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Prospects of community-based co-management of Philippine abalone fishery



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ABSTRACT

The Philippine abalone fisheries has been in a continuous decline in the last two decades, From an all-time high of 633 mt in 2004, exports declined to 218 mt in 2008. Reasons cited for the decline are the harvesting of abalone juveniles and broodstock, indiscriminate and destructive methods of harvesting, occurrence of disasters due to anthropogenic and natural causes, and the absence of a management plan for abalone. This paper explores the prospect of community-based co-management (CBCM) approach in addressing the decreasing production of abalone from the wild. The challenges faced by women and men abalone fishers-absence of organized abalone fishers, weak implementation of fishery laws and lack of policy for abalone management, general lack of knowledge on the biology of abalone, and the much needed co-management arrangement with various stakeholders, provide a very fertile ground for community organizing. Community organizing as an over-all strategy in the implementation of the four interrelated components of CBCM provide some prospects for better management of abalone fisheries. The four components of CBCM are: resource management that aims to protect, conserve, regulate and improve the management of abalone fishery resources; community and economic development and livelihood which hopes to widen the socio-economic opportunities to improve people's wellbeing; capacity building that aims to increase people's knowledge on the biology of abalone and their awareness on the need for its judicious management; and, institutional support, networking and advocacy that hopes to enable the various stakeholders-fishers, LGUs, academe, research institutions to work together and share in the benefits of management. The sharing of responsibilities and authority based on each partner's resources and capacities may be a contentious issue but CBCM has to deal with it. While CBCM is not a one-size-fits-all strategy to address the complex issues of fisheries management, the challenges present in the different study areas call for a CBCM approach that is adaptive and context-specific. The collective learning process innate in CBCM shall provide the best alternatives that will ensure that abalone fisheries will be sustained.

1. Introduction

The Philippines is one of the countries harvesting abalone from the natural fishery mainly for export; however, the country's export of abalone has been declining in the last two decades. From an all-time high of 633 mt in 2004, exports declined to 218 mt in 2008 (NSO, 2013) reportedly due to declining volume of abalone collected. The demand for abalone is consistently growing especially in China, Hong Kong, South Korea, Singapore, and Japan.

Abalone are sedentary, small-scale benthic shellfisheries which are very vulnerable to exploitation (Jenkins, 2004) that led Berkes (2011) to say that abalone is one of those highly localized stocks that may become extinct even before the issue of their overexploitation is

noticed. More recent studies reaffirm that abalone fisheries in the country is under threat. Abalone fishing grounds in Siquijor (Wagey and Bucol, 2014), Anda, Pangasinan (Capinpin, 2012), Tawi-Tawi, Eastern Visayas, Iloilo and Palawan (Prieto-Carolino et al., 2016) have been overfished as observed by abalone fishers and traders. There have been numerous studies undertaken on the biology of abalone and on its aquaculture development (Largo et al., 2016; Fermin, 2001; Capinpin et al., 1998, 1999; Encena et al., 1998). Research on its judicious management, however, need to be explored.

This paper argues that a community-based co-management (CBCM) approach has the potentials to address the continued overexploitation of abalone fisheries. Specifically, this paper aims to examine the prospects of CBCM approach in the judicious management of abalone

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fisheries. Co-management remains to be the best option for small-scale fisheries management (Freed et al., 2016; Kosamu, 2015) and the only "realistic solution" (Gutierrez et al., 2011:386) in the face of increasing competition for scarce resource and reducing the rate of decline of resources (Wamukota et al., 2012). Emphasis is given on community-based approach considering the fragile status of the Philippines' abalone fisheries resources and the significant role abalone fishery plays in the life and livelihoods of artisanal fishers who are highly dependent on the resource.

The next section explains the research methods used in to examine the prospects of CBCM approach to manage abalone fisheries. The succeeding sections presents the analytical framework used, discusses the results of the analysis, and provides conclusions.

2. Methods

2.1. Areas of study and respondents

This paper is part of a bigger research project on the "Supply Chain Improvement of Abalone in Selected Areas in the Philippines". The study areas included the provinces of Palawan, Iloilo, Leyte, Eastern Samar, Western Samar, Northern Samar and Tawi-tawi as presented in Fig. 1. These provinces are among the major abalone-producing areas of the Philippines.

