, these authors examine how small-scale fishers in Thailand were empowered to create thriving communities, while protecting the marine ecosystem. The notion that small-scale fishers are able, and in many cases in a better position, to take control of their own future is further reflected in Bavinck and Jentoft's essay (*Chapter 20*). Following the subsidiarity principle, they argue that when small-scale fishers are able to fish with their technology, they, rather than large-scale fisheries, should be given the priority to access the resources. Likewise, if they are able to do the job of governing the resources just as well or better, they should be given the privilege. The essays in this section similarly call for more discussion about the roles and responsibilities of governments, at all levels, to facilitate governance transformation, recognizing that it essentially requires innovative thinking and imagination.

The final main section in this volume (**Section 6:** Reflections and Visions) offers us an opportunity to reflect on lessons learned in our efforts to understand and contribute to making small-scale fisheries viable and prosperous. In *Chapter 21*, Kurien reminds us that the theory and the practice of governance are two different processes. Using his experience in fisheries development and negotiating governance arrangements in three different contexts – India, Cambodia and Indonesia – he emphasizes how we must be aware and ready to address possible dilemmas generated by proposed

governance transformation. Challenges in fisheries governance go beyond the divide between theories and practices. As noted by young scholars like Song and Khan (*Chapter 22*), the current, and at times ferocious, scientific debates in fisheries create confusion in policy arenas and with the general public. Perplexed by the inconsistencies appearing in the media nowadays, they raise questions about future research directions for small-scale fisheries. There are unfortunately no easy answers to their enquiry, but further probing and alternative perspectives are valuable. Angerbrandt and colleagues (*Chapter 23*), for instance, urge us to revisit the conceptualization of the term community and what it is good for. While not dismissing the importance of community and locally-driven initiatives for fisheries sustainability, they submit that embedding communities in society and redressing any asymmetrical community relationships is necessary to substantiate such claims. Finally, Jentoft (*Chapter 24*) challenges the traditional fisheries paradigm based on Hardin's "Tragedy of the Commons," and evokes Sen's "Development as Freedom" as a contrasting image to address fisheries problems. Illustrated using some historical events in Norwegian fisheries, he argues that governance outcomes would have been very different, had it been Sen's idea that inspired fisheries policies.

As Pauly reiterates in his foreword, for small-scale fisheries to realize their potential of becoming the fisheries of the future, they must be seen as a viable part of the solution, rather than a problem. In the last essay (*Chapter 25,* **Section 7**: Way Forward), I present the global research network for the future of small-scale fisheries, "Too Big To Ignore," as one possible way to move in this direction. The network is initiated to facilitate interdisciplinary and participatory, action-oriented research that addresses current and emerging issues facing small-scale fishing people. It also encourages information and knowledge sharing, through a database system and online curriculum, and ongoing dialogue between fishing communities, scientists, policymakers, environmental groups and funding agencies about the sustainable future of the world's fisheries, with small-scale fisheries at its core.

This book could not have happened without the hard work and dedication of 35 other authors from around the globe. The essays embody the experiences and viewpoints of fisheries scientists, practitioners, post-doctoral fellows, and graduate students and, most of all, of the small-scale fishers around the world who inform our research. I sincerely thank all the authors for telling their stories and sharing with us their enthusiasm and optimism for small-scale fisheries. Technical assistance was provided by Theresa Heath, Ian Ivany, Jennifer Dyke and Andrew Song. I extend my gratitude to Professor Daniel Pauly, not only for his encouraging words in

the foreword, but also for his unyielding belief in the value of good science. I continue to learn from him.

I greatly owe the participants of the first World Small-Scale Fisheries Congress (WSFC) and many partner organizations, including Memorial University of Newfoundland (MUN). My special thanks go to the three conference co-hosts: Department of Fisheries, Government of Thailand; the Southeast Asian Fisheries Development Center (SEAFDEC); and the Coastal Development Centre (CDC), its members and the Director, Dr. Kungwan Juntarashote, for the logistical organization of the congress. Several people played significant roles at the congress, prominent among them were Andrew Song of MUN, Shettapong Meksumpun and Sangtien Ajjimangkul of CDC, and Phattareeya Suanrattanachai and Namfon Imsamran of SEAFDEC. Funding for the congress came from various sources, most notably the Norwegian-funded PovFish Project and the Social Sciences and Humanities Research Council of Canada.

We have already taken major steps towards improving knowledge, renewing interests, and contemplating visions in small-scale fisheries with the launch of the WSFC and with this volume. I invite readers and everyone interested in small-scale fisheries of the world to join us in making them *Too Big To Ignore*.

Ratana Chuenpagdee
St. John's, Canada

FOREWORD

Daniel Pauly
University of British Columbia, Canada

Small-scale fishing is the practice by which we began to utilize the coastal resources of our East African home, some 120,000 years ago. Gradually, along with the conquest of new continents, fishing effort increased, and some pre-industrial fisheries became rather substantial, involving large sailing fleets targeting herring in the North Sea or cod in Newfoundland.

