Journal of Environmental Management 151 (2015) 11–21

Contents lists available at ScienceDirect

Journal of Environmental Management

journal homepage: www.elsevier.com/locate/jenvman

Barriers to collaborative forest management and implications for building the resilience of forest-dependent communities in the Ashanti region of Ghana

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ARTICLE INFO

Article history:
Received 1 September 2012
Received in revised form
20 November 2014
Accepted 3 December 2014
Available online

Keywords:
Adaptive governance
Agroforestry
Co-management
Community resilience
Social–ecological system

ABSTRACT

Community resilience, the capacity of a community to adapt to change in ways that result in positive impacts on its well-being, is increasingly used as a framework for understanding and enhancing the sustainability of forest-dependent communities as social–ecological systems. However, studies linking community resilience to the implementation of forest management programs are limited. This study uses community resilience literature and analyzes data collected from interviews to study barriers of forest-dependent communities of collaborative forest management (CFM) in two forest-dependent communities in the Ashanti region of Ghana. Analysis revealed the barriers in community response to CFM programs in these two communities comprise institutional shortfalls in the design and implementation of the CFM program that have constrained the incentives, capacity and opportunities for communities to successfully adapt to the program. The paper offers recommendations on how the CFM program can contribute to building the resilience of communities in managing their forests. The first is to build institutional capacity of communities to play an active role in forest governance, and the second is the prioritization of well-being and livelihood enhancement as forest management goals.

1. Introduction

The field of resource management is undergoing a transition in which older assumptions about the distinction between social and ecological systems, and the belief in human ability to predict and control the responses of ecological systems, are now believed to be inaccurate representations of the reality of human–environment interactions (Folke et al., 2002; Redman et al., 2004). As an alternative outlook on human–environment interactions, Ostrom (2009: 419) has noted that "(a)ll humanly used resources are embedded in complex, social–ecological systems." Social–ecological systems refer to inter-dependent, co-evolved social and ecological systems that dynamically interact with each other across multiple spatial and temporal scales (Folke, 2007; Liu et al., 2007). At any given level of analysis, social–ecological systems are exposed to external influences from higher levels, i.e. drivers of change such as increasing population, high market value, and the implementation of conservation policies, which could create challenges and vulnerabilities, as well as opportunities for development (Folke et al., 2011). The concept of resilience in social–ecological systems refers to the capacity of a system to cope, adapt and transform in response to drivers of change without compromising its critical attributes (Folke et al., 2002). Folke et al. (2011) highlight the need to build the resilience of social–ecological systems to deal with these external drivers of change and to utilize them as opportunities for development.

While the resilience literature has been largely focused on ecological systems, the application of resilience thinking to social issues has not received enough attention, particularly at the community level (Akamani, 2012; Berkes and Ross, 2013). Of particular interest is the need for understanding the attributes of social systems that serve as barriers or bridges for social–ecological resilience (Folke et al., 2010). Using the community resilience literature as an analytical perspective, this paper uses qualitative data from two forest-dependent communities in southern Ghana to analyze the factors that inhibit the process and outcomes of community

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http://dx.doi.org/10.1016/j.jenvman.2014.12.006
0301-4797/

participation in the implementation of Ghana's collaborative forest management (CFM) program. The purpose of this paper is not to undertake a comprehensive evaluation of the success or failure of the CFM program in Ghana. Rather, it focuses on those barriers that inhibit community resilience to policy change, i.e. "(t)he ability of resource users to cope and adapt to change in the rules that govern access to natural resources" (Marshall and Marshall, 2007:1). We adopt Moser and Ekstrom's (2010) approach to barriers of community participation and resilience as "obstacles that can be overcome with concerted effort, creative management, change of thinking, prioritization, and related shifts in resources, land uses, institutions, etc." (p. 22027). By focusing on these barriers and how they can be overcome, the paper contributes to on-going efforts aimed at enhancing the sustainability of communities and forests in an increasingly unpredictable future (Colfer, 2005; Tucker, 2010).

2. Resilience in forest-dependent communities

The community concept has multiple sociological meanings, ranging from a locality or human settlement to a local social system and an interactional field (Lee and Field, 2005). The most useful for understanding community responses to change events is the interactional approach (Wilkinson, 1991), which portrays the community as a constantly evolving social interaction process through which the diverse segments of the community address their common concerns (Paveglio et al., 2009). The concept of forest-dependence also has different meanings. Kusel (1996: 367) defines forest-dependent communities as "those immediately adjacent to forestland or those with a high economic dependence on forest-based industries." While past measures of forest-dependence were based on timber-dependence, the meaning of forest-dependence has broadened to include non-extractive uses, such as recreation and tourism (Power, 2006), as well as non-economic values, such as quality of life and the meanings people associate with forests (Machlis and Force, 1990).

