



The Marine Stewardship Council certification in Latin America and the Caribbean: A review of experiences, potentials and pitfalls



Mónica Pérez-Ramírez^{a,*}, Mauricio Castrejón^b, Nicolás L. Gutiérrez^c, Omar Defeo^{d,e}

^a CONACYT Research Fellow—Centro de Investigación Científica de Yucatán, Mexico

^b Interdisciplinary PhD Program, Dalhousie University, Canada

^c Marine Stewardship Council, 1–3 Snow Hill, London EC1A 2DH, United Kingdom

^d UNDECIMAR, Facultad de Ciencias, Iguá 4225, 11400 Montevideo, Uruguay

^e GEPEIA, Centro Universitario de la Región Este, Rocha, Uruguay

ARTICLE INFO

Article history:

Received 12 May 2015

Received in revised form 16 October 2015

Accepted 7 November 2015

Available online 27 November 2015

Keywords:

MSC certification

Seafood eco-labeling

Environmental governance

Fish trade

Small-scale fisheries

ABSTRACT

The Marine Stewardship Council (MSC) certification program is a market-based instrument aimed at recognizing sustainable fishing practices. Although there are 10 MSC-certified fisheries in Latin American and the Caribbean (LAC), this proportion is low (4%) compared to the total number of certified fisheries globally. Therefore, implementation of MSC certification in LAC fisheries is examined by considering: (1) fishing industry drivers for certification and (2) certified fisheries performance against the MSC standard. The MSC certification was suitable for large multi-national enterprises with export-oriented markets and for small-scale fisheries with exclusive access rights harvesting high-value resources. Maintaining or increasing market-share was a main motivation to pursue certification. Most LAC certified fisheries showed high performance in terms of stock status, governance and management systems. However, the expansion of the MSC certification in LAC remains limited by: (1) intrinsic weaknesses of fisheries in the region (shortage of information and instability in governance systems); and (2) high costs associated to certification and extrinsic market conditions (price shocks and demand retractions). Innovative strategies to encourage the development of domestic certified seafood markets, and a major inclusiveness of small-scale fisheries with traditional management arrangements at the local level, could constitute significant steps toward a more sustainable pathway on a regional scale.

© 2015 Elsevier B.V. All rights reserved.

1. Introduction

Fishery certification and seafood eco-labeling emerged as a voluntary and private instrument aimed at promoting a sustainable global seafood market. The Marine Stewardship Council (MSC), a non-profit organization, is considered the most widespread fisheries certification program (Bush et al., 2013; Agnew et al., 2013). By March 2015, 255 fisheries were, and further 121 were at different stages of the assessment process, together accounting for about 10% of the global wild-caught seafood (MSC, 2015). The MSC's fishery certification process is an assessment to determine whether a fishery meets MSC's environmental standard for sustainable fishing (hereafter the standard; MSC, 2015). The MSC standard is comprised of three core principles and a set of performance indicators

(PIs) and scoring guidelines (SGs), known as the “default assessment tree” (MSC, 2014a). Such principles are: (1) sustainable target fish stocks, (2) environmental impact of fishing, and (3) effective management. The PIs are grouped under each of the three MSC's principles. The certification process has two stages: a confidential pre-assessment that identifies the characteristics and limitations of the fishery in question and a complete public assessment in which a third-party certification body, known as certifier or Conformity Assessment Body (CAB), evaluate whether a fishery meets the standard.

Gutiérrez et al. (2012) provide evidence that MSC-certification is a pathway to move fisheries toward sustainability more quickly than non-MSC fisheries. Additional studies suggest that the MSC certification attracts price premiums (Roheim et al., 2011; Asche et al., 2015; Sogn-Grundvåg et al., 2015), incentivizes environmental improvements (Martin et al., 2012; MSC, 2014b; Bellchambers et al., 2014) and promotes community development and stakeholder engagement (Pérez-Ramírez et al., 2012a; Field et al., 2013). Nevertheless, concerns about MSC's market-driven approach to

* Corresponding author. Fax: +52 998 211 30 08.

E-mail addresses: monica.perez@cicy.mx (M. Pérez-Ramírez), mauricio.castrejón@dal.ca (M. Castrejón), nicolas.gutierrez@msc.org (N.L. Gutiérrez), odefeo@dinara.gub.uy (O. Defeo).

rebuild fisheries and restore marine ecosystems have emerged in recent years. Some studies debate the effectiveness of the MSC certification process to identify healthy stocks (Jacquet et al., 2010) and to adequately address conservation of vulnerable species (Heupel and Auster, 2013).

Other criticism is that the MSC program is not suitable for certification of developing world fisheries, including those located in Latin America and the Caribbean (LAC) (Pérez-Ramírez et al., 2012b). Since 2000, the MSC identified as one of its main objectives the need to ensure that its standard is applicable to all fisheries, irrespective of their nature, scale and intensity, location and country development (Peacey, 2000). However, even though the MSC has developed tools and systems to facilitate the accessibility of developing world fisheries to its certification program, including the development of a “risk-based framework” to assess data-poor fisheries against the standard, the representation of certified fisheries from developing countries is still low. In fact, only 19 (8%) MSC certified fisheries are located in developing countries. Among them, 10 are located in the LAC region, including Mexico, Suriname, Argentina, and Chile (MSC, 2015; Fig. 1).

