REDD and Community Forestry: Opportunities and Challenges in Nepal

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Abstract:
REDD has emerged as a major mitigation measure of climate change. It is proposed as a win-win strategy for both north and south. Nepal has also participated in pilot project of REDD. It is believed that CFUGs can also benefit from carbon trade due to high success of community forestry in high hill of Nepal. Nepal's current laws and policies, communities have clear rights to manage and use trees and forest products. However ownerships right of forest could create some difficulty between government and community forest user groups in benefit sharing of REDD. Further REDD itself has multiple prior-condition for the REDD trade. This paper tries to analyze the conceptual ambiguities in the REDD trade and further tries to explore the governance and technical aspects of REDD with especial focus on community forestry of Nepal.

Background:
Regardless of different debate over climate change either on human induced or natural cyclic phenomena, Global consensus is achieved in its prevalence and impact on human ecological system. The Intergovernmental Panel on Climate Change highlighted the scientific evidence suggesting the global increase of average temperature and uneven precipitations. They have suggested that average surface temperature has risen by about 0.74 degrees Celsius in the past 100 years and it could even rise by up to 5 degrees Celsius by 2080. In the case of Nepal, HDR report of 2007 has revealed that temperature in Nepal is increasing at a high rate as compared to other country. The warming is found to be more pronounced in the high altitude regions of Nepal.

IPCC report of 2007 accepted that GHG emissions since pre-industrial time have increased more than 70% between 1970 and 2004. Intensive use of fossil fuels in industries of developed countries and increasing rate of deforestation and forest degradation in developing countries are to be considered major cause increase for emission carbon-dioxide gas. Definitely its impact is inevitable to different biophysical and socio-economic system. Several researches have been conducted to show the schematic framework of anthropogenic climate change. Philippe Rekaciwicz in 2005 has developed the framework of the climate change: processes, characteristics and threats. He has shown that how the global warming ultimately brings multiple-disasters like biodiversity loss, economic loss, famines, and causalities. A report on this matter prepared by the economist Sir Nicholas Stern and entitled the “Stern Review” concludes that how the developing countries are most vulnerable to climate change. He has considered different factors like topical
geography, high population growth, dependence on agriculture rapid urbanization, weak infrastructures and lack of resources to increase vulnerability of developing countries.

Climate change and its impact on human live has been a very important issue of discussion in recent decades. Climate change mitigation and climate change adaptation strategies are in discussion to cope with negative consequences of climate change. It is suggested that deep cuts in greenhouse gas (GHG) emissions are necessary to avoid the danger zone of a global temperature increase greater than two degrees celsius (2°C). Constraining global temperature increase to less than 2°C will depend upon keeping atmospheric CO2 concentrations below 450 parts per million (ppm). Achieving that target will require rapid deployment of all major climate change mitigation strategies (Angelsen, 2009). Several attempts from Stockholm conference in 1972 to latest conference in Cancun in last December 2010 have concentrated to reduce the impact of climate change. In these several efforts, Nepal has been actively participated as a member of Conference of parties of United National Convention on Climate Change (UNFCC). In above of all, Quito protocol was the first legal binding agreement to reduce GHG emissions by 5.2 percent within 2008 to 2012 taking baseline of 1990.

Basically Kyoto protocol accepted the forest as the means of carbon sequestration. But the forests play a dual role in climate change. Forests can be a source of greenhouse gas emission. Forests play a key role in climate change as both sinks and sources of atmospheric carbon dioxide. Recent studies estimate that the destruction of forests contributes up to 20 percent of all carbon dioxide emissions annually (Stern, 2006). Approximately 35 per cent of greenhouse gases in the atmosphere are a result of past deforestation and 18 percent of annual global emissions are from continued deforestation. Deforestation is the second single greenhouse gas source, behind energy production. How forests are managed has a profound impact on the global climate (SNV, 2009).

