



PROBLEMS AND PROSPECTS OF REDD IN COMMUNITY BASED FOREST MANAGEMENT SYSTEM

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Abstract:

Deforestation and forest degradation are the second leading causes of global warming. Interest in the potential of avoided deforestation has been growing and solutions to the problems are currently being worked out through the development of proposed mechanism under the Kyoto Protocol (KP) called Reducing Emission Thorough Deforestation and Degradation (REDD). This paper argues that unless a significant change is made in the existing proposal of REDD till Copenhagen in December 2009, prospect of benefiting Nepal's forest in general and community forestry in particular looks not so encouraging. It is mainly due to factors like poor documentation of deforestation and degradation (uncertainties of baselines), small scale of forests to attract global buyers and Nepal's low influence in the international REDD policy process, among others. This Paper tries to analyse that, despite achievements in the forestry capital formation, several contentious issues related to the equitable sharing of income among different stakeholders have emerged, and may even threaten the sustainable management of this capital if issues are not duly addressed. Much of the debate on forest-based mitigation measures are dominated by technical issues and socio-ecological systems such as livelihoods and biodiversity tend to take a back seat. Finally, the author has forwarded the responsibility of Institute of Forestry in carbon inventory process.

Key words: REDD, Community Forestry, Carbon trade, R-PIN, benefit-sharing

REDD: WHY IT CAME? AND WHAT DOES IT MEANS?

Deforestation and forest degradation are the second leading causes of global warming. Tropical forest clearing accounts for roughly 20% of the anthropogenic carbon emissions and destroys significant carbon sinks globally (IPCC, 2007). The global response to climate change is coordinated through the United Nations Framework Convention on Climate Change (UNFCCC) and since early 2005, under the KP. Efforts to reduce atmospheric Greenhouse Gas (GHG) concentrations (and thereby mitigate increases in global temperatures) are being made through schemes that aim to reduce the use of fossil fuels, increase energy efficiency and sequester carbon dioxide in biological matter. In developing countries these schemes are managed in two ways: first, regulated or certified projects which come under the Clean Development Mechanism (CDM) of the KP and which are regulated according to international standards; and second, 'voluntary' projects which operate outside of the KP and have no overall governing body, although voluntary standards may be compiled to (Staddon, 2009). These certified and voluntary projects involve the trading of Certified Emission Reduction (CER) or Voluntary Emission Reduction (VER) credits respectively. One CER or VER credit is typically equivalent with the capture of one ton of carbon dioxide, and companies or individuals buy credits to comply with legal commitments for the purpose of Corporate Social Responsibility or for philanthropic reasons.



Almost all CDM projects involve energy efficiency or energy reduction, with only one out of the 400 registered projects relating to carbon sequestration through forestry, falling under the 'Land-Use, Land-Use Change and Forestry' (LULUCF) category. The lack of forestry projects is considered to be due to the high transaction costs of the CDM process and restrictions placed on forestry projects by the CDM (Peskett, Brown, & Luttrell, Making Voluntary Carbon Markets Work Better for the Poor: The Case of Forestry Offsets., 2006a). In contrast, the more flexible voluntary market is dominated by forestry related projects located throughout the global south (Peskett, *et. al.* 2006a).

Under the CDM's LULUCF programme, only Afforestation and Reforestation (AR) projects are currently recognized, and many projects in the voluntary market involve the planting of trees, meaning that there is a little scope for projects that work through 'avoided deforestation'. Reasons given for the exclusion of the avoided deforestation include the difficulties in ensuring 'additionality' (i.e. the project provides emissions reductions which are additional to what would have occurred in its absence), problems in establishing 'baselines' (levels from which to estimate emission reductions due to the project), problems in preventing 'leakage' (changes in emissions due to project activities but which occur outside of the project area, e.g. shifting deforestation to another area), the problem of ensuring that reductions are permanent, the fact that the large potential scale of avoided deforestation emission reductions could flood the market, and finally, that it may reduce incentives for developed countries to 'de-carbonize' and reduce emissions through energy efficiency or energy reduction (Peskett *et. al.* 2006b, Richards and Jenkins 2007, Karky and Banskota 2007).

