ForestAction

How does techno-bureaucracy impede livelihood innovations in Community Forestry?

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Content

Abstract

Over the past three decades, Nepal's community forestry program has marked a tremendous shift from state-centric, top down model to community-based participatory approach to forest governance. Research confirms that such shift has led to significant improvements in local institutional arrangements (social capital) and the condition of forest (natural capital). Yet, recent studies indicate that livelihood benefits to local communities, especially the poor and disadvantaged groups, remain limited. Such studies point to the need for problematising the participatory approach itself in order to unravel more complex pathways of, and constraints to, livelihoods innovations in community forestry. Drawing upon the experience of a participatory action research project, that aimed to understand and facilitate innovation systems in forest management in Nepal, we argue that limited livelihood outcomes in community forestry can be attributed to the limited space for innovation, mainly restricted by regulatory practices and bureaucratic behaviour of state forest agencies. Despite legal autonomy, local communities face significant hurdles and impediments as they plan to undertake innovative actions in forest management, utilization, marketing, and benefit sharing. Likewise, local communities get limited freedom to explore and utilise livelihood opportunities and have limited access to new information and ideas about improved methods, technologies and livelihood opportunities. A key conclusion is that livelihood innovations in community forestry are more related to bureaucratic and regulatory structures than to the commonly assumed internal processes and capacities of the local communities. We also identify emerging threads of innovations that challenge such constraints and expand the space for innovation.

1. Introduction

Over the past three decades, Nepal's community forestry program has marked a tremendous shift from state-centric, top down model to community-based participatory approach to forest governance. Supported by adaptive decentralized and devolved policy processes, this program is widely recognized as an innovative approach to forest management and governance (Koirala et al. 2008). By devolving forest management rights to local community forest user groups (CFUGs), the program aims to nurture deliberative democratic platform and enhance CFUGs' access and influence in decision-making processes (Banjade and Ojha 2005). Currently, Nepal has some 17,685 CFUGs with legal rights to manage over a million hectares of forest areas, bringing about one third of the country's forest area under community forestry (DoF 2011). Given the history of over three decades of community forestry, studies have increasingly focused on the extent to which CFUGs can practice democratic functioning, improve livelihoods and restore ecological benefits.

Most of the previous studies clearly indicate that community forestry is especially successful in forest conservation (Yadav et al. 2003; Thoms 2008). Yet, there are also studies that conclude that actual livelihood outcomes from community forestry have been limited (Khadka and Schmidt-Vogt 2008; Dhakal and Masuda 2009) and far less than the actual potential (Edmonds 2002; Yadav et al. 2003). Such limited livelihood outcomes have often been attributed to two key factors. First, the weak and inefficient internal governance within CFUGs, such as elite capture, and lack of access to and influence in forest decisions can hamper the equitable benefit sharing within forest users, resulting in disproportionately lower benefit flows to the marginalized groups (Agarwal 2001; Giri 2006; Nightingale 2010). Second, stringent emphasis to 'protect' the community forests despite the productive potential and market values of these forests have limited and even undermined the potential of enhancing and diversifying livelihood options for the forest users (Edmonds 2002; Yadav et al. 2003). Central to both the propositions is the ways in which CFUGs negotiate rights and decision-making autonomy with the state. While there are some studies that demonstrate extra-legal techno-bureaucratic control over CFUGs, less understood are the ways through which forest bureaucrats and local forest users negotiate knowledge and political power pertaining to the policy and practice of forest management and governance (Nightingale 2005; Giri 2005b; Ojha 2006).

Forest bureaucrats are often condemned to produce and extend techno-bureaucratic legacies in forest management, with the aim to enact the state's centralized control over forest management (Shrestha 2001; Mahapatra 2001; Ojha 2006). These authors, among others, criticize such legacies as a "backlash" or "betrayal" (Mahapatra 2001) to community-based forest management, and claim that these signify the risk of endangering the principles of devolution and decentralization in community forestry (Shrestha 2001). While these

reflections point to techno-bureaucratic hegemony as a barrier to effective forest management, these studies have not been sufficiently attentive to provide an in-depth account of how the hegemonic, techno-bureaucratic power impede agency, willingness and incentive of local people to engage in innovations in forest management. Moreover, in case of community forest management, hegemony is treated as being static (similar in all contexts), exhibited by a single-actor (i.e. the state). At the wider level, the question is –how community forestry can nurture democratising power to enable its hegemonic actors to be self-reflexive and prepared to allow and facilitate innovate institutions, technologies and practices for better livelihood results in CFUGs?