CDM mechanisms under Kyoto Protocol allowed only Aforestation and Reforestation activities to be considered for emission trading. Sustainable management of forest was like community forestry was not considered in CDM mechanisms (Dahal, 2006). Further it didn’t consider the emission of carbon through deforestation (Banskota, K, Karky, B.S, 2009). These debates were discussed as in the Bali conference in Indonesia in 2007. Because it was felt that the deforestation is also seen as a relatively ‘cheap’ way of mitigating climate change (Stern, 2006). So the Bali convention of Parties to United national Framework Convention on Climate Change (UNFCC) prepared Bali action plan and Bali road map which includes reference to reduction in GHGs emissions through forest deforestation and degradation. It is simply known as REDD (Reducing Emissions from Deforestation and Forest Degradation). Reducing Emissions from Deforestation and Forest Degradation (REDD) in developing countries is a mechanism that allows industrialized countries to offset their emissions by purchasing carbon credits from developing countries, which reduce emissions from deforestation and forest degradation by avoiding such activities. REDD is being proposed as a potential climate change mitigation option in the international climate negotiations along with enhancement of community livelihood (Dhital, 2009).
Nepal has also participated in pilot project of REDD. After the submission of Readiness Idea Plan Note (R-PIN) to World Bank in 2008, Nepal has officially participated in REDD through the Forest Carbon Partnership Facility program. As per need of World Bank, Nepal has prepared the Readiness Preparation Proposal (R-PP) and which has been accepted for conducting Pilot project in Nepal ((Banskota, K, Karky, B.S, 2009, Dhital, 2009). So it seems that, Nepal can take advantage from REDD in days to come. Community forests can also take part in REDD for mutual benefit. Utilization of continues support from FCPF, could help to enhance capacity to participate in REDD. Benefit received by communities could utilize in climatic adaptations and sustainable forest management (Pokharel and Byrne, 2009).

However, questions of how to design and implement a mechanism to achieve REDD are proving exceptionally complex and controversial. Many experts have doubt on REDD to generate real benefits for the global climate, forests and forest communities. REDD and its successful implementation is challenging task in front of us. It is not yet made sure that how the state and community could get money from industrial countries. The discussion on effective mechanisms for compensating developing countries in proportion to carbon emissions has not yet been finalized. There is ongoing debate on favor of REDD and against the REDD (Pokharel and Byrne, 2009 and Staddon, 2009).

**Research Problem:**

Many experts argue that implementation of REDD will ensure the multiple benefits to developing countries (adhikari, 2009). However some critics on REDD have doubt on its success due to slow progress of previous project of likes clean development mechanisms, and aorestation and reforestation projects (Hall, 2008). Especially weak governance structures and institutional capacities of many developing as barrier for sharing benefits at the local level (Agrawal 2008). At the same time, there is also some skepticisms about the REDD and they argue that carbon financing agenda as being unsuitable for Nepal, due to small area of deforestation and forest. They argue that Nepal could not meet the criteria of REDD. Basically REDD is focused on assessing the reduced rate deforestation and degradation in days to come which was prevalent in past. Further they argue that government retains ownership of the land in community forest as well and which could bring problem in the context of carbon trading initiatives like REDD. Since carbon is contained not only in trees, but also in the soil, roots and organic debris, for which tenure remains ambiguous (LFP, 2008; Pokharel & Byrne, 2009).

There are several researches that have been published in REDD in international and national levels. Some experts have come with optimistic view of REDD and argue that REDD could bring improved livelihood and maintain biodiversity. However some skeptic on REDD argue that REDD can increase the poverty and further destroy the forest. In Nepalese context as well different papers have only argued the technical and governance aspects of REDD and Forest from optimistic and pessimistic point of view. In addition very
few papers have focused to community forestry. So this paper will contribute in increasing knowledge regarding REDD and Community forestry. This paper briefly introduces the principles of carbon trade on REDD mechanisms. Different technological aspects of REDD with focus in community forestry are thoroughly reviewed to see opportunities of challenges of REDD in developing Countries like Nepal.

The study is based on the secondary data published by different organizations and academic institutions and journals. Basically this paper tries to explore the conceptual ambiguity of REDD mechanism in context of Nepal with especial focus on community forestry. The available papers are intensively reviewed to prepare the final paper.

**Concepts on REDD and REDD Plus**

The Bali Road Map of the UNFCCC COP-13 made a decision on REDD calling for

*Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;*

Basically the REDD helps to purchase the carbon