

Making REDD Functional in Nepal: Action Points for Capitalizing Opportunities and Addressing Challenges

DRAFT

A Discussion Paper

Hemant R Ojha¹, Ngamindra Dahal², Jagadish Baral³, Ramu Subedi⁴ and Peter Branney⁵

Background

Climate change is an emerging problem of global scale having deep impacts at local scale. Effects of global warming encompass all vital systems supporting world populations, namely, water resources, human health, agriculture, forests and biodiversity. Nepal is among the most vulnerable countries to climate change since the annual mean temperature growth (0.06 degree Celsius) is at least six times higher than the global average¹. High mountains are warming faster (0.08 degrees C per year) than lower hills and plains (0.04 degrees C per year). Fast receding glaciers and growing number and size of glacial lakes in the Himalaya provide strong visual evidence of global warming effects at local level. Higher rates of mean annual temperature in high altitude regions mean severe impacts on local natural resources and environment such as faster melting of snow deposits in the Himalayan peaks and glaciers, undesirable changes in forest and vegetation compositions, and many uncertainties on weather characteristics. Similarly, changes in forestry and vegetation systems have also been reported².

Under the business as usual scenario, the Fourth Assessment Report of Intergovernmental Panel and Climate Change (IPCC) projects that global mean temperature may increase between 1.4 and 5.8 C by 2100. This unprecedented increase has given rise to many uncertainties about the future natural processes including weather patterns and hydrological processes. Societies having poor development infrastructures and limited capacity are more intensely exposed to the risks of climate change³. The report also warns that 'no action' is no more an option to both industrialized and developing nations. It is, therefore, important to analyse Nepal's status of climate change impacts and policy measures for coping with the emerging challenges.

The Bali Conference (UNFCCC COP 13) held in December 2007 was a milestone for forestry sector as it brought it into centre stage of climate negotiation through a new approach called Reduced Emissions from Deforestation and Degradation in developing countries (REDD). REDD approach entails the idea that a developing country which is experiencing deforestation (loss of area of forest e.g. through conversion to agriculture or through logging) may, on a voluntary basis, receive

¹ ForestAction Nepal Email: ojhahemant1@gmail.com

² NTNC Email: ndahal@ntnc.org.np

³ Ministry of Forest and Soil Conservation Email baraljc@yahoo.com

⁴ LFP Nepal r-subedi@lfp.org.np

⁵ LFP Nepal Email P-Branney@lfp.org.np

compensation if it reduces its national deforestation rate, in proportion to the amount of carbon emissions that are thus reduced.

Of the total annual global emissions of GHGs, nearly 20 % is contributed by deforestation and forest degradation. In this ground, the new international climate regime to make significant emissions reduction should address forest degradation and deforestation problems. Therefore, it is very likely that international consensus will emerge (at COP 15 in December 2009) to provide incentives to the developing countries willing to reduce deforestation and forest degradation. This is quite different from existing forestry policy under CDM, in which carbon credits are issued at a project level for planting of new trees. But REDD is still under discussion and may come into effect only after 2012.

Climate change affects forest ecosystems (and consequently the livelihoods of the poor living in and around the forest) in many predictable ways. Global warming may cause forest modification through its migration towards the polar regions (or higher altitudes), changes in its composition, extinction of species, and the like. More than 70% of Nepal's people depend on agriculture and forestry interface for their livelihoods. Forest covers about one-third of Nepal's geographic area (5.8 million ha) and 21% of forests are under community management. Any climate induced changes in forest situation could therefore directly affect not only the environment of Nepal but also the lives of the majority of people.

Nepal's situation is complicated by the huge altitudinal variations and diversity of forest types. Out of 39 vegetation zones⁴, Nepal's 15 forest types under existing CO₂ conditions would be reduced to 12 under double CO₂ conditions⁵. Under this scenario, Nepal's tropical wet forest and warm temperate rain forests would disappear, and cool temperate vegetation is likely to become warm temperate vegetation. Furthermore, vegetation patterns will also alter as a result of a 2°C temperature rise and 20% increase in rainfall. There is clearly a need for rapid adaptation to limit the effects of this on water resources, flooding, drought and landslides as well as to ensure continued access to forest resources and non-timber forest products.