Drawing on the experience of a participatory action research project, which had a goal to understand and facilitate innovation systems in forest management in Nepal, we argue that the onset of economic potentialities of community forests can reinforce the relative importance of the state agencies, and generate new hegemonic practices and actors. Such hegemonic practices can produce limited livelihood outcomes at CFUGs, for the 'space of economic innovation' is restricted by both (i) regulatory practices and bureaucratic behaviour of state forest agencies, and (ii) the emergence of new forms of hegemonic practices and actors, affecting the transparency and equitable systems in the CFUGs.

This paper starts with a brief conceptual overview of technocracy and innovation with an implicit focus on state agencies in the context of forest and natural resource governance. Based on an analysis of attitudes and practices of the state agencies amidst livelihood innovations at CFUGs, we present how technocracy and innovation interlink, focussing on the hurdles and impediments to innovative processes in community forestry. Thus, our aim is to understand the complexity through which local users and bureaucrats interact, enacting the hegemonic relations of power that limits the space for innovation. While the action research project created some examples regarding how changes can take place, we report here diverse challenges linked to techno-bureaucratic domination over forest governance that we experienced in the field.

2. Techno-bureaucratic practice in innovation system perspective

Most of the studies analyzing community forest management and governance in Nepal use the perspective of 'institutional and property rights' (e.g. Ostrom 1990), and/or political ecology (e.g. Blaike and Brookfield 1987). These perspectives often highlight the rational behaviour of individuals and associated power play within the institutions that, in turn, can affect community forest governance (Lachapelle et al. 2004; Dahal 2003). Yet, most of these studies focus on certain components of community forestry such as internal dynamics of CFUG (Lapachelle et al. 2004; Dahal 2003), and pluralistic civil actors (Timsina and Paudel 2003), and

their influences on community forest management and governance. While these studies have rightly revealed important dynamics of governance mechanisms and underscored the importance of a pluralistic network for effective forest governance, an in-depth analysis of the ongoing interaction between the state and forest communities is essential to reveal the complex processes within which stakeholders inquire, learn, contest and act together (Forester 1999).

Such an understanding is also deemed essential considering the emerging consensus that techno-bureaucratic values and practices predominate environmental decision-making (Backstrand 2004; Ojha et al. 2009). This holds particularly relevant in developing countries where the legacies of centralised and technically-oriented colonial approaches of the past continue to be reproduced and dominate policies and practices of forest management (Shivaramakrishnan 2000; Sarin et al. 2003). Only a few studies (Shrestha 2001; Mahapatra 2001; Ojha et al. 2009) have documented that CFUG institutions-state relations in Nepal is not moving through linear trends of participatory and decentralized development (Timsina and Paudel 2003). Rather complex forms of contention and collaboration between civic power and techno-bureaucratic power exist. They are usually mediated by a wide range of development and environment actors (Giri 2005b). Thus, a detailed understanding of how such technocratic interactions surface up and affect community forest management and governance is an urgent imperative for both research and its use in practice and policy.

While definitions may vary, we understand technocracy as a state of techno-bureaucratic control and regulatory enforcement without providing deliberative space to civic actors for change, learning and modification (Fischer 2003). Likewise, we understand innovation as irreversible change in the behaviour, relationship, and technology use for greater and equitable benefits.