Interest in the potential of avoided deforestation has been growing, however, and solutions to the problems listed above are currently being worked out through the development of proposed mechanism under the KP called REDD. At the 13th Conference of Parties (CoP 13) of the UNFCCC, held in Bali in 2007, it was agreed in principle to implement a policy called REDD in developing countries upon completion of the first commitment period of Kyoto Protocol, i.e. 2008-12. Under the proposed REDD Policy; there is a strong move to reduce CO₂ emissions from terrestrial ecosystems by reducing deforestation rates in the tropics (cited by Karky and Banskota, Gullison *et. al.* 2007). Additionally, at the UNFCCC meeting held in Accra from August 21-27, 2008, REDD gained a broader support for an agreement to reward actions that enhance forest cover and is additional to avoided deforestation and forest degradation (popularly called REDD+). Once it comes into operation, this will add value to the existing forest capital and the stream of income that flows from it through reduced deforestation, reduced degradation and forest enhancement, and, hence, should theoretically benefit all primary stakeholders. However, to make claims to this income, it will be essential to demonstrate that there has indeed been a net sequestration of carbon. Other social, economic and technical issues will also have to be complied with. As the policy is still being discussed and negotiated, uncertainties associated with REDD implementation will continue to trigger more questions and debates before they are decided at the CoP 15 meeting in December 2009.

REVIEW OF NATIONAL EXPERIENCES

Despite Nepal's very low GHG emission, it's Ministry of Forest and Soil Conservation (MFSC) has taken progressive step towards climate change mitigation through market mechanisms offered by REDD. It has ventured to embark on the World Bank's REDD programme so as to be ready for forest carbon transaction when the tenure of the KP ends in 2012. The World Bank is moving ahead to address methodological and institutional issues related to REDD. The Bank established the new Global Forest Alliance (GFA) in 2007, in partnership with agencies like Nature Conservancy, Conservation International and World Wildlife Fund for creation funds to intervene in the forestry sector. The Bank has been able to establish the Forest Carbon Partnership Facility (FCPF) with a financial plan of US\$165 million to jump-start REDD policy in developing countries (World Bank 2008). Preparation and submission of the Readiness Plan Idea Note (R-PIN) is the first step in this direction. The R-PIN process has been characterized by:



- Exploration of potentials, problems and recommendations associated with the future national REDD framework.
- Capacity development package to fulfil the operationalization aspects of the above framework.
- Exploration of the impending governance issues related to the operationalization aspects.
- Setting informal multi-stakeholder processes in motion by developing R-PIN through a consultative process.
- Projecting success in participatory forest management for leveraging on a pro-community forestry REDD concept. (Adapted from Rajan Kotru, 2009)

Nepal participated in the World Bank's call for submission of a R-PIN. Based on its experience with Community Forest Management, the R-PIN document submitted by Nepal was selected by the World Bank. Once the R-PIN is formulated into a full Readiness Plan (R-Plan), Nepal will be able to implement a prototype of REDD and will be able to gain experience and build capacity to operationalize REDD by taking onboard community forest users in an experimental way under FCPF. Though the FCPF is outside of the UNFCCC, the experiences from FCPF may be valuable for the development of REDD Policy under UNFCCC aimed at the post-2012 period. It may be possible for Nepal to be able to lobby for CFM conducive REDD policies based on experiences from R-PIN. In January 2009, nine members multi-stakeholder consultative committee under the coordination of MFSC Secretary has been formed to precede the task of readiness plan with FCPF funds (Dahal and Banskota, 2009).

