

Comparison of Private Incentive Mechanisms for Improving Sustainability of Filipino Tuna Fisheries

FRAZEN TOLENTINO-ZONDERVAN^a, PAUL BERENTSEN^a, SIMON BUSH^a, JOSEPH IDEMNE^b, RICARDO BABARAN^b and ALFONS OUDE LANSINK^{a,*}

^a Wageningen University, The Netherlands

^b University of the Philippines in the Visayas, Iloilo City, Philippines

Summary. — This paper analyzes the influence of three private incentive mechanisms over decision making related to improved sustainability of fishing practices in Filipino tuna fisheries. The three mechanisms compared are the World Wildlife Fund for Nature's fishery improvement project model, Marine Stewardship Council certification, and the International Seafood Sustainability Foundation Pro-Active Vessel Register. The main question addressed in this paper is how and to what extent the private incentive mechanisms support the development of fisher capabilities to respond to the requirements set out by these mechanisms. Applying a global value chain approach to analyze results collected from key actors involved in Philippine tuna fishers contributing to both domestic and regional economic development in the Western Pacific, we explore the structure and function of these private incentive mechanisms in achieving both environmental and economic development outcomes. Our results show that these private incentive mechanisms deliver different direct and indirect incentives for changing to more sustainable fishing practices, and that the success of these mechanisms is dependent on the extent to which the mechanisms support the development of target fisher capabilities to comply with their sustainability requirements. We conclude that the future success of these incentive mechanisms depends for a large part on stricter sustainability requirements, but also on the capacity of the mechanisms to incentivize the inclusion of more developing country fishers. These findings contribute to a wider understanding of how the capabilities of developing country producers are influenced by their relationship with chain and non-chain actors, and with the wide institutional arrangements that the producers operate in.

© 2016 Elsevier Ltd. All rights reserved.

Key words — Philippines, private incentive mechanisms, sustainability, tuna fishery, value chain

1. INTRODUCTION

Improved management and more equitable distribution of benefits from tuna fisheries is widely recognized as fundamental to the long-term sustainability of tuna fisheries in Western and Central Pacific Ocean (WCPO) (Barclay, 2010; Barclay & Cartwright, 2007). However, achieving both development and resource sustainability goals has been complicated by the complex interaction of different fishing gears with three main species; yellowfin (*Thunnus albacares*), bigeye (*T. obesus*), and skipjack tuna (*Katsuwonus pelamis*). While skipjack tuna remains underexploited, both juvenile yellowfin and bigeye tuna, both of which associate with skipjack, are more vulnerable to overexploitation; with bigeye already in an overfished state and with ongoing overfishing taking place (Hampton, 2010; Harley, Williams, Nicol, & Hampton, 2011; Langley, Williams, & Hampton, 2008). Fisheries surrounding these tuna species account for up to half of the gross domestic product (GDP) of some Pacific island countries (Havice, 2010), and make up 20% of total fisheries production in archipelagic countries such as the Philippines (Bailey, Flores, Pokajam, & Sumaila, 2012). Finding governance mechanisms that can successfully steer fishers toward improved resource stewardship while maintaining an important source of regional, national, and local income, is therefore a clear policy imperative for both national and regional sustainability and development.

State-led fisheries management and control, such as restrictions in fishing licenses, gears, and harvest, have been traditionally applied to addressing conservation challenges in WCPO tuna fisheries. However, the perceived limitations of state regulation have led to a shift toward regulation through private incentive mechanisms (Grafton *et al.*, 2006; Hilborn, Orensanz, & Parma, 2005; Oosterveer, 2008). Private incentive

mechanisms aim to change the production and consumption behavior of value chain actors toward sustainability by delivering economic incentives, such as price premiums and/or market access, while allowing actors to decide the extent to which they will adopt changes to their practices (Jack, Kousky, & Sims, 2008; Van Riel, Bush, Zwieter, & Mol, 2013). The use of private incentive mechanisms in the value chain to motivate fishers to improve their fishing practices has increased considerably over the last decade and is often presented as a new opportunity for creating sustainability outcomes (Iles, 2007; Parkes *et al.*, 2010). However, the impact of private incentive mechanisms in developing countries such as the Philippines has been widely debated given their potential adverse effect on poor or disadvantaged primary producers (e.g., Fairhead, Leach, & Scoones, 2012). Questions therefore remain about the extent to which these different mechanisms stimulate so called “developing world” fishers to improve their fishing practices in order to achieve sustainability goals (see Stratoudakis *et al.*, 2015).

*This research is funded by the BESTTuna Programme under Interdisciplinary Research and Education Fund (INREF) of the Wageningen University, and the University of the Philippines Visayas. The main author would like to thank Frabelle Fishing Corporation for the logistical support during her stay in Papua New Guinea and WWF-Philippines for assisting her fieldwork in Lagonoy and Occidental Mindoro. The authors also thank the editor and the three anonymous reviewers for providing critical comments and suggestions in improving the paper. Moreover, the authors also thank Jose Ingles and Megan Bailey for their valuable comments on earlier reports of this research. Final revision accepted: January 10, 2016.

