

16. Concluding thoughts: coastal fisheries of Latin America and the Caribbean

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Charles, A., Salas, S., Seijo, J.C. and Chuenpagdee, R. 2011. Concluding thoughts: coastal fisheries of Latin America and the Caribbean. *In* S. Salas, R. Chuenpagdee, A. Charles and J.C. Seijo (eds). *Coastal fisheries of Latin America and the Caribbean. FAO Fisheries and Aquaculture Technical Paper*. No. 544. Rome, FAO. pp. 423–426.

This document has sought to accomplish three goals: (1) to highlight the diverse nature of coastal fisheries in the Latin America and the Caribbean (LAC) region; (2) to examine how these fisheries are currently assessed and managed; and (3) to explore future directions – in policy, management and assessment – that can improve the state of LAC fisheries. The first two of these goals have been met largely thanks to the impressive work of colleagues in twelve LAC countries, spread out across the region. The authors of our ‘country chapters’ have worked over the past several years to produce a body of material that together paints a picture of the wide range of coastal fisheries found in the region. This set of chapters in the document at the same time provides a strong base for the integrated analysis of fishery assessment and management in the region in Chapter 14 – an analysis which, to our knowledge, is a first for the region. Finally, the third goal of the document, to examine options for the future of LAC coastal fisheries, was met, we hope, in the discussions of Chapter 15, which focuses on linking global trends in fishery thinking with the specific realities of the LAC region.

The focus on coastal fisheries has represented another unique feature of this document. Throughout the document, such fisheries have included three main subtypes: subsistence fisheries, traditional fisheries (artisanal), and advanced artisanal (or semi-industrial) fisheries. While there are always differences in perspective – between analysts as well as among countries – over what constitutes each of these subtypes, the key distinction we have sought to make here is between coastal fisheries on the one hand and industrial or recreational fisheries on the other hand. Thus, while some coastal fisheries may involve more capital-intensive fleets than might be typically seen as ‘small scale’, there is, in many cases, a reasonable equivalency of coastal and small-scale fisheries. The importance of focusing on

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such fisheries has been increasingly highlighted on a global scale – for example, through FAO’s Small-Scale Fisheries Conference (2008) and the forthcoming World Small-Scale Fisheries Congress (2010).

A key rationale for this focus on ‘coastal’ and small-scale fisheries lies in their typically close connections to coastal communities, and thus the crucial role they play in supporting community well-being and household livelihoods along the coasts of the LAC region. In Chapter 1, it was noted that “The major contribution to the region’s total landings comes from pelagic species landed by the industrial fisheries”, so in terms of quantities alone, coastal fisheries are not typically the biggest contributors. But the value added that comes from these fisheries goes far beyond the size of landings or of GDP figures. This reality calls out for new or enlarged measures of fishery contributions – ones that involve livelihoods, regional economic development, community welfare, and so on – if we are to properly understand the value of coastal fisheries globally.

As noted at the outset, the fishery information presented in this publication is certainly not exhaustive, since it reflects but a sample of the region’s fisheries. However, the twelve countries included provide reasonable geographical coverage of Latin America and the Caribbean, including each of the main subregions:

- The Caribbean islands (Barbados, Cuba, Grenada, Puerto Rico, Dominican Republic, Trinidad and Tobago);
- North and Central America (Mexico, Costa Rica); and
- South America (Argentina, Brazil, Colombia, Uruguay).

Furthermore, as described in Chapter 14, our analyses indicate that the coverage herein does indeed reflect many issues and challenges shared by fisheries more widely in the region, especially regarding assessment and management. The overall state of coastal fisheries in the LAC region was described in Chapter 1, while Chapter 14 describes the broad features of coastal fisheries globally and the particular characteristics of such fisheries in each of the twelve countries covered in the document. Chapter 14 then summarizes both the fishery data available in each country (from catch and effort data through to institutional and benefit/cost information), as well as the management methods (from catch limits and access rights to gear restrictions and closed areas). There are clear indications of which forms of data, and which management approaches, tend to be most prevalent in the region – and which are less uncommon or even rare. A synthesis is provided of these results, including the extent to which each subregion (Caribbean, Central America and South America) has the four main forms of information discussed (basic fishery data, bio-ecological, socio-cultural and economic).

In exploring future directions for LAC coastal fisheries, Chapter 14 drew on the above analysis to highlight five specific fishery assessment and management approaches to improve the state of these fisheries:

1. Comprehensive fisheries assessment.
2. Building capacity for fishery data collection, assessment and management.
3. Incorporating social, economic and livelihood considerations.
4. Adopting alternative management schemes.
5. Promoting equity, rights and self-regulation.

Options for implementing each of these approaches in a coastal fisheries context were discussed in Chapter 14, while Chapter 15 moved to a broader policy analysis, noting that the five themes above all fit into two major policy frameworks being advocated globally as essential to the future of fisheries:

- Development of new innovations in fishery governance and institutional design.
- Adoption of an ecosystem approach to fisheries.

