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Protected Area Co-management in Bangladesh - Can enhance the adaptation of the forest communities?

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Abstract— The study stipulates that the protected area co-management initiatives is potential to enhance the adaptive capacity of the forest communities through enhancing livelihood security, access to forest benefits, forest decision making and institutions; however is not a policy panacea. The study aims to analyze the outcomes of the co-management initiatives in Bangladesh to understand to what extent the co-management has transferred the control of forest management to local forest users. And, to what extent it has benefited the marginalized communities in regard of their decision making space, access to benefits, and livelihood opportunities. Based on the field survey in Chunoti wildlife sanctuary, this study summarizes that the initiatives is a good start to transfer to control to local communities but insufficient to address the marginal forest users who are most vulnerable to climate change and whose access and benefits are captured by local elite and the societal patronage relation.

INTRODUCTION

The effectiveness of protected areas has long been discussed in terms of their ability to reduce deforestation and to conserve bio-diversity. It has been suggested that carefully managed protected areas could help to alleviate poverty; conserving bio-logical resources whilst providing developmental benefits to marginalizes communities [1]. In this context, Community Forest Management (CFM) become as protected area management policy as well as a mainstream forestry policy to mitigate increasing deforestation and forest degradation and address the negative impacts on rural livelihood through the last 2-3 decades. Increasingly it influences the conservation and development policy and recently the climate change policy. Very recently when `Reducing Emission from Deforestation and forest Degradation (REDD) become very prominent agenda in the global climate change, CFM is getting much more emphasis in the premise that REDD initiatives are more likely to be effective in reducing emissions if they build on, rather that conflict with, the interests of local forest groups[2]. However the complementarities and the conflicts between bio-diversity conservation and human development continue to be the subject of heated academic and policy debates [3]-[5]. Despite these debates, there is a general consensus that conservation policy has changed significantly towards people-oriented approach and this integrated approach is very much potential to address the sustainable development and adaptation of the forest community along with forest protection.

In Bangladesh to address the deforestation and bio-diversity conservation, the government has taken alternative forest management strategies; forests or part of forests have been declared as protected areas according to the IUCN categories and initiated collaborative management approach to include the active participation

of the local forest users. A state-community collaborative program which is commonly known as protected area co-management has been initiated from 2004 with the broader aim of protecting forest, sharing resource management with forest communities and ensuring the livelihood security of the forest communities. After piloting projects in 5 protected areas the co-management initiatives have gradually been implementing in other protected areas including Sunderbans mangrove forest. In this context, these collaborative initiatives or community forest management in the protected areas in Bangladesh can potentially be considered as an effective way to address the climate change threats of Bangladesh both from adaptation and reduced carbon emission perspectives. Community forest management can be an effective local institution to enhance the adaptive capacity of the vulnerable forest communities through enhancing their livelihood security and as well as enhance carbon sequestration through forest protection [6], [7].

Bangladesh is one of the most vulnerable countries to climate change; many of its ecosystems including forests especially the coastal mangrove forests are already being heavily affected and likely to be intensified by the unprecedented combination of climate change, its associated hazards (e.g., flood, drought, salinity intrusion, river erosion). Apart from this; the country is fighting with an increasing rate of deforestation and forest degradation; the existing natural forests are decreasing at a rate varying from 2.1% to 3.3% per year [8], [9]. Bangladesh has 17% of the landmass designated as forest [9] but the statistics of FAO indicate that the actual tree cover is estimated at around 10% [10]. A very densely populated country like Bangladesh where 1061 people live in per square kilometer and where land distribution is sharply skewed; 10% people hold 40% land and 60% are landless [11], the pressure is already excessive on this very limited forest resource. Per capita forest land in the country is estimated around 0.02 hectare or below which is one of the lowest in the world. With this limited and degraded forest resource, the changes in the climate and carbon dioxide concentration which is affecting the structure and function of ecosystems have significant consequences for its dependent community. On one hand their resource bases are degraded, their lives and livelihood become more and more insecure and on the other hand they have very poor capacity to cope or to adapt this very threatening situation.