Existing studies on private incentive mechanisms for fisheries have focused predominantly on eco-labels, including the MSC, Krav-Eco, Friends of the Sea (FOS), Naturland, and Marine Ecolabel Japan. These studies have focused on the ways in which standards or criteria for fishery sustainability are developed, introduced, and adopted by fisheries in different parts of the world (Gulbrandsen, 2009; Parkes *et al.*, 2010; Ponte, 2008b; Ponte & Cheyns, 2013; Potts & Haward, 2007). Some studies highlight how private incentive mechanisms improve the management of developing country fisheries, resulting in economic- and non-economic benefits for producers (Bolwig, Gibbon, & Jones, 2009; Lopuch, Ward, & Phillips, 2008; Pérez-Ramírez, Ponce-Díaz, & Lluch-Cota, 2012; Warning & Key, 2002). Other studies, however, show how private incentive mechanisms have limited and marginalized developing country fisheries' participation in the global chain (Ponte, 2008a; Pérez-Ramírez, Phillips, Lluch-Belda, & Lluch-Cota, 2012; Tran, Bailey, Wilson, & Philips, 2013). To the best of our knowledge, there are no studies that systematically compare different types of private incentive mechanisms in a single commodity, nor whether these mechanisms incentivize fishers to shift toward more sustainable production practices.

This study compares the effects of three private incentives mechanisms—the World Wildlife Fund for Nature (WWF)-led Fishery Improvement Projects (FIPs), the Marine Stewardship Council (MSC) certification, and the International Seafood Sustainability Foundation's (ISSF) Pro-Active Vessel Register (PVR)—and their effect on the domestic and international involvement of the Philippines in WCPO tuna fisheries. We have chosen these mechanisms because of their emerging influence over tuna fisheries in the WCPO and the range of institutional, social and economic challenges that have emerged around their implementation in developing countries (e.g., Kirby, Visser, & Hanich, 2014). We have chosen to focus on Filipino tuna fisheries for five reasons. First, tuna has been an important source of livelihoods and economic development in the Philippine economy, contributing around \$681 million of export revenue in 2013 (Bureau of Fisheries & Aquatic Resources, 2013). Second, the Philippines is the fourth major tuna producer in the world behind China, Japan, and Indonesia (Food and Agriculture Organisations, 2005). Third, the sustainability challenges faced in the Philippines have reached an acute stage, where domestic stocks of tuna are significantly depleted (BFAR, 2012; Vera & Hipolito, 2006), forcing Filipino investment offshore within the WCPO region. Fourth, the Filipino tuna fishers range from small-scale nearshore handline fishers to industrial-scale offshore purse-seine fishers, so both different type and scale of tuna fisheries are included. And fifth, there are at least four private incentive mechanisms currently implemented in the Philippines that aim to create change toward sustainability of tuna fisheries.

The objective of this paper is to compare the ways in which different types of private incentive mechanisms influence upgrading of Filipino tuna fishers in the value chain. In order to achieve this objective, we analyze how the capacity of fishers to make decisions related to upgrading is influenced by prevailing value chain governance arrangements and the local institutional arrangements that structure the practices of fishers. We compare these incentive mechanisms through the analytical lens of “upgrading” in global value chains (GVCs). By doing so we analyze the conditions under which producers can capture more value for their products through compliance to market requirements, while at the same time balancing a range of economic, environmental, and social benefits and risks (Humphrey & Schmitz, 2000; Ponte & Ewert, 2009). Building

directly on the GVC literature (Gibbon & Ponte, 2005; Humphrey & Schmitz, 2002b; Mitchell & Coles, 2011), we contribute to a wider understanding on how the interaction between firm and non-firm actors involved in these incentive mechanisms influences the capabilities of developing countries producers to upgrade in globally traded products such as tuna.

The following section provides an explanation of GVC analysis and of upgrading, before outlining the methods used in this study. The paper continues by presenting the private incentive mechanisms and comparing and discussing them in the context of globally commodified natural resources. Finally, conclusions are drawn related to upgrading of fishers under each mechanism.

2. GLOBAL VALUE CHAIN ANALYSIS

Governing sustainability “through” value chains involves a set of normative and regulatory practices that use the chain as a medium for influencing producer decision-making, and strategies for upgrading their practices for sustainable production (Bush, Oosterveer, Bailey, & Mol, 2014). But while considerable attention has been given to the structural dimensions of GVCs, including lead-firm strategy and state support to private incentive mechanisms such as certification (e.g., Foley, 2013; Ponte, 2008b), less has been given to how these strategies enable producers to improve their capability for upgrading to more sustainable production practices (e.g., Giuliani, Pietrobelli, & Rabellotti, 2005; Marchi, Maria, & Micelli, 2013). The relationship between private incentive mechanisms and producer capabilities in GVCs raises important development-related questions, such as how the governance of value chains in tuna fisheries enable developing country producers to access markets, how incentives for participation in these markets are distributed among participating countries, and in how far producers are exposed to economic, social, and environmental risk as a consequence of their participation (Barrientos, Gereffi, & Rossi, 2011; Perez-Aleman, 2012). A particularly underexplored question is how and to what extent incentive mechanisms support the development of capabilities of fishers to respond to the requirements they set out for market compliance. Addressing this gap, we now turn to an explanation of how the GVC framework enables a more precise elaboration of producers' capabilities and how capabilities are influenced by the interactions of producers with chain actors, with private and public actors outside the chain, and with the existing institutional arrangements of the operating environment.

(a) *Upgrading*

Firms are expected to upgrade their practices toward specified goals such as more sustainable production, when the benefits of upgrading exceed maintaining existing practices (Jack *et al.*, 2008). Private incentive mechanisms are therefore designed with the purpose of coordinating (or enabling firms to coordinate) the conditions in the value chain and the incentives to be delivered, which force other firms to comply with the pre-determined standards or requirements.

The different ways in which producers and other firm actors upgrade their position or process of production in value chains, have been variously classified (Gibbon & Ponte, 2005; Humphrey & Schmitz, 2002b; Mitchell & Coles, 2011). Following Riisgaard *et al.* (2010), these ways can be summarized into four main strategies. First, upgrading the process, the product characteristics and the volume, which can improve

Download English Version:

<https://daneshyari.com/en/article/7392748>

Download Persian Version:

<https://daneshyari.com/article/7392748>

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