

## *Book Review*

# Community Natural Resource Management and Poverty in India: Evidence from Gujarat and Madhya Pradesh

Shashidharan Enarth, Jharna Pathak, Amita Shah, Madhu Verma, and John R Wood (SAGE 2015)

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Community natural resource management (CNRM), the process of involving local communities in the management of natural resources with the objective of contributing towards socio-economic development while also conserving the environment, was first introduced and grew as a new approach to rural development in the early 1990s. A range of government and civil society programmes grounded in this approach have been underway across India since then.

This book examines the extent to which the management of natural resources by communities has been successful and whether CNRM projects and institutions have had an impact on rural poverty in India. The authors make comparative studies of four government schemes based on the CNRM approach in the states of Gujarat and Madhya Pradesh (MP) in the sectors of irrigation, inland fisheries, watershed management, and forest management. Specifically, the functioning of the Participatory Irrigation Management (PIM) programme, Inland Fishing Cooperatives (FC) programme, Watershed Development (WD) programme, and Joint Forest Management (JFM) programme is compared across the two states, based on data collected between 2008 and 2010.

The book offers new insights on several aspects of CNRM across natural resources and community contexts which add to our existing

conceptual understanding of CNRM as an approach and provides data and information on the manner in which the approach works in practice. While outcomes and impact on poverty varied across programmes, due to the nature of the four resources and the institutions established to manage them, the authors find that, in general, in addition to decentralization, the success of CNRM is also contingent on components of governance, such as participation, transparency, accountability, responsiveness, equitability, and rule of law. The objectives of increased productivity, effectiveness, equity, and sustainability are more likely to be met when administrative, fiscal and political autonomy (and conversely responsibility) is accorded to CNRM institutions and exercised by these institutions in practice.

Certain conceptual and definitional issues around CNRM are discussed at the outset, including, importantly, how to define the 'community'. For the purpose of this book, the authors choose to define the 'community' as a community of end-users rather than groups of individuals in villages or similar units, especially when considering irrigation networks, and watersheds. The various meanings and types of decentralization are examined and the authors find that several types of decentralization are at play in the Indian context, such as administrative, fiscal, and political (or devolution, which entails

the transfer of authority from central to local authorities). However, they caution that the *de jure* decentralization of power need not translate into *de facto* decentralization of power and even *de facto* decentralization need not imply any real 'community empowerment' which is often touted as an outcome of CNRM.

The authors also sought to understand the similarities and differences in the implementation of the four programmes and their impact on rural poverty, given the differing contexts of the two states. Their research shows that the governments of the two states have taken somewhat differing approaches to CNRM, with a more gradualist approach with the involvement of NGOs seen in Gujarat, and a more rapid, government-led approach in MP.

Specific findings on each of the selected sectors and programmes are discussed next. Each of the authors attempts to examine the following common issues across the four chosen programmes: (i) the manner in which the CNRM project and institution was first introduced in the village; (ii) the performance of the project in terms of its goals (both *de jure* and *de facto*); (iii) the extent of productivity and income increase; (iv) the extent of decentralization and inclusion; (v) especially of the poorer members of the village, and (vi) the manner in which the CNRM project and institution have contributed towards sustainable natural resource management in the village.

### **Participatory Irrigation Management**

In his analysis of the functioning 8 Water User Associations (WUAs) in the two states, Shashidharan Enarth finds that an increase in agricultural productivity and incomes is contingent on certain conditions, including firstly, introducing improved agricultural practices along with PIM projects; secondly, support for the decentralization of WUAs by capacity-building agencies; thirdly, the support by irrigation departments, which continued to wield control over irrigation projects in all 8 WUAs, even when operational control was

handed over to the WUAs; finally, linkages with agricultural input agencies and the market. He finds a close association between increased decentralization and fiscal autonomy for WUAs and improved productivity and equity. Interestingly, despite higher user charges in the 3 WUAs with increased decentralization (Dagarkot in MP and Chopdvav and Kiyadar in Gujarat), these WUAs reported the highest recovery of water charges and were the best managed, thus, implying that higher charges made economic sense to the farmers as they were assured improved irrigation and returns on their payments.