Chapter 15 explored these two major frameworks in some detail, with emphasis on how they can be effectively applied in the context of coastal fisheries management, particularly in the LAC region. It was noted that taking the right moves toward implementing these approaches, within an appropriate context, would increase the likelihood of success in efforts to improve the conditions of coastal fisheries across Latin America and the Caribbean.

A recurring theme in this document has been the reality that effective assessment and management of small-scale fisheries – and the success of moves to meet governance and ecosystem challenges – must acknowledge the human, ecological and technological interdependencies present in the various uses of coastal ecosystems. This requires an appreciation of the goals, the motivations and the decision-making patterns of coastal fishers and communities.

As a concrete example of this, consider the switching behaviour that fishers commonly practice among target species along the coast – often seasonally as a result of species availability, catch rates and markets. Such behaviour needs to be taken into account in analysis of these fisheries, as well as in management actions. From a policy perspective, it may be important (i) to allow fishers to change target species in relation to abundance and demand, to avoid the incentive to fish depleted species, and thereby give the stocks time to recover; and (ii) to encourage the fleets made up of small- to medium-sized multipurpose vessels that are capable of such flexible switching among species. It is also important to ensure that coastal ecosystems are kept healthy. Thus it is important that while encouraging switching behaviour, there is avoidance of unselective fishing gears and/or habitat-unfriendly gear. Finally, there may be a need to build bio-ecological safeguards as mechanisms to cope with the complexities of human activity on the coast – such as seasonal closures, technical measures to avoid capture of unwanted or protected species, and permanently closed areas (marine protected areas) in areas of particular sensitivity such as nursery grounds and critical habitats.

Such situations highlight the complex nature both of human uses along the coast and of coastal ecosystems. There is undoubtedly a challenge to be faced

in the assessment and management of coastal fisheries, given that complexities such as these arise typically in situations where there are also major limitations on data availability – a reality that has been emphasized in Chapter 14 as well as throughout the country chapters of this publication.

Fortunately, however, the challenge is not insurmountable. Shifts in the directions summarized above – including appropriate governance arrangements and an ecosystem approach – can work successfully for the coastal fisheries of Latin America and the Caribbean, as well as those elsewhere, by drawing on a key strength – the capabilities of coastal fishers and coastal communities. Their energy, experience and local knowledge base make fishers and communities crucial partners in assessment and management, through participatory research and data collection, as well as community-based and co-management arrangements. This partnership with scientists and managers can help overcome the range of shortcomings in ‘official’ data sources and in conventional fisheries management. In small-scale fisheries around the world, and specifically in the LAC region, if governmental policy places value on (and shows respect for) the integrity and well-being of coastal fishers, communities and ecosystems, this will go a long way to ensuring the health of these coastal systems into the future.

Coastal fisheries of Latin America and the Caribbean



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FAO
FISHERIES AND
AQUACULTURE
TECHNICAL
PAPER

544

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ISBN 978-92-5-106722-2

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Abstract

The importance of fisheries for coastal communities and livelihoods in Latin America and the Caribbean (LAC) is well documented. This is particularly the case for ‘coastal fisheries’, including subsistence, traditional (artisanal) and advanced artisanal (or semi-industrial) varieties. There are, however, major gaps in knowledge about these fisheries, and major challenges in their assessment and management. Therein lies the key theme of this document, which seeks to contribute to a better understanding of coastal fisheries in the LAC region, as well as to generate discussion about ways to move towards sustainable fisheries. The document includes three main components. First, an introductory chapter provides an overview of general trends in the fisheries of the LAC countries, as well as some of the key challenges they are facing in terms of sustainability. Second, a set of twelve chapters each reporting on the coastal fisheries of one country in Latin America and the Caribbean, collectively covering fisheries of each main subregion: the Caribbean islands (Barbados, Cuba, Dominican Republic, Grenada, Puerto Rico, Trinidad and Tobago), North and Central America (Costa Rica, Mexico) and South America (Argentina, Brazil, Colombia, Uruguay). All these country-specific chapters follow an integrated approach, to the extent possible, covering aspects ranging from the biological to the socio-economic. Third, the final component of the document contains a synthesis of information from the countries examined, an analysis of the main issues and challenges faced by the various fisheries, an outline of policy directions to improve fisheries management systems in the LAC region, identification of routes toward more integrated approaches for coastal fisheries management, and recommendations for ‘ways forward’ in dealing with fishery assessment and governance issues in the region.

Salas, S.; Chuenpagdee, R.; Charles, A.; Seijo, J.C. (eds).

Coastal fisheries of Latin America and the Caribbean.

FAO Fisheries and Aquaculture Technical Paper. No. 544. Rome, FAO. 2011. 430p.

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