Our analysis captures reflections as we tried to actively promote innovations in forest governance, focussing particularly on establishing and enabling linkages between local CFUGs and forest offices. We build on innovation system perspective (see Hall et al. 2004; World Bank 2007) to study such interactions, to understand what enables the techno-bureaucratic hegemony to be challenged and transformed, with what innovative processes of interaction and learning can work to this end. Innovation system perspective provides an explicit focus on interrelated actors who interact in the generation, exchange, and use of forestry-related knowledge in processes of social or economic relevance, and the institutional context that conditions their actions and interactions (Smits 2002; Hall 2005; World Bank 2007). This perspective does not see innovation as mere technologies or products but as the process through which knowledge is generated, negotiated and put to use, and again contested, leading to more learning questions and need for research and analysis. Thus, innovation encompasses interactive processes amidst different actors and organizations, often possessing different

types of knowledge within a particular social, political, policy, economic, and institutional context that influence these processes. From this perspective, we particularly focus to understand how the historically entrenched relations of power and knowledge between local communities and the state forest agencies can change, and what drivers facilitate such processes. We also look at the subtle processes of reproduction of hegemony despite rhetoric and discourse of transformation. This analysis, we expect, would also contribute to the current body of knowledge on innovation itself, for the fact that though there is consensus on the importance of innovation for economic development, the systemic mechanism through which it can be enhanced is not given sufficient attention. Existing literatures with few exceptions (e.g. Hall 2005; World Bank 2007) lack explaining how economic innovations are embedded within forest system that, in turn, operates within certain institutional and policy contexts.

3. The context of innovation and site overview

Reducing poverty through innovation systems in forestry (RPISF) is a research initiative that aims to bring research into policy and practices by enabling forest-dependant people to learn, know and improve the environment of policy and practices, and thus, enhancing their livelihood. RPISF is funded by 'Research into Use'-RIU/DFID and International Development Research Centre (IDRC). A coalition of five different organizations led by ForestAction was formed to promote research innovations for active, equitable and effective management of natural resources within the framework of community forestry in Nepal. Each of the coalition partners has specific roles to contribute. ForestAction's role was to strengthen innovative processes in forest and livelihoods by enhancing collaborative linkages among the diverse coalition partners and through policy-oriented research. Federation of Community Forestry Users Nepal (FECOFUN) advocated for scaling out the innovative lessons learnt throughout the country. Central Department of Sociology/Anthropology of Tribhuvan University build up academic linkages to conduct quality research on innovation. Nepal Herbs and Herbal Product Association assessed the possibility of forest products enterprise development, and market linkage at national and international level. Nepal Forum for Environmental Journalists worked to disseminate the project activities and innovative responses to a wider audience through Community Radio Stations in the project districts.

RPISF aimed to provide a unique opportunity to these diverse groups of actors to work together in repacking, updating, disseminating, adapting and institutionalizing both product and processes of innovation. Especially, RPISF sought to: a) enhance interaction and exchange among diverse actors at different levels, b) put earlier renewable natural resources research strategy and other related research products into effective use; c) disseminate and scale out innovation products and processes; d) strengthen capacity of CFUGs networks and other local actors; and e) develop policy linkages in support of innovation system.

The project includes 15 CFUGs from Lalitpur, 15 CFUGs from Nawalparasi and 30 CFUGs from Baglung districts, covering Nepal'sthree ecological regions – Mid hills,Terai, and High hills. The 60 CFUGs in the project received training and support in the use of forest management methods developed in past projects, and were supported to identify and develop forest-based enterprises as an incentive to good governance and forest management.

To enable understanding and assessment of situations, changes, and causal connections, the research team undertook extensive background studies, interim and final assessments, as well as ongoing observation by field researchers. Moreover, the coalition partners tabulated their reflection and stories about each event/observation at field sites, which after an in-depth discussion and agreement with other partners, led us to document and develop conclusions about the particular event/observation. Different events such as issue-based discussion at CFUG level and multi-stakeholder meeting at district level were used to inform, identify and provide solutions to any emergent issues. Therefore, the ongoing project activities, regular meetings (Cluster level meetings, reflective and interactive meetings) and correspondences with CFUGs committee members, hamlet representatives, 60 project facilitators, district FECOFUN members, three district advocacy officers of the project comprise the major sources of information for this research.

4. Community forestry and livelihoods –processes and challenges

This is an empirical section describing cases and stories on how local communities faced different kinds of hurdles and challenges in relation to innovating livelihoods from forestry. To do so, we analyze the key actors, their attitudes and practices, and patterns of interaction and their effect on the CFUG innovation processes.

As the facilitative actions in support of forest-related innovations began in the project area, we encountered a variety of techno-bureaucratic resistance that used to challenge the prospects of economic innovation in CFUGs. Diverse cases of techno-bureaucracy and its effect on economic innovations in community forestry are presented below.