Climate Change, Forestry and Livelihoods: Opportunities and Challenges

3.1 Opportunities

1. Functioning community forestry user groups at local level

There are over 14000 community forestry groups (CFUGs) managing more than one million ha of forest in a sustainable way⁶. The CFUGs have reversed past trends of deforestation⁷, and have enhanced a number of livelihood assets. In a number of innovative cases, they have created provisions to directly benefit the poor and excluded groups. The existence of CFUG networks from local to national level also creates opportunities for communities to raise their voice at different levels of governance, and also to promote collective efforts for forest management and carbon marketing. CFUGs have thus a strong potential to receive added financial rewards⁸ for their contributions to checking deforestation and degradation through the possible REDD mechanism or even the voluntary markets if appropriate intermediary support is available. If CFUGs are able to access rewards for carbon offsets, it would represent a significant contribution to the income of community groups and to the sustainability of the community forestry programme in Nepal. More

importantly, CFUGs can become a strong safety net for the poor and local communities in coping with, and adapting to, climate change induced risks.

Partners in forestry sector have the potential to capacitate CFUGs to capture carbon financing opportunities and to become climate resilient community institutions that provide climate proofing and livelihood opportunities to the poor.

2. Effective local governance systems and institutions for pro-poor targeting

Not only does Nepal have a large number of robust and empowered local community groups (forest user groups), these groups have been able to demonstrate over the past decade that, given sufficient support and capacity through a programme of social mobilisation, they can effectively pursue an approach which delivers benefits to poor and social excluded households in a way that has been extremely difficult to ensure elsewhere. The challenge is to ensure that carbon funds can also be targeted in this way by these institutions, and also that these experiences in effective pro-poor governance can be extended to other areas of the forest sector.

3. National readiness initiative for capacity building on REDD through multi-stakeholder processes

A multi-stakeholder process is in motion now to explore opportunities for Nepal through evolving REDD mechanism. Nepal has been selected by the World Bank as one among the 14 countries to receive funding assistance for preparing itself to REDD⁹. The Readiness Plan Idea Note (R-PIN) submitted the World Bank was prepared by the MFSC in collaboration with several stakeholders. R-PIN proposes for capacity building of national institutions, development of database and piloting in the field. But there is still some level of confusion as how the process should move, what exactly need to be done, and how. There are also policy confusions with regard to carbon tenure and benefit sharing. Nevertheless, this initiative has already created an environment for regular dialogues among stakeholders. In this process, partner agencies in forestry sector can play a meaningful role to direct the process towards addressing issues of livelihoods and biodiversity while Nepal is preparing itself for future REDD mechanism. In particular, there is an opportunity to generate evidence from the field to supplement to the MFSC led REDD processes, and to deepen the REDD related dialogues and deliberation to sub-national and local community levels.

4. Opportunity to contribute in the ongoing international policy negotiations on forest and climate change

At national and international levels, climate change policy discussions are taking place intensively, authentically under UNFCCC but also outside. From the perspective of forest and livelihoods, two instruments are critical – REDD and adaptation financing. There is increased level of commitment and seriousness in combating climate change, and post-Kyoto framework may build on some of the important lessons learned during CDM implementation¹⁰. Once such policies come into a force, they have far reaching consequences, as they are legally binding and set the limits and procedures for the flow funds. Providing timely inputs based on research and practical experience is very important. Intensive dialogues among professionals and partner organizations are useful to build opinions in the interest of the country. This is very important in the context when Nepal is lobbying for appropriate provisions in REDD mechanism to safeguard country's interest to benefit from forest carbon. At times, there is a lack of clarity on what Nepal's stance should be on specific climate policy issues.

There is an opportunity to facilitate more intense dialogue and analysis within Nepal to develop clear policy stance and ideas to feed into the international negotiation that will intensify further till December 2009. A crucial issue, among others, is to recognize participatory forestry management practices for mitigation and adaptation to climate change.

5. Opportunities for pioneering/piloting institutional and technical processes for REDD financing and PES for policy uptake and wider adoption

Till date, there is little ground level evidence and experience in community based carbon trade, adaptation, forest monitoring, regulating and rewarding environmental services of forests. Though there are tools and techniques available to monitor forest carbon¹¹, none of them can be applied straight to our contexts where geo-physical diversity exists. It is important to demonstrate on the ground how community based carbon forestry can become a part and parcel of a resilient, equitable and effective instrument for livelihoods enhancement. To this end, piloting and action research can be immediately undertaken in at least in three fronts: a) carbon monitoring and voluntary marketing, b) payment for environmental services of forests at watershed/landscape level combining a number of CFUGs, c) CFUG based adaptation and reducing vulnerabilities of the poor.