### **Inland Fishing Cooperatives**

Jharna Pathak examines the impact of increased participation and decision making within Fishing Cooperatives (FCs) on the outcomes outlined in the comparative framework through studying 6 fishing cooperatives, 3 in the Ukai Reservoir, Gujarat, and 3 in the Gandhi Sagar Reservoir, MP. She argues that both the top-down approach (used by the government in MP) and the bottom-up approach (used by the government in Gujarat) only led to greater control over the resource by the governments of each state. In addition, while the fishing catch increased marginally overall after the formation of the FCs in the two reservoirs, (by 1.3% in Ukai and 5.7% Gandhi Sagar) per capita incomes decreased in both areas (from Rs 11,774 to Rs 4,641 in Ukai and from Rs 30,845 to Rs 16,477 in Gandhi Sagar). Some of the key reasons for the limited impact of FCs include: (i) low involvement of fisher folk in the process of planning and implementation; (ii) the design of the programme which expected a group of fisher folk to purchase the lease of the fishing ground of the reservoir; (iii) limited training in recording keeping; and (iv) an ineffective monitoring and sanctions system

### **Watershed Development Programme**

Amita Shah examines the functioning of 8 micro watershed (4 each in Gujarat and MP)

within the common comparative framework for the book. She finds that there was an increase in the irrigated area by 18% and 9% over the pre-project area in Gujarat and Rajasthan, respectively. However, as she points out, this could be attributed to an increase in groundwater extraction at the time. In terms of poverty reduction, the incomes of participants increased more than those of non-participants in both states, even though both sets of groups reported higher incomes. In MP, participants had reported higher incomes than non-participants even prior to the start of the programme, suggesting a bias towards relatively wealthier households during project selection or a reporting bias. Even though income levels increased in general, per capita income fell in 2 out of the 8 villages (Valuna, Gujarat and Kalakhunt, MP). While Watershed Development Committees were formed in most villages, there was limited awareness of the WDC and its functions and activities in these villages implying limited democratization and participation by the community.

### Joint Forest Management

Through a comparative study of 8 villages, 4 each in Gujarat and MP, Madhu Verma finds that JFM has had a mixed impact. While certain positive impacts include: (i) an increase in forest cover and availability of fuel wood; (ii) equitable distribution of benefits among JFMC members; (iii) increased capacity to carry out harvesting, value addition, and marketing of forest produce; (iv) regular meetings and decision making through consensus; (v) the preparation of micro-plans to be implemented by communities; and (vi) employment generation; the negative impacts include: (i) inadequate consultation with key stakeholders; (ii) government driven rather than community-driven projects; (iii) limited transparency; (iv) low levels of awareness among members about future yields, incomes, and their shares; (v) low involvement of women; (vi) unresolved conflicts with neighbouring villages dependent on the same patch of land; (vii) limited alternative sources of

livelihood; and (viii) poor marketing of forest produce. She finds that there was an increase in forest cover in 6 out of 8 villages studied, along with increased awareness about the importance of forest resources. Negligence by the forest department and illegal felling were reported as the key causes for the decline in forest cover in the remaining two villages. Where an increase in forest cover was reported, it was often because of strict restriction of entry into the forest. By and large, forest departments have not devolved power to JFMCs and these remain controlled by beat guards and are devoid of administrative, fiscal or political autonomy.

Towards the beginning of the book, John Wood points out that it was with the intent of increasing rural productivity and a gradual privatization of functions previously carried out by the government that CNRM institutions and programmes were first introduced in India. CNRM institutions at the village level were to gradually work towards becoming self-governing and self-financing. Over time, with a greater emphasis on inclusivity in the discourse on development, the focus shifted towards also enabling equitable development through CNRM in addition to increasing the productivity of resources.

This book provides a detailed analysis of the extent to which these outcomes have been met and its strength lies in the common analytical framework which is developed to analyse outcomes across all four chosen resources and programmes and the rich empirical data generated for all these programmes. The chapters complement each other so that the reader gains a comprehensive overview of CNRM in the country while also understanding programme-specific issues and challenges in the chosen states.

Given that the research for this book was carried out between 2008 and 2010, perhaps it is time to revisit these sites and understand the manner in which the CNRM programmes and institutions have evolved over the last decade. Future research could also consider including stand-alone civil society programmes within

the comparative framework developed in this book to gauge the differing impacts that these may have had in the same sector, given the significant role that civil society organizations seem to have played as project implementation agencies in the success of government-led CNRM programmes. Finally, while limiting

the site of the research to two states serves the purpose of allowing for a focussed analysis of issues and challenges, this framework should be applied to other state-specific contexts or possibly across agro-climatic zones in the coming years.