4.1 Maintaining the technical complexity of forest management

In many of the CFUGs in the project districts, local people have complained that state forest agencies working at local (district, range post) level adopt different procedures that add complexity and blur the autonomous functioning of CFUGs. In many instances, local CFUG/NGO criticize forest officials for misusing forest science to misinterpret harvesting potential (especially annual allowable cut, or AAC) of community forests. While CFUGs are not aware about the procedures of the measuring the AAC, they completely rely on state forest agencies. Likewise, even after the allocation of AAC of timber from forest, CFUGs

have to report to and take permission from forest officials before carrying out the harvest. As an example, 'Binai' CFUG of Nawalparasi district, raised this concern during the stakeholder meeting. Despite having a provision of taking out certain amount of timber as AAC, forestry officials play an influential role during the harvesting period. Quite frequently, CFUGs are allowed to cut only the dead, dying, diseased trees, irrespective of the assigned AAC in the operational plan of CFUG. Additionally during the harvesting period, CFUGs have to get a *tancha*—or, official approval stamp—from state forest agencies to remove the harvest from the community forest. Such *tancha* system is interfering with the autonomous functioning of CFUGs. While district forest agencies argue that *tancha* is essential to monitor and control the illegal felling of economically productive trees such as *Shorea roubusta* in some CFUGs, lack of proper justification and counseling to local CFUGs by state forest agencies have added the technical complexity in managing community forests. Such examples illustrate that state forest officials distort forest science to serve bureaucratic power and interests. Similar forms of interventions that made forest management more technically complex than initially assumed simplistic plans is also reported in other districts (Ojha 2006).

4.2 Protectionist forest science

During its journey of about 30 years, Nepal's community forestry program has witnessed emerging needs, and the call for change in management and policy orientation. While the program is especially successful in forest conservation (Yadav et al. 2003; Thoms 2008), the management system has remained mostly protection orientated. Most of the CFUGs are only removing dead, dying, fallen trees and leaf litter. Due to such passive management, using forest just for the subsistence needs, the productivity of the forest is not completely utilized (Edmonds 2002; Yadav et al. 2003). This has called for the need of intensive community forest management to achieve sustainable economic transformation (Giri 2005a).

Despite the apparent need for economic transformation of forest-dependent people, the activities in the project areas have largely been restrictive, with no or limited scope for economic innovations. Our experience and evidence reveal that the state forest agencies and many of the forest executive committees adopt protection-oriented forest management schemes, while other users prefer use-oriented forest management. Uncooperative behavior of state forest agencies towards entrepreneurial development in CFUGs can undermine economic innovation in many CFUGs. As an example, in 'Hilejuke' CFUG in Baglung district, after seeing the potential, the CFUG wanted to establish an enterprise to produce and market locally used bowls/plates from leaves of certain trees found in their community forest. When intimated, forestry officials said, "You [the CFUG] cannot do everything you want in Community Forestry." In our next visit, 'Hiljuke' CFUG was found discouraged and had lost hope of setting up enterprise.

Likewise, in cases where enterprises are already set up, state forest officials do not provide counseling and networking for sustaining the enterprise. This behavior suggests that despite their motivation and preparedness, CFUGs do not have autonomy for economic innovation. The state still controls the ideas and decisions concerning economic innovation under the protectionist attitude in forest management.

4.3 Inefficient service provisioning

Despite being mandated for technical service roles and responsibilities and the capacity to do so, state forest officials fail to provide needed technical services. We found that service provisioning was rather weak in many of the CFUGs in all the project districts. As an example, some 84 household of marginalized communities were excluded from CFUG membership during constitution amendment in 'Tallo Pakha Pare Bhir' CFUG in Baglung district. Likewise, in 'Manedada' CFUG in Lalitpur district, there was no facilitation from state forest officials to end the four-year long impasse in CFUG management. In many other CFUGs, the frequency of facilitation by state forest officials is either absent or minimal. In Baglung, which is a hilly district, forest rangers do not visit many of the CFUG in such pretexts as distance (5-6 hours to reach a CFUG) or lack of economic incentives. In Terai district such as Nawalparasi, forest rangers visit CFUGs only during harvesting period, whereby they monitor the harvesting operations and receive *bhatta* (or allowance) for their visits during the harvesting operations. Moreover, local CFUG express their discontent over the state forest officials who behave as if CFUG were a unit of District Forest Office and use a top-down language.