Such ground level experience can also provide a sound basis for policy development. Based on findings of pilot studies, innovative activities may be integrated as the regular part of the programme.

6. Potential to mobilise CFUGs to enhance adaptive capacity of the poor and excluded groups to cope with climate change

Within area where partner agencies of forestry sector are actively working, there are already a cohort of innovations towards creating equitable access to community forests, benefiting the poor, women and marginalized groups¹². Indeed, community forestry has increasingly become a safety net for the poor against shocks and vulnerabilities, through enhanced access to social and financial assets¹³. As such, CF has the potential to become resilient socio-ecological system to provide not only climate proofing to the poor but also generate assets to enhance the quality of life.

Adaptation to climate change is essentially building capacity of people and institutions to understand, cope and modify their behaviour so as to minimize the risks. It also includes transforming the access regime of livelihoods capitals in favour of the poor – such prioritising CFUG funds (financial capital) to address the climate induced risks of the poor. These adaptation responses can be promoted through awareness raising, locally based climate change monitoring, linking local adaptation with global funding.

3.3 Issues, challenges and gaps

1. Limited awareness of climate change among forestry and livelihood stakeholders

Though climate change is emerging strongly as single biggest challenge to earth's environment, livelihoods and overall human security, a very low public awareness on this challenge is a reality. Scarcity of information and lack of expertise, studies and publications on country specific issues of climate change is evident. Practically, only few people and organizations including Ministry of Environment Science and Technology are familiar with the subject. Inadequate flow of available information to planners, educators, development practitioners and researchers has jeopardised the situation. Only recently, Ministry of Forests and Soil Conservation, mass media, I/NGOs and private sector entrepreneurs have taken initiatives to acquire information on climate change and its implications on various sectors.

Even when there is some progress on information flow and awareness, there is often a distortion of message or lack of critical understanding. Climate change is considered as a technical issue, without understanding the justice and equity dimensions. At the political level, climate change is only secondary to a plethora of political issues unfolding through the political transition.

2. Inadequate national level vision and strategy for the forestry sector and engagement in forest-carbon and PES

Nepal is in the unfortunate position of having a forest policy that is not endorsed widely across the sector. Not only is Nepal's forest policy disputed in many details, it is now severely outdated in terms of its ability to clearly establish a national vision and a strategy for reaching that vision in the light of recent national and international developments and processes. In particular, it needs to be updated in the context of Nepal's political development – particularly in terms of decentralisation and moves towards a level of state restructuring. It needs to offer more in terms of a targeted approach towards ensuring that socially excluded groups benefit directly from the forestry sector, and it needs to clearly outline a direction which Nepal will take in response to the international climate change agenda. At present there are separate 'policies' or policy drafts on specific areas of the forest sector (and other related areas such as climate change) but in other cases the necessary deliberative, participatory processes are not even underway that will deliver these.

3. Inadequate capacity and institutional commitment to respond to climate change

Understanding what climate change is not adequate to address the challenge. It requires commitment at the personal and institutional levels, investment in planning and monitoring, development strategies and methodologies, working collaboratively with related stakeholders, linking scientific evidence with policy and decision-making, establishing focal points and climate units within organizations, assessment and reorientation of ongoing activities, and the like. Such concrete initiatives are lacking in key forestry and livelihood stakeholders to make such readiness moves. Though some actors in forestry sectors have taken early initiative to internalize the climate change issues and to start preparing for responding them, they are still less equipped in terms of information, planning and expertise. Likewise, MFSC is also yet to create any climate change unit within itself. A common challenge all organizations facing is that they have limited prior experience on climate change, which has moved to center stage of conservation and development discourse in short space of time.