Fisheries play a critical role in LAC, in terms of food security and nutrition, poverty eradication, equitable development and sustainable resource utilization (Defeo and Castilla, 2005; Begossi, 2010; Orensanz and Seijo, 2013; FAO, 2014a). The LAC fish-caught production accounts for about 24% of the global catch, being Peru, Chile, Mexico, and Argentina the top producing countries, mostly based on pelagic and shellfish species. Between 1993 and 2011 the average supply of fish in LAC countries increased from 8.9 to 10 kg per capita (FAO, 2012a). The main foreign markets for Peru, Chile, and Mexico are located in Asia and USA, whereas Argentina exports its production to Europe (Thorpe and Bennett, 2001). Even though the region maintains a solid positive net fishery exporter role to European, North American and Asian markets, the fish regional flow has increased during recent years (FAO, 2014a).

Considering the particular features of LAC fisheries, in terms of productivity, fishery resources, scale, governance and trade, there is considerable debate about whether MSC fisheries certification is a suitable option for this region. In this article, we contribute to such debate by using two approaches: (1) reviewing the factors driving the fishing industry to pursue MSC certification and (2) assessing the performance of fisheries against the MSC standard, addressing also progress and barriers (bottlenecks) in adopting MSC certification.

2. Methods

Our analysis is based on all fisheries certified by the MSC in LAC until March 2015 (Table 1, Fig. 1). These included 9 wild fisheries and one enhanced fishery, constituting more than half (53%) the total number of developing world fisheries in the MSC program. They are located in Mexico, Argentina, Chile and Suriname. Target species involve 5 benthic (lobsters, shrimp, and bivalves), 4 pelagic (tuna, sardines, and anchovies) and one demersal (hoki) species (Table 1). Information about fisheries certification was collected from several sources, including MSC public certification reports, surveillance reports, external databases, scientific literature and personal communications with key informants (fishermen organizations' representatives and fish industry managers). A modification of the analytical approach provided by Kvalvik et al. (2014) was used to identify factors driving the fishing industry in LAC to pursue MSC certification. This analytical approach is based on the premise that a particular certification standard (either MSC or other program) is not the main factor driving interest toward certification. Thus, 4 factors may explain the actors' different responses to pursue certification, including: (1) market aspects; (2) structure of

the industry; (3) role of advocacy groups, and (4) national discourse toward certification.

The scores of the 31 PIs included in the “Public Certification Reports” corresponding to the initial assessment for each fishery were analyzed taking into account the nested structure of the default assessment tree defined by the MSC. Therefore, the assessment included the component groupings (CGs), which are high level sub-divisions of each Principle defined in the default assessment tree (see MSC, 2014a). The main CGs were defined as follows: (1) CGs in Principle 1 include stock-specific issues (stock status, reference points and stock rebuilding) and harvest strategy. (2) CGs in Principle 2 include retained, bycatch and endangered, threatened or protected species (ETP), as well as habitat and ecosystem issues. (3) CGs in Principle 3 include governance and policy and the specific management system of a fishery. A nested analysis of variance (ANOVA) was used to determine differences in scores among PIs, using Principle as the main factor as well as CGs nested in each Principle. The assumption of homoscedasticity was not met and data were transformed by the arcsine of the square root of each PI value (expressed as proportions). The Fisher's Least Significant Difference (LSD) test was used for multiple comparisons.

Scores were further analyzed by aggregating them in different ways by discriminating between taxonomic groups that define each certified fishery (fish and invertebrates) and fishery scales (small-scale and industrial). A two-way ANOVA was used to test the null hypothesis of absence of differences in scores among taxonomic groups and fishery scales (main fixed factors). A similar analysis was conducted by analyzing individual fisheries and CGs. The LSD test was used to evaluate pairwise comparisons.

Each of the PIs is scored on a 0–100 scale, where 60 is the minimum acceptable sustainable standard, 80 is global best practice, and 100 is near-perfect performance. If a fishery achieves a score between 60 and 79 for any individual PI (conditional pass), it is required to improve performance to a score of 80 within the 5 years period of the certificate (MSC, 2014a). Therefore, we identified those PIs that scored between 60 and 79 in LAC certified fisheries at the time of certification, and grouped them according to the CG that they belong.

3. Results

3.1. Factors driving the fishing industry to pursue MSC certification

Main features of the certified fisheries in LAC are summarized in Table 1. Most fisheries include controlled-access and target high-value species with export-oriented markets, such as shellfishes and white fish. LAC fisheries participating in the MSC program may be categorized into two groups (Table 1): (1) large enterprises of industrial fisheries, especially multi-national ones that can afford the certification process (i.e., Argentine hoki); and (2) small-scale fisheries (SSFs) that are vital to the local livelihoods (i.e., lobsters).

Factors driving the fishing industry toward MSC certification in LAC are shown in Table 2. For Argentinean and Suriname fisheries, the major driving force behind the uptake of MSC certification is to attend current demands for ecolabeled seafood of corporate retailers in European markets. Fishing industry in both countries shows financial resources and administrative capacity to carry-out the certification requirements, as well as stable markets where the additional price for labeled fish could be paid. In Mexico, certified fisheries have strong fishers associations, such as cooperatives (SSFs) or chambers (industrial) (Table 2). The main factor to seek certification was not only market drivers (enhance current market-share), but also a political motivation directed to seek recognition to successfully managed fisheries. In Chile, certification was sought

Download English Version:

<https://daneshyari.com/en/article/4542666>

Download Persian Version:

<https://daneshyari.com/article/4542666>

[Daneshyari.com](https://daneshyari.com)