4.4 State's discretionary control through alliances

CFUGs as one of the resilient grassroots organizations have the opportunity to work with a broader network of alliances and plural actors in various activities. In RIU project sites, several NGOs, researchers and donor agencies have extended their alliances with CFUG to embolden CFUG democratic functioning. While the pluralistic context has often extended the linkages of CFUG to wider networks, it has also called for an unwarranted interference of state forest officials regarding CFUG inter-linkages and activities with the other actors. Many CFUGs reported an increasing negative attitude of some state forest officials towards new alliances of CFUG. Such negation is reflected in the form of denying the role of external, non-governmental service providers (such as ForestAction Nepal) and threatening the local CFUGs not to entertain the other service providers (other than themselves) or face unwanted consequences by the state forest officials (e.g. hurdles to harvesting operations of CFUG etc.). Such behavior has often been reported in Nawalparasi district that harbors expensive timber and complex challenges in community federations. Additionally, in this district, state officials also tend to form allies with different elites within CFUGs or community federations, and

thus, embolden their own control and influence over forest management decisions through these allies. While these behaviors are often explained against personal characteristics of a few individuals, the frequent occurrence of such behaviors reinforce the hegemonic tendency to retain the power and influence over CFUGs in different forms and behaviors. Above all, such selective alliances indicate that state forest officials tend to discourage and derecognize civil society networks that could challenge the legitimacy of bureaucratic hegemony, while they cooperate with a few elites who tend to accept it.

5. Space for innovation in community forestry and livelihoods - key lessons

The previous section outlined some stories about how regulatory and bureaucratic hurdles impede innovations in forest management in the context of community forestry in Nepal. In this section, we further our analysis into how these hurdles are produced and sustained while also exploring the prospect of expanding innovation space. There are at least a few key analytical aspects of technocracy and innovation, linked to cases and examples mentioned in the previous section.

5.1 Emergence of multiple stakeholders in the field of community forestry has the potential to countervail bureaucratic pressure

While the success of locally focused participatory initiatives such as community forestry in Nepal is lauded as providing a democratic space to decision-making to the local users, decentralisation and increasing market forces have also introduced a wide array of stakeholders, changing the conventional relationships. Such changing relationships can lead to the emergence of local elites and alliances of powerful actors who usurp local control over resources (Wollenberg et al. 2006). As our stories indicate, the state forest agencies that used to cooperate with local CFUGs for protection oriented forest management are paradoxically exhibiting contradictory and negative behaviour in regard to economic dimensions in community forest management.

5.2 Such a conflicting scenario is also due to the fact that most participatory initiatives have not anticipated the changing relationships among actors due to wider-scale political economic changes

Though labelled participatory, these efforts remain embedded in economic and science-normative institutions and broader political economic regimes, leaving little room for process-oriented approaches. Very locally focused participatory forestry initiatives, largely led by nongovernmental organisations, often assume that local participation and 'community empowerment' suffice to overcome forest management problems. The innovation system project recognized this limit and hence sought to link three levels i.e. the community, meso

and national level– but the sheer amount of politics needed to achieve a modest of level of innovation was too massive to be managed within the limits of the project. Hence, the project team realized that what has been achieved is understanding the complexity through which local agents and bureaucrats interact and limit the space for innovation, and not so much about creating the actual changes.

5.3 The actors' relative importance can change during the innovation process

As our case studies indicate, seemingly collaborative and enabling environment and actors can compete for resources, in the event of economic possibilities. FECOFUN that acts as a watchdog organization of CFUGs at national level has its weak links at district, where the economic incentives and vested interests of the leaders have formed an alliance with the state. Conflict due to such changed roles amidst different actors can again affect innovation processes. As a result, despite being accountable to the local CFUGs needs and concerns, FECOFUN district chapter has not raised any concern about state's technocratic behaviour in particular in Nawalparasi district. Thus, interventions that seek to develop the capacity for innovation must give particular attention to ingrained attitudes and practices and the ways these are likely to interact with and skew the outcome of interventions.

5.4 Relationships between CFUGs and other actors are more important than within the CFUGs

A recent policy emphasis on unpacking communities runs the risk of masking bureaucratic impediments to innovation. CFUGs are not confronted with problems that are independent of each other, but with dynamic situations that consist of complex systems of changing problems that interact with each other. Thus, there is a need to address the complex dynamics of societal change—in particular, the changing relationships between interest groups in evolving political and socio-economic contexts.

5.5 Problems of representation and articulation on the part of communities

As our case studies indicate, collective action often does not suffice to run up against the constraints associated with higher-scale dynamics in the context of economic change. The ways communities themselves network and federate have been problematic because of the underlying political economic interests of the leaders, who resort to non-transparent and often corrupt ways of reaping profits from forest management. Thus, the power and influence exhibited by individuals and organizations- such as in CFUG and district FECOFUN are embedded in actual social networks and emerging contexts and do not exist as separate, abstract, idealized relationships that follow the rules established by their boards.

We conclude that partnerships and linkages are central to innovative performance and must be analyzed in their historical and contemporary context to understand their strengths and weaknesses. One of the key lessons for out-scaling and up-scaling research findings is that we must start by figuring out how these interactions may affect putting particular research results or baskets of research findings to use. Moreover, a description of the changing context is a key diagnostic element for revealing any divergence between organizations/other actors and their practices (on the one hand) and the changing demands imposed by the context (on the other) and its overall influence on innovation processes. It is because as circumstances change, an activity will become obsolete, will be eliminated and the resources will be used in a new way. In this context, strategy needs to be understood as an unfolding process, which can include both avenues as well as bottlenecks.

6. Conclusion

In view of the recent research findings suggesting limited livelihoods benefits from community forestry, this paper explored the possibility of applying innovative systems approaches to enhance livelihood benefits and contributions to poverty reduction. Using the concept of technocracy with innovation system perspective, this paper has demonstrated that livelihoods outcomes cannot be automatically generated with improved participation and strengthened local institutions such as CFUGs. Instead, it requires a continuous system of innovation and social learning in relation to planning, decision-making, entrepreneurship development, access to information and ideas, market linkages, and empowerment of the poor and disadvantaged. The experience of the innovation project reveals that while communities have enough volunteers and capable leaders to facilitate innovation as well as discernible economic and livelihood opportunities, technocratic behaviour of state agencies continues to be one of the key impediments to innovation related to effective, productive and equitable use and marketing of forest resources.

Despite legal autonomy and strong institutional base, CFUGs continue to face significant constrains to make management decisions oriented to economic innovations, despite the emerging market potential of timber and a wide variety of non-timber forest products. It is also because the underlying political relation, constructed through historical process of state and community formation, does not allow the communities and the disadvantaged groups to explicitly challenge such hurdles created by state agencies. Likewise, the development agencies working in these communities do not provide critical empowerment services, as they take apolitical approach and always seek to avoid possible confrontations with the techno-bureaucratic behaviour of state officials. As a result, these communities continue to face deep-rooted technocratic resistance in a number of ways (from asking bribes and fees to threats), that constrained their agency to explore and innovate forest management and livelihood improvement practices. Thus, any further improvement in livelihoods from Nepal's

community forestry would depend on removing such barriers and hurdles and on expanding the freedoms of local actors to innovate methods, technologies, institutions and practices that harness the economic and livelihood opportunities of forest ecosystems.

These results point to two broad revelations. First, there is a need to redress/problematise participatory approaches to forest management, that often work without questioning the existing structure of state bureaucracy, which is the common approach to development in Nepal. Second, there is a need to document lessons on processes that may have triggered self-reflexivity in the agency of the state officials and to understand how this has worked with other processes to enable overall innovation in forest governance, away from the technocratic hegemony. In the current context of Nepal moving through political transition, it is relevant to bring the issues related to structure and behaviour of the state when we promote community based resource management and development. Without problematising the deep-rooted technocratic behaviour of state forest agency, it is too naive to anticipate significant improvements in livelihood outcomes. We, however, see that ideas of innovation systems can be applied as an entry point to understand the linkage between structure and behaviour of state agency as they come to govern and regulate community actions in resource management and innovation.

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