4. Inadequate research and evidence in relation to climate change, forestry and local livelihoods

While awareness and capacity are the basic barriers, lack of research and credible evidence on the impacts of climate change is the next major challenge. There is limited understanding on such basic issues as the nature of impacts of climate change on forests governance and livelihood aspects. No studies are available on specific linkages of climate change on livelihood aspects of forestry – such as changes in species composition, range shift etc and their impact on livelihoods . Also, country and sector specific information on climate change is rare. Lack of credible and relevant evidence has constrained developing national policy responses, setting up priorities for public funds, creating stronger basis for international negotiation, exploring and capitalising voluntary carbon markets. Existing forestry research institutions are too slow to respond to such research needs. Some international and national NGOs are quick to do some specific studies of their interests, but there is a need to develop research priority, to which all research efforts are linked. Baseline information, methodology and local skills for scientifically valid carbon database are some important research issues. There is also a need to develop mechanisms for monitoring of climate change impacts on composition, productivity and sustainability of forest. There are also few assessments of the effectiveness of actions undertaken by existing actors to address climate change and basic livelihood opportunities - water, food, shelter, clothing and security. Relatedly, it is also important to know how people on the ground are coping with the effects of climate change in various ecological zones. Analysis of policy gaps are also important. These crucial issues may take time and costs longer than expected to materialize the benefits to target communities.

5. Complexity and uncertainties over REDD policy at national and international levels

While a principle of REDD is acknowledged, there is still a number of unsettled issues before it can be functional. Forest stakeholders, particularly the lead and facilitating actors should be aware of the specific policy issues and proposals that are being debated, and suggest appropriate ways (see Annex 1). The issues to be noted for learning and further analysis include: dealing with multiple levels governance issues; measurements, monitoring, marketing and verification complexities; technical complexities and the like. Again there is a need for speeding up piloting and experimental initiatives to feed into the Copenhagen meeting of COP 15, and preparing Nepal for the period beginning 2012.

6. Complex drivers of deforestation in Nepal Terai

Nepal's Terai still contains natural block forests with relatively better capacity to sequester carbon. Past efforts to control deforestation and degradation has largely failed. This is partly because many drivers of deforestation are outside forest sector – such as trans-boundary economy across the open borders, ethnic tensions, political unrest and lack of incentives to marginal poor depended on local resources for their livelihoods in the region. Besides, there are a number of contested in-house issues of the forest sector - such as defining forest tenure, creating inclusive institutional modalities, devising benefit sharing mechanisms, and informal nexus of corruption among traders-bureaucracy-political leaders. Given these complex drivers of continuing deforestation in the Terai, community forestry's contributions in the hills may be balanced out in any REDD payment mechanisms.

Nepal's perspectives in the International REDD Negotiation

Though REDD is not a high priority deal for Nepal in climate change front compared to other more pressing issues such as emergency needs of adaptation measures, meeting basic livelihoods of poor and marginal groups and preparing for shift in weather patterns and their implications. However, a good deal of REDD is vital for sustainable management of forest, thus, capitalizing opportunity of bringing global climate funds to support local communities who have worked hard to protect and manage the forests as legitimate local guardians.

Following are the specific suggestions for Nepal's REDD position in the international negotiation:

1. **Link Carbon with livelihoods of the poor and socially excluded.** While carbon offsets should be accounted for financial reward, climate change funding should reflect the concerns for addressing the problems of poverty and forest together. Forest cannot be conserved without addressing the basic livelihoods concerns of the local, indigenous, poor and marginalized groups and the benefits from carbon financing need to be targeted at socially excluded groups through an effective social mobilisation process that empowers them and raises their awareness and capacity to engage in decision-making processes that can deliver them benefits..
2. **Address drivers of deforestation.** Deforestation and forest degradation is a direct result of poor sector governance and should not be misunderstood as a solely financial or technical problem. It may be a result of various factors combined such as denial of local rights over forests, lack of enabling policy, irresponsible private sector, corruption within government forestry agency, and many non-forestry drivers such as fuel prices rise.
3. **Reward communities.** Any future REDD should prioritise channelling funds from industrialised countries to reward, upscale and promote community based and participatory forest management in developing countries.
4. **Provide fund as compensation.** The fund should be not be just a payment for the amount of carbon offsets created; it should be a part of the responsibility of the industrialised countries towards the poor and forest dependent people who have conserved forests.
5. **Link with adaptation.** Any REDD financing should also include an amount needed to help the local people to cope with risks and vulnerabilities induced by global warming for which they have little contributions.
6. **Ensure equity between developing nations.** REDD should not privilege high forest and high deforestation countries; funding priority should be based on both the urgency of human problem as well as the extent of carbon offsets realised.
7. **Use participatory processes.** While there is a need for research, analysis, monitoring and verification processes in relation to REDD funding for sustainable forest management, these processes should not be "hijacked"⁶ by the carbon experts, state agencies and international organizations. Local people and civil society organizations should be fully informed of and be provided opportunity to participate in these processes. Locally based intermediaries should be capacitated and provided opportunities to implement local level REDD processes.
8. **Apply multiple crediting levels.** REDD schemes should not be limited to national level; sub-national innovations in forest conservation should be rewarded. At national and sub-