2.2. Types of data and data gathering procedure

This study utilized both primary and secondary data. Primary data were gathered through face-to-face interviews, focus group discussion (FGD), and key informant interviews (KII). The face-to-face interviews were facilitated with the use of a pre-tested structured survey questionnaire while pre-tested interview schedules were used to guide the

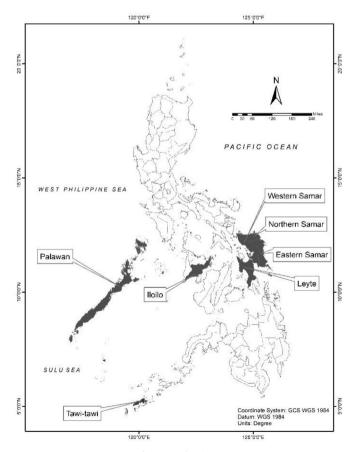


Fig. 1. Study Sites.

FGD and KII. Types of data gathered included, but not limited to, activities and processes, knowledge and information sharing, relationships with other abalone fishers and other stakeholders, institutional support and advocacy, networking, livelihood opportunities, role of men and women as well as logistical issues. A total 153 abalone fishers, identified through tracer methodology, participated in the survey done in 2013. Key informant interviews were also conducted with key personnel of the Southeast Asian Fisheries Development Center (SEAFDEC), Bureau of Fisheries and Aquatic Resources (BFAR) regional offices, Bureau of Export Trade Promotions of the Department of Trade and Industry, and the Local Government Units (LGUs), Additional primary data was collected through the conduct of three (3) FGDs participated in by abalone fishers and other industry players. Stakeholders' meetings were held in each of the study site to validate primary data collected and to gather new insights. A total of 148 participants attended the activity that included abalone fishers, personnel of BFAR, employees from provincial, municipal and barangay local government units and representatives from the academe.

This study also used secondary data from reports and documents from SEAFDEC and BFAR. Municipal Fishery Profiles and Strategic Plans for Coastal Resource Management of selected municipalities of the areas covered in this study were also reviewed.

3. Framework of analysis

Community-based co-management (CBCM) recognizes community empowerment as its cardinal theme while at the same time focuses on a partnership arrangement between government and the local community (Ferrer and Nozawa, 1997; Thomson and Gray, 2009). A win-win partnership can be made possible if the local community has attained certain degree of empowerment. Once empowered they can better negotiate with government and other stakeholders on the sharing of authority and responsibility for the management of the fishery resources. "Negotiated power" is the key in co-management where the relationship of state and non-state actors will highly determine how power and resource allocation will be done (Pomeroy and Rivera-Guieb, 2006).

Community organizing (CO) is an over-arching strategy for the empowerment of communities. It aims to enhance the knowledge and skills of local communities to identify and prioritize its needs and issues, tap its own resources to collectively address these needs. Through the process of community organizing, potential leaders are identified who will then facilitate the formation of people's organization. Capacity building through trainings and environmental education will further increase people's awareness to critically examine socio-economic and political realities within the framework of natural resource management. With enhanced capacities, people will work towards the institutionalization of mechanisms for networking with the partners and communities for the judicious management of natural resources (Ferrer and Nozawa, 1997). Only when organized fishers have attained a certain degree of empowerment can it engage with government for the sharing of responsibilities and benefits from the management of fisheries.

As a process, community-based co-management is not a one size-fits-all strategy to address the complex issues of fisheries management. It should be seen as a dynamic, iterative process that is adaptive based on the changes that takes place in a specific context over time. It becomes a collective learning process where various partners work together and share in the costs and benefits of management arrangements. It is consensus-driven that recognizes the different values, needs and interests of various stakeholders. (Pomeroy and Rivera-Guieb, 2006).

Pomeroy and Rivera-Guieb (2006) identified four complementary components of CBCM which are 1) resource management, 2) community and economic development and livelihood, 3) capacity building, and 4) institutional support, networking and advocacy. The *Resource Management* component of CBCM includes activities to protect,

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