The study stipulates that the protected area co-management initiatives is potential to enhance the adaptive capacity of the forest communities through enhancing livelihood security, access to forest benefits, forest decision making and institutions; however is not a policy panacea. The adaptive capacities of the forest dependent communities depend not merely on the limited livelihood option rather they rely on the broader livelihood security which include access to resource, decision making and other opportunities like the intuitional and forest

market access. I argue in this paper that the broader livelihood security and adaptive capacity of the local forest users largely depend on the effectiveness of their local institutions through which they are connected to the resource management. Without the space and control of decision making of the local forest users in the resource management, it is hard to ensure their benefits and capacity building for adaptation. Therefore, the specific objective of this study is to examine the process and outcome co-management initiatives to understand to what extent the co-management has transferred the control of forest management to local forest users and, to what extent it has benefited the marginalized communities in regard of their decision making space, access to benefits, and livelihood opportunities which are crucial for their adaptive capacity building.

METHODOLOGY

This study is an empirical study based on field work in the Chunut Wildlife Sanctuary (CWS) in Bangladesh. CWS covers about 7,763 hectares area in two forest ranges (Jaldi and Chunut) and it was declared as protected area (PA) in 1986. This is one of most heavily degraded and deforested area in Bangladesh. From 2004 the collaborative community forestry management has been operating under different projects like Nishorgo Support Project (accomplished) and Integrated Protected Area Co-management (IPAC continuing).

Focusing the Chunut range at Chunut Wildlife Sanctuary, the survey was conducted from January 2010 to May 2010 with semi-structured questionnaire followed by in-depth interview. The total number of the respondent of the survey is 32. Among the 32 respondent, 13 respondents are from the co-management council and committee. Another 10 key informed persons have also been interviewed. Along with the survey data I also employ the data from the meeting minutes of co-management meetings, evaluation report of the project, project proposal, interim report, financial report and relevant research documents.

KEY FINDINGS

Co-management as local institution

The basic concept behind the co-management approach is on pluralism. In the sustainable forest management or natural resource management arena pluralism refers to a situation where a number of autonomous and independent groups with fundamentally different values, perceptions objectives demand a role in decision making about natural resource management and its outcome [12]. Based on this basic premise, a two-tier institutional structure is formed which are termed as co-management council and co-management committee (CMC). Both of the institutional tiers were designed to include specific number of member from different representatives. According the design of the co-management council and co-management committee the distribution of the members are as follows

Table 1: Distribution of the membership in the co-management council and committee at Chunut range, CWS

Name of different representative	No. of member in the council	In %	No. of member in the committee.	In %
1. Govt. agency	17	34	6	31.5
2. NGO/CBOs	3	6	3	15.8
3. Forest users	6	12	2	10.5
4. Elite group	24	48	8	42.1
Total number of the members	50	100	19	100

Source: Data from the local Integrated Protected Area Co-management (IPAC) office at Chunut and project documents

This distribution of the membership shows that the number of the representative of forest user group (FUG) in the co-management council and committee is 12% and 10.5% respectively. In contrast with the other representative of the society like the resource owner group and elite group (generally, we can call them local elite group) is around 48% and 42% in the council and committee respectively. In Chunut wildlife sanctuary (in the Chunut range) the total number of the household is 3636 and the number of the community people is about 20,000 [13]. Among them majority are the ordinary and poor forest users who depend on forest resources directly or indirectly for their livelihoods. These majority peoples are disproportionately represented both in the co-management council and committee. According to the interviews of the committee member and the Forest Department (FD) official, the marginalized or poor forest users are not enough capable to take such responsibilities. They also agreed that there is no capacity building initiatives for them.

The pattern of participation in decision making

The member of the co-management council and committee they are assigned to carry some specific job like preparing six-monthly plan of action, meet bi-monthly to review the status of the planned activities, problem encountered etc. The survey on the pattern of participation in discussion on 6 specific agendas like planning (year planning), implementing the planned activities, financial-budget matter, benefit sharing discussion, community development and conflict resolution finds that their participation varies agenda to agenda. The following Fig. 1 shows the details of participation pattern on different issues.