Studies on forest-dependent communities are increasingly embracing insights from the literature on resilience in social–ecological systems. The community resilience concept is based on the assumption of dynamic and complex relationship between communities and forests, a broadened conception of forest-dependence beyond economic measures, and an emphasis on the capacity of communities to respond to change in ways that result in positive outcomes for their well-being (Harris et al., 1998; Magis, 2010; Akamani, 2012). From the community resilience perspective, forest-dependent communities are no longer considered as stable and isolated, but rather dynamic and constantly exposed to multiple drivers of change from various levels of scale, to which they must build the capacity to adapt in order to be sustainable (Donoghue and Sturtevant, 2008; Kelly and Bliss, 2009; Akamani, 2012). Communities respond differently to, and are differentially impacted by these drivers of change (Charnley et al., 2008; Qin and Flint, 2010). Theoretical discussions and empirical evidence suggest that the ability of communities to successfully adapt to change is largely influenced by the availability of and access to effective institutions and capital assets (Tompkins and Adger, 2004; Walker et al., 2006). While the role of capital assets as sources of community well-being and resilience have received a lot of attention in the literature on forest-dependent communities (Donoghue and Sturtevant, 2007), institutional issues have not been adequately addressed. Below, we discuss how institutions contribute to community resilience by shaping the awareness, motivation, opportunities and capacity for communities to respond to drivers of change.

Institutions comprise the humanly devised formal and informal rules that shape social interactions and behavioral patterns (North, 1990; Agrawal and Perrin, 2008). Formal institutions tend to be codified and enforced through legal or regulatory frameworks. Informal institutions, on the other hand, are usually unwritten and their enforcement occurs outside regulatory frameworks (Pahl-Wostl, 2009). Institutions are often used interchangeably with organizations, which North (1990) refers to as groups of people pursuing a common purpose. The role of institutions and organizations in promoting resilience in social–ecological systems has received a lot of research attention (Adger et al., 2005; Berman et al., 2012). For instance, research on local institutions has shown that such institutions play critical roles in enhancing community capacity to adapt to drivers of change by mediating the impacts of change on communities, providing incentives that influence individual and collective responses, and serving as channels for the acquisition of external resources, such as information, skills and financial resources (Agrawal and Perrin, 2008). Similarly, research on the co-management of natural resources, which involves the sharing of power and responsibilities between state representatives and resource users (Carlsson and Berkes, 2005), suggest that such multi-level institutions enhance equity, efficiency and legitimacy in decision-making processes (Plummer and Armitage, 2007), as well as contribute to community resilience by promoting the transfer of decision-making authority to lower levels (Nelson et al., 2007), facilitating interaction between local communities and external organizations, enhancing access to information and other critical resources, and promoting local level flexibility and capacity for responding to uncertainties (Berkes and Jolly, 2001; Tompkins and Adger, 2004).

Pahl-Wostl (2009) has noted that the ideal situation where effective formal institutions work in harmony with informal institutions is essential for enhancing resilience and resource governance success. However, a common situation in the developing world is one of ineffective formal institutions in conflict with informal institutions, thus creating room for perverse outcomes, such as corruption, lack of transparency, and the entrenchment of pre-existing powerful actors (Pahl-Wostl, 2009). For instance, the implementation of co-management programs frequently experience setbacks stemming from the reluctance of government representatives to share power with local resource users (Berkes, 2009, 2010) and benefit capture by powerful locate elite (Cinner et al., 2012) among other challenges. These issues are explored using the case of Ghana.

3. The CFM program in Ghana

The CFM program in Ghana presents itself as an ideal opportunity for examining the resilience of rural forest-dependent communities in Ghana. Since the establishment of a Forestry Department in Ghana in 1909, two major forest policies have been adopted in the country: one in 1948, and the other in 1994. Kotey et al. (1998) classified the evolution of forest policy in Ghana into four distinct phases: the consultative phase (1874–1939), the timberization phase (1940–1953), the "diktat" (or centralized) phase (1954–1990s), and the collaborative phase (since 1994).

The consultative phase of forest policy in Ghana spanned the inception of colonial rule in Ghana in the late 19th century to the outbreak of World War II. This period saw the introduction of formal forestry practice in the country with the establishment of the Forestry Department in 1909. The roots of colonial forest policy in Ghana have been traced to the traditional European forestry tradition, characterized by the goal of sustained yield of timber, strong reliance on technology and expert science, and reliance on government apparatus for policy implementation (Kotey et al., 1998). During the early part of the consultative phase, forest policies initially sought the creation of state-controlled forest reserves for timber production, water quality, cocoa production and so forth.