OPPORTUNITY AND CHALLENGES IN COMMUNITY FORESTRY

In 1979s, the declining forest capital in the mid-hills of Nepal raised major concerns about the protection and growth of forests and active local participation in forest management. This may be referred to as the first generation issue, which has to do with increasing the capital stock of forests. Since the 1990s, forest capital formation has been fairly successful in the mid-hills of Nepal. This can be attributed to the efforts of thousands of CFUGs, which manage their forests as per agreements reached between those and the district forest offices concerned. Nepal's community forestry is the key element behind the projection of positive image of Nepal's overall forest status. While community forestry has addressed the first generation by restoring forestry capital and by devising an institutional mechanism to manage this capital, the story is far from over. Many issues and challenges triggered by the stocks thus rejuvenated have given rise to a number of subset of issues, including ownership, rewards and distribution. This often culminated serious conflicts. This is primarily the second generation issue in Nepal's community forestry and needs to be addressed with due priority (Dahal & Banskota, 2009).

To date some of the 14,439 plus CFUGs are managing over a million hectares of forests and are generating income in most places (DoF 2009). In many places this capital has eased problems of firewood and fodder supplies in mountain areas. Capital formation has created opportunity for making income. Despite achievements in the forestry capital formation, several arguable issues related to the equitable sharing of income among different stakeholders have emerged, and may even threaten the sustainable management of this capital if issues are not duly addressed. Claim over property rights on the part of the government gave rise to conflict. For example, the Government of Nepal (GoN) attempted to exercise its property rights over this capital by claiming 40% of the cash revenues generated through commercial sale of forest products. Though the government's decision was overturned by the Supreme Court of Nepal, citing inadequate legal ground over the claim, such conflict may merely be the start.

There is now a new dimension added to the use of forests. The recognition to compensate for carbon sequestration function of forest has added to the potential value of community forest resources. Once an international agreement is reached on REDD, community forests may be the potential source of extra benefits brought about by carbon conserved in their forests. This obviously would add monetary value to

the existing community forests. After the REDD mechanism is framed into an international protocol, the debates would shift to the national policy arena and is likely to further draw attention to the second generation conflicts unless immediate steps are taken to address the issues related to institutions and governance regarding community carbon forestry in particular and environmental services provided by forests in general. How forestry capital responsibilities and ownership will change and how to share the income from carbon is bound to take a central stage. This has come at a time when Nepal is about to draft a new constitution along federal lines, which will entail a major restructuring of the administrative boundaries, devolution and decentralization of power. At this juncture, Nepal's competitive participation in the FCPF of the World Bank is to be much welcomed as it provides the financial resources required to prepare Nepal for possible participation in REDD in the future.

Biological sequestration of carbon from forest can occur through reduced deforestation or degradation and better management of forest. In developing countries, including Nepal, all these are primary sources and sinks of carbon. Thus, when forests in developing countries such as Nepal sequester carbon and implement measures to prevent forest degradation, they need to be compensated for the emission reduction made possible through one of these means. This was the general argument made by some developing countries in the global climate change discourse during CoP 6 held in Germany in 2000, especially after realizing the failure of the CDM to address deforestation drivers, leading to loss of large tracts of forest in the tropics (Sikkema and Kenzie 2001).

Unless a significant change is made in the existing proposal of REDD till Copenhagen in December 2009, prospect of benefiting Nepal's forest in general and community forestry in particular looks not so encouraging (Dahal and Banskota, 2009). It is mainly due to factors like poor documentation of deforestation and degradation (uncertainties of baselines), small scale of forests to attract global buyers and Nepal's low influence in the international REDD policy process, among others. For example, under REDD provision, Nepal's Terai forests where high rates of deforestation and degradation have been registered, could be and appropriate target for generating Emission Reduction Units (ERUs) by slowing down the rates of deforestation or degradation by a credible method. However, distribution of benefits to the Terai communities alone would be counter productive unless a fair share were provisioned for these communities for restoring and managing their forests in a sustainable way.