The Fig. shows that members are relatively less active and less influential in the financial and budget related discussions than the other discussions like year planning or community development. But overall the process (in average) the majority of the respondents (30.73%) think the members of the committee can actively participate in the meeting but ultimately they cannot influence the decision-making process. 16.1% respondents think they actively participate and also can make influence. 7.85 participants think the members have nominal or no

participation, 8.35% think they have passive participation. 28% of the respondent did not answer as they don't have enough idea what actually happen in the meetings.

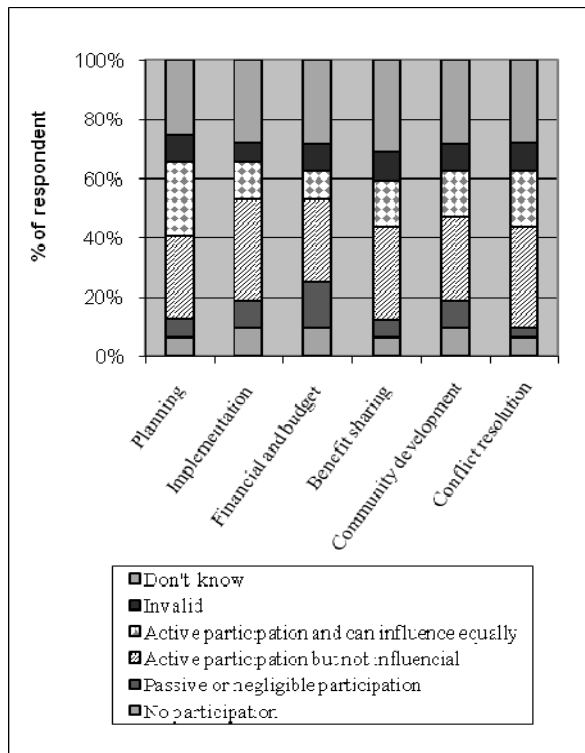


Fig1: Pattern of participation of CMC member in various agenda.

Source: Based on field survey at Chunoti Wildlife Sanctuary in 2010

Decision making space for marginalized community

One of the core conceptual understanding and assumption in regard of the co-management initiatives is that it can enhance the capacity of the community forest management institution and as well empower the marginalized forest users. But the forest user groups who are the basic unit of the community forestry could not develop as a formal institution or formal arrangement even in the co-management initiative. In the Chunoti range at CWS out of 20 thousands population only 38 FUGs are formed with 865 forest users⁵. These forest user groups also remain more or less as an informal group which lack definite membership or definite activities. Some of the forest user groups like the patrolling groups are relatively well organized, have some definite activities and benefits. According to the opinion of the forest users, their selections for the council usually are done by the forest department along with the local elites. The election of the member for the committee is also heavily influenced by the forest department or the local elites.

The survey also reveals that the capacity to influence making among the committee and council member is unequal. Most of the key discussion and decisions are lead by the forest department, project official and local elites. The committee member and council member from the forest user group (FUG) expressed that they can participate

in the meeting properly but ultimately they don't have any influence or control over decision making process. They also mentioned that ultimately the FD official and project official decide according their plan and most of the cases, they (forest users) follow that.

The position of the women participants is worse; their presence and position are far bellow than the proposed model of co-management institution. The total women member in the co-management committee and council is only 4 and all of them are the member of the *Union Parisad* (lowest tier of local government). The poor women forest users remain the most marginalized one, they could not be included in the co-management institution as members yet. According the survey only 9.4% respondents think the women forest users are participating like the male forest users. 50% respondents think that women are participating to some extent but not like man and 15.6% of the respondent think they are not participating in their area.

Cost and benefit

The most significant discussion in regard of the protected area management is that whether it really brings benefit for the local forest dependent community; what type of cost they are paying and what type of benefits they are receiving from the conservation process. 28.1% respondents give their opinion that this project brings livelihood opportunity or livelihood benefit for the local forest users. 65.6 % of the respondent expressed that the project did not bring any significant livelihood opportunities; it gave some assurance about the livelihood option but in reality a few opportunity they received. Some of the respondent who is from the poor forest user groups expressed their frustration in regard of getting these opportunities. They thought majority of the opportunities goes to the local elite who already possessed *khas* land (governmental land) for social forestry purpose. In regard of other benefits like receiving training; only 34.4 percent respondents received or get involved with some sort of training or awareness activities. 59.4% of the respondent did not receive any sort of training or education for alternative livelihood or forest conservation.

However in the survey only 25% respondent expressed that they faced some livelihood constrains due to these projects or project related activities. 71.9% of the respondent expressed that there is no constrain due this projects. The respondent who expressed that they faced the constrained, basically are from the poor forest user groups who used to live on fire wood, wood, and other forest resources for their livelihood. With the development of the protected areas, these opportunities and scope became shrinking and many of the forest users faced difficulties in regard of their livelihood security. According to their opinion, they got assurance of alternative livelihood instead of unsustainable extraction but in reality most of them are rhetoric.

Forest health

87.5 of the respondent expressed that there is significant positive changes in regard of the forest health such as reducing deforestation, forest degradation, enhancing bio-diversity during the last several years and they have active involvement to bring this change. The FD officials

also expressed that Chunoti was heavily deforested and degraded but after the declaration of PA and the enhancement of the social forestry initiatives there is significant changes in this area. Forest coverage has increased significantly especially with the active involvement of the community people. But the forest users also expressed that this positive situation is not continuing; illegal logging and other unsustainable extraction have increased again after the end of the project period. The co-management institution and their activities became inactive in the interval time of two consecutive projects.

DISCUSSIONS

This study demonstrated that the co-management has brought some changes in several areas like forest management, forest protection and livelihood security of the forest communities; however limited and insufficient.

First, in regard of the forest management, it transferred the forest management from state centric to people centric and it helped to form a community forest management institution with local multi-stakeholder participants. However, their participation still remains less influential and majority of the representatives are from the elite class of the society. The forest users who are the majority did not develop as a full-fledged FUG and effective institution. They remain as informal or papery group. They are not well connected with the decision making space or administrative capacities. Their disproportionate presence in the co-management institution and the historical patronage relation in the society keep them as less beneficial.

Second, in regard of forest protection, this initiatives involved community peoples in forest protection and bio-diversity conservation, enhancing forest coverage or afforestation, and reducing deforestation. But with limited benefit of the forest communities and with lack of emphasis on the communities' demands and their capacity building these contributions tend to be for short time or unsustainable. These initiatives also seem very much project oriented thus in the interval period this community forestry cannot act actively. Without involving or sharing the responsibilities with the majority of the forest users it is hard to achieve real community forestry as well as hard to achieve forest protection.

And third, in regard of the livelihood security, it has brought some direct and indirect benefits for the forest communities which enhance their some livelihood options and open up a space for political negotiation but these livelihood options and political space are limited and insufficient. There are no significant changes in the access to forest markets or forest benefits. A large number of the forest users depend directly or indirectly on non timber forest products (NTFPs), but there are no significant initiatives to improve the NTFPs market for the local forest users. Moreover, most of the opportunities and access those are available are exposed to be captured by the local elites.

CONCLUSIONS

Forest communities are most marginalized and vulnerable to climate change. To address the adaptation of the forest community, CFM needs to be an effective platform for both in securing their livelihood and decision

making space. The adaptive capacity of the forest dependent communities rely not merely on the limited benefits or livelihood option rather it depends on the broader livelihood security which include access to resource, decision making and other opportunities like the intuitional and forest market access. In this context, collaborative community forest management (CFM) seems a good start and potential to address this issue but still its role remains more looming than promising.

The marginal forest communities remain marginalized even in the process of transferring the control of forest management to CFM. The agenda of sharing control of forest management with CFM has not fundamentally challenged the basic distribution of property rights and access to forest benefits established in the colonial and in the post colonial periods. If the co-management approach does not touch the political and economic settings where access and opportunities are captured by elite and if it could not create the playing field for the marginal people, these co-management initiatives would remain largely as rhetoric than substantial and it could lead to further vulnerabilities to the forest communities.

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