⁶ This term was used by a civil society side event in Accra meeting.

national level, REDD should be implemented by multi-stakeholder groups and committees in a transparent and participatory manner.

9. **Go beyond the market.** REDD should not be relegated completely to the principle of market that undermines value of other environmental services of forests and sources of local livelihoods among others. Nepal should advocate for a package of funding that includes poverty reduction, forest conservation and adaptation.

1. Some Action Points for Nepal's forestry and REDD

In the context of increasing recognition of the role of forests to combat climate change and the emerging REDD policy that may offer incentives for saving biomass stocks in standing forests, roles of Nepal's various actors and partners are important to facilitate both Nepal Government and the local communities for preparing themselves to address climate change related challenges and opportunities. This is also an opportunity to each actor for getting recognition of its local works that have been contributing to address causes and consequences of global warming.

Seven specific actions are identified as follows:

1. Enhance capacity of forestry stakeholders
2. Develop National vision, strategy and policy framework
3. Effectively participate in international REDD policy negotiations
4. Undertake piloting on REDD and PES implementation methodologies and processes
5. Upscale existing good practices and initiatives around community based forest management and livelihoods
6. Enhance adaptive capacity of the local communities

These are briefly outlined below

1. Enhance overall capacity forestry sector to assess and address climate change issues in terms of knowledge, policy priorities and programmes.

At present there is insufficient understanding and capacity amongst the forest actors/ partners on climate change issues (which include rapidly growing scientific knowledge as well as wide-ranging political processes). As a priority, they can work to promote learning within and between organizations in order to ensure more effective engagement in climate change-related works. This will include better in-house sharing as well as bringing in external expertise for sharing wider knowledge and undertaking analysis of one's experiences. The stakeholder organizations will also encourage their staff and partners to participate in national and international policy and learning processes related to forest and livelihoods. Capacity building will also include development of materials and 'products' to disseminate information about climate change. Climate change related capacity building should be integrated with existing capacity building strategy of the stakeholder organizations.

Donors and international organizations as well as local groups of professionals and civil society leaders have the potential to facilitate/support capacity building of local forestry stakeholders. This can be achieved more through on-going action and learning initiatives, such as those linked piloting in the field, rather than one-off trainings.

2. Develop national vision and policy framework on CC linking forestry sector with local livelihoods.

With better capacity, and with better information base, the forestry stakeholders, including the Ministry of Environment, Science and Technology (MoEST) (which is the designated national authority for climate change), Ministry of Forest and Soil Conservation (MFSC), will be in a position to develop and strengthen policy and legal framework and implementing mechanisms.

Donors can coordinate among themselves to contribute such policy and legal frameworks along local professional groups with experience in policy analysis and multi-stakeholder processes.

3. Donors international organizations should support government and civil society actors to engage in international REDD policy negotiations and its implementation at national level

Together with the Government of Nepal and established civil society actors, forestry stakeholders (both government, civil society and international organizations) should lobby internationally to bring community managed forests (CF) under the framework of climate change and carbon financing. This involves exploring and capitalising on the opportunities around REDD, voluntary markets, adaptation funds and other climate funding, including the Forest Carbon Partnership Facility of The World Bank. In addition, it is equally important to Nepalise the REDD in the forest sector through facilitating multi-stakeholder processes. Local communities dependent on forests, as well as the local civil society groups should be enabled to take the driving seats, while the international organizations play a facilitating role. Donors should not only support the governmental position and delegates but also the civil society perspectives in the international climate change negotiations.

4. Experiment, innovate and promote REDD and PES implementation methodologies and processes in the context of community based forest management.