Table 1: Prospect of REDD Benefit to Nepali Forest Sub-sectors

Forest Category (Biomass stock and area)	Status of forest in Terai	REDD Prospect*		Status of forest in mountain	REDD Prospect*	
		Interest of Intl buyers	In-country benefit sharing		Interest of Intl buyers	In-country benefit sharing
Community Managed Forest	Stable/declining	Medium	Medium	Growing/stable	Low/Medium	High
Government managed Forest	Declining significantly	High	Medium	Stable	Low/Medium	Medium
Protected Areas	Stable or growing	Low	Low	Growing/stable	Low	Low
Total Forest	Declining	High	Complex and contested**	Stable/growing	Low/Medium	Contested and risk of perverse***

(Source: Dahal and Banskota, 2009)



* Based on original concept of REDD, it is assumed that good performances made against highly deforested and degraded areas will fetch good REDD benefits provided that other sub-national areas having no negative impacts remained at least a status quo.

** Lack of clarity of stakeholders and drivers of deforestations, sharing the benefit will be complex as multiple groups may stake their claims.

*** Unless the hill communities received a fair share of REDD benefit for their good performances, there might be risks of perverse impact.

SOME ISSUES OVER REDD APPLICABILITY

Forest commons are crucial for delivering multiple outcomes such as livelihoods, carbon sequestration, and biodiversity conservation (Chhatre and Agrawal 2008, GEF 2000, Klooster and Masera 2000, Smith and Scherr 2003). Unfortunately, much of the debate on forest-based mitigation measures are dominated by technical issues and socio-ecological systems such as livelihoods and biodiversity tend to take a back seat (Smith and Scherr 2003). Forests play a key role in the world carbon cycle (WRI 2000) and also act as a “genetic library” that supports important human welfare functions such as the improvement of existing crops, introduction of new crops, and the creation of medicines and pharmaceuticals (Myers 1997, Sunderlin et al. 2005). They support the livelihoods of millions of people in the developing world and help alleviate poverty while capturing synergies between local and global environment/development goals (Klooster and Masera 2000). For these reasons, the multiplicity of forest commons needs to be an integral part of international debate on forests and climate change.

While CFM has been successful in generating forestry capital, the way of actually claiming carbon credits from this is a serious technical issue that still needs to be spelled out by the REDD policy (Karky and Banskota, 2009). There should be three forms of payments for CFM: a) avoiding deforestation; b) avoiding degradation and c) enhancing forest biomass. Whilst the first two are payments for reduced carbon emissions (sources), the third is payment for a carbon sink. For any form of payments to take place, the REDD policy, irrespective of whether it recognizes sink, sources or both, will also have to address a) how to account for carbon in CFM; b) what to use as a baseline against which increments are measured; and c) the rights of indigenous people – since CFM in most developing countries relates to livelihoods and access to resources (Karky and Banskota, 2009).

The Government of Nepal has formally entered the readiness mechanism. According to Pokharel and Baral, 2009, there is lacking of the adequate competency of Nepali professionals for REDD and Capacity of Government in Leading the process of REDD. However, it is not yet known whether community groups and indigenous peoples are also ready for REDD. A critical mass of community alliance is necessary. More importantly, community forestry and the protected area system (under which half of the country's forests are governed) should convincingly be prepared for this concept. Various tenurial arrangements are required that need innovation and piloting of the various models and objectives, ranging from intensive forest management to conservation of biodiversity. The environmental impact of REDD would not be local, but it would be regional or international. It is not clear whether this would convince local communities and indigenous peoples of the need to participate.

WHERE IS THE ROLE OF IOF?

In Nepal, there is weak mechanism of making up-to-date database information. Especially in the case of natural resources, importantly of forest resources there is vast gap. The intensive inventory of the whole national forest was carried out before two decades. Having accurate database of the forest resources,



carbon status, and deforestation and degradation rate is most to enter into the voluntary markets to get benefit from selling carbon credits in the international markets. Among others, insufficiency of technical manpower is one constraint for this. In this scenario the Institute of Forestry can take some responsibility to make up-to-date inventory of the forest resources and carbon content of Nepal. These work can be accomplished through the students of inter to master levels with the support from staffs of IoF. Furthermore Institute also can provide some practical knowledge to its students and can evaluate the work through modifying its syllabi to incorporate more practical classes. And again MFSC can hire some students from IoF as interns to fulfil its manpower deficiency in the short as well as long run.

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