

Contents lists available at ScienceDirect

Journal of Forest Economics

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



Local institutions, collective action and forest conservation: The case of Similipal Tiger Reserve in India



Madhusmita Dash^{a,*}, Bhagirath Behera^b

- ^a Doctoral Scholar of Economics, Department of Humanities and Social Sciences, Indian Institute of Technology, Kharagpur West Bengal, India
- ^b Associate Professor of economics, Department of Humanities and Social Sciences, Indian Institute of Technology, Kharagpur West Bengal, India

ARTICLE INFO

Article history:

Received 18 November 2014 Accepted 22 September 2015 Available online 25 October 2015

JEL classification:

P48

Q23

Q57

India

Keywords: Conservation Institution Collective action Property right Similipal

ABSTRACT

This study analyses the factors responsible for effective management and conservation of forest resources in Similipal Tiger Reserve (STR) in India. Both primary and secondary data have been used for analyzing the determinants of forest conservation outcome in 35 sample villages located in and around STR. The result shows that forest growth is positively associated with function of local management institutions, caste homogeneity, and distance to forest department and nearest market. Moreover, it is concluded that efforts at improving forest conservation outcomes should not be confined to the poorest communities, as rich communities are largely responsible for adopting degrading resource use practices. Our result recommends the revival of existing local institutions and promotion of more participatory community management approaches in the STR. Further, in order to reduce trust deficit that exist between fringe villages and the forest department, more usufruct and ownership rights over resource should be transferred to local people, which in turn may enhance better forest conservation outcome.

© 2015 Department of Forest Economics, SLU Umeå, Sweden.
Published by Elsevier GmbH. All rights reserved.

^{*} Corresponding author. Tel.: +91 9564090176/+91 9861243782; fax: +91 9861243782. E-mail addresses: madhuu.dash@gmail.com (M. Dash), bhagirath@hss.iitkgp.ernet.in, bhagirath9@gmail.com (B. Behera).

Introduction

Biodiversity provides a variety of ecosystem services that are essential for economic activities and promotion of local livelihoods. Over the last several decades the demand for these ecosystem services has increased manifold owing to rapid growth of human population and per capita income (Kumar, 2006), resulting in loss of biodiversity worldwide. Several studies have pointed out that loss of biodiversity in terms of extinction of species has increased dramatically due to increasing human intervention in the natural environment (Vitousek et al., 1997; Pimm, 2001). Further, it is reported that species are estimated to be disappearing at a rate more than a thousand times faster than is known historically (Pimm et al., 1995). Therefore, effective conservation of biological resources has become an important policy agenda for countries across the globe. Countries have designed and implemented a variety of institutional mechanism¹ in order to conserve and use these resources on a sustainable fashion.

The failure of centralized top-down approach to arrest irretrievable losses of biodiversity inside the protected areas (henceforth PAs) led to a search for an effective and viable alternative natural resource management (NRM) regime (Heltberg et al., 2000; Heltberg, 2001; Kumar, 2006). As a response the concept of community-based NRM arose as an alternative that intended to address environmental, economic and social goals, within a single program package (ibid). The goal is to promote local peoples' active involvement in management of PA resources (Kiss, 1990) as they have some comparative advantage over the state, specifically with respect to monitoring, enforcement, and adaptation to local conditions (Agrawal and Chhatre, 2006; Behera, 2009). Besides, the local people traditionally depend on PA resources to meet their daily livelihoods (Kumar, 2006); even if not de jure, there is de facto use (Kothari et al., 1998). So, it will be beneficial if they can be a part of the conservation activities. Moreover, since half of the PAs across the globe are inhabited (Borrini-Feyerabend, 1996), attempts to exclude local people will be unrealistic and will inevitably lead to conflicts and resource degradation (Saberwal, 1996). In addition, several studies show that the active involvement of user groups has been empirically seen as consequential in the effective management of natural resources, primarily through informal institutions (Wade, 1988; Ostrom, 1990; Baland and Platteau, 1996; Heltberg, 2001; Behera, 2009). However, while a large number of studies suggest that state-managed biodiversity conservation measures have not been effective in achieving their intended goals (Wainwright and Wehrmeyer, 1998; Barrow and Fabricus, 2002), the outcomes of community-based biodiversity conservation efforts have been mixed (Kumar, 2006).

However, designing proper institutions for NRM is complex in nature, especially in heterogeneous societies like India. Some studies have highlighted that the recent destruction of natural resources and the resultant biodiversity loss inside the PAs can be strongly attributed to a lack of a well defined and secure system of property rights² (Tietenberg, 1994; Heltberg, 2001). The human habitation residing inside a PA, lives in a subsistence economy and thereby try to improve their living standards by extracting more natural resources which is available to them at free of cost. Under such a situation the institutional framework to control local use and access rights breaks down. Besides, in India, there is still insufficient knowledge regarding the evolution and functioning of local institutions and how government and external interventions can shape that process (Heltberg, 2001). Moreover, the policy makers often ignore the fact that the users sometimes lack incentives and ability to organize themselves for collective action (Heltberg, 2001; Behera, 2009). The major question in this context arises as what are the factors responsible for the successful implementation and operation of collective action among the local community users to manage and protect the PA resources? Or, what kind of institutional framework is essential for the effective management of PA resources in a biodiversity rich developing country?

In this paper, an attempt has been made to explore the challenges for improved management of PAs in India. In order to comprehensively investigate the possible factors responsible for effective management of natural resources, the present study focuses on the complex interactions of local communities

¹ A brief review on these institutions is provided in Institutional dynamics and NRM outcomes: A review section.

² Property rights are defined as the legal expression of the guarantee of access to a benefit stream in the context of a given legal, political and social order (Demsetz, 1967; Ellickson, 1993; Gerber, 2009).

Download English Version:

https://daneshyari.com/en/article/92289

Download Persian Version:

https://daneshyari.com/article/92289

<u>Daneshyari.com</u>