This entails undertaking and facilitating action research/piloting at CFUGs and the landscape level, preferably by bundling carbon with other environmental services wherever feasible. Linked to specific pilot initiatives, Forest partners of Nepal should support forestry and climate change studies, documentation and information sharing. Through such action research initiatives, field based programmes and NGOs will be able to better contribute to the development and revision of policy, institutions, and methodologies regarding carbon marketing, forest monitoring, PES and equitable mechanisms for benefit sharing. Donors and international organizations should work with appropriate intermediaries to assist a few clusters of CFUGs in each socio-ecological region to explore carbon marketing possibilities in the existing voluntary markets. The supporting partners

also need to ensure that impact studies (for example utilising baseline information already available from hills districts) can be used to contribute to more informed discussion about the contribution of community forestry to climate change mitigation.

5. Promote and upscale existing CF practices and initiatives that contribute to mitigation of and adaptation to climate changes.

Reducing deforestation and forest degradation by bringing more forests under community management is already a major function of government agencies and majority of forest partners. They should continue to support GoN, communities and other partners in bringing government forests under sustainable community management. It will also promote simple climate change monitoring systems that can be adopted by CFUGs. Support should be provided to promote field-based activities that are carbon neutral or are carbon efficient. This includes ongoing support of forest stakeholders for promoting alternative energy such as biogas, improved stoves, and alternative energy, through community forestry groups and possibly the promotion of biofuels as a means to reduce carbon emissions. Low carbon livelihoods activities will be documented and disseminated.

6. Reorient stakeholder activities to enhance the adaptive capacity of the local communities to cope with various climate induced stresses.

Several of activities of forestry stakeholders are already oriented towards enhancing the adaptive capacity of the local communities in general and the poor and excluded groups in particular. These activities should be analyzed further to learn to what extent they are contributing to enhance adaptive capacity of the poor and community organizations, and measures to promote them more widely within and outside community forest areas. Likewise, the supporting partners of forest sector should pay greater attention to understand how local knowledge, institutions, culture, and practices contribute to socio-ecological resilience of the local communities in general, and the poor and the excluded groups in particular. This knowledge will be fed into the planning and learning cycles of local to national level forest actors to formulate better community based adaptation strategies to help climate vulnerable groups to better cope with climate change related risks and shocks.

¹ (Shrestha, 1999)

² (Dahla, 2007)

³ The Fourth Assessment Report of Intergovernmental Panel and Climate Change (IPCC) has established two critical effects of climate change. First, concentration of green house gases in our atmosphere has already crossed the acceptable limit, thus triggering irreversible changes in the earth's weather pattern. It implies that adaptation measures to cope with the unintended consequences of climate change effects are indispensable. Second, there is no alternative of cutting down high emission rates of green house gases through strong mitigation measures at the earliest possible time frame (Dahal, 2008 in The Initiation).

⁴ categorized by the **Holdridge model**

⁵ MoPE, 2004: Nepal's Initial National Communication Report, Government of Nepal.

⁶ Research conducted by NTNC indicates that community forests are generating additional biomass at the rate of 1.5 ton/ha/year that justifies the argument that current management practices of community forests is sustainable and should be rewarded for avoiding deforestation and forest enhancement.

⁷ As there is a lack of authentic information about exact rate of deforestation or forest degradation before CF intervention, recent data indicate that interventions have not only reduced the losses of forest, but have recorded a steady increase in forest biomass. REFF?

⁸ Banskota et al estimated the carbon sequestered from community forests. They estimate that community forests sequester 7.1 tCO₂ per hectare per year. This will give around 8m tCO₂ for all of Nepal's 1.2 million ha of community forests in Nepal. The value of would be worth between US\$61-147 per year on international carbon markets.

⁹ The World Bank called for expression of interests from developing countries for a financial support through a scheme called Participatory Forest Carbon Facility (PCPF). In response to the Bank's call, Nepal Government submitted the R-PIN.

¹⁰ For instance, there is an emerging consensus to keep the accounting and reporting system simple (CDM bureaucracy is far too complicated and costly, this mistake should not repeat).

¹¹ IPCC has developed methodological templates for monitoring deforestation, and there is a need to test and adapt them in specific contexts.

¹² LFP's land allocation scheme is one among several others (see LFP land allocation paper)

¹³ Yet, there are still concerns that CF has not yet become pro-poor nationally.