But the most significant transition in fishing, and the start of the dichotomy which colors each and every one of its various aspects, was the deployment of the first steam-powered trawlers along the English coast in the late 1880s. This marked the transition to a mode of fishing using non-renewable but abundant fossil energy to exploit a renewable resource, itself ultimately limited by the rate at which the sun's energy is converted into edible fish.

In the short-term, industrial fisheries simply had to 'win' in their competition with small-scale fisheries: they could deploy major capital and fishing power to obtain massive catches – even if they consisted of the accumulated biomass of old fish – which helped to fuel population and fish consumption growth everywhere. And their fishing power expanded to cover the whole world when, after two world wars and the cold war, a vast array of new fish finding and processing technologies became available to them. From the 1950s to the late 1980s, the fishing world was consumed by the exploits of industrial fishing which, at the end of this period, had engulfed the globe.

And so, almost everyone forgot small-scale fisheries – or they were seen as a relict of the past, soon to disappear, just like steam engines and Apple II computers. Only a few maritime anthropologists and fisheries sociologists soldiered on, and their accounts often emphasized quaint features of the lives of fisher folks, rather than their core activity. Fisheries scientists also tended to avoid small-scale fisheries, whose largely undocumented catch, when known, contained little of the detailed per-species information that was required for application of a succession of population dynamics models then fashionable, whose relevance to the management of small-scale fisheries was, moreover, dubious at best.

In many countries, especially so in developing countries, the urban elites who were recruited to staff the bureaucracy could not be bothered with the logistical and administrative nightmare that monitoring and reporting

on small-scale fisheries often represents, and thus mostly ignored them. And, since they did not report on them to the United Nations Fisheries and Agriculture Organization (FAO), the coverage of small-scale fisheries in the FAO's global database of fisheries statistics vastly underestimates the contribution of small-scale fisheries to global fisheries catches. As a result, the army of academic economists and other consultants hurriedly writing reports for the World Bank and other international development agencies, and even environmental NGOs, bought into this alternative reality, and accepted that small-scale fisheries are, well, small, and best left to those dealing with folklore or caritative projects.

But then, throughout the 1990s, and increasingly in the first decade of the 21st century, many realized that the party may be soon over for industrial fisheries. Some of them are managed well, in Alaska and a few other places, with strong harvest control rules. But in most of the rest of the world, the very size of industrial (particularly distant-water) fleets translates into political power often exceeding that of coastal states, and they abuse this power and operate, literally, out of control. And, other than destroying habitats, as in the case of trawlers, they also regularly crash the stocks they depend on. Then they continue, further offshore, into deeper waters and further south because, at least in the rich countries of the global north, they get government subsidies to do so, and so escape the economic consequence of their activities – a market failure if there ever was one. However, these fleets now have less room – if any – to expand, and they are squeezed by increased fuel costs which cannot always be absorbed by additional subsidies; hence the widespread crisis of fisheries.

Thus, it is high time to recall that there is an alternative, and that it is staring us in the face: the small-scale fisheries. They survived, albeit with difficulties, while industrial fisheries grew in the absence of checks or balances. Some of these difficulties resulted from the application of brute force against them, such as when coastal fixed gears are destroyed by trawlers operating – illegally – close inshore, or when politically connected industrial fleet owners redirect to themselves funds that governments or international agencies allocated to 'fisheries development'.

But a major problem has always been the conceptual swamp which fisheries policies are stuck in, and in which small-scale fisheries are always seen as a problem, rather than a viable part of the solution of the crisis of fisheries. It is true that small-scale fisheries can be destructive (e.g., when they use dynamite, insecticide or other poison as fishing gear), and they often serve as a social 'safety valve' for landless farmers or cattle-less pastoralists, with the decline of coastal fish resources as an all too frequent result.

However, because small-scale fishers invariably live close to their fishing grounds, and depend on the resource therein and on no others, they can be (re-)connected, if need be, with the idea of caring for the resources; which the hired hands on board of industrial vessels cannot afford to do. Combined with the obvious advantage of adjacency (short sailing time, and hence limited fuel consumption, if fuel is used), this is a major reason why small-scale fisheries have the potential of becoming the fisheries of the future.

It is therefore very opportune that, finally, a 'World Small-Scale Fisheries Congress' (WSFC) was held in October 2010. This volume features selected papers presented at this event and others, and they span the entire gamut of small-scale fisheries operations and management, showing that they are indeed, too big to ignore. Also, these essays show that there are solutions to problems in small-scale fisheries. I congratulate the editor of this volume – also the initiator of the WSFC – for her initiative and enthusiasm which, I am convinced, will help validate the systematic, quantitative and comparative study of small-scale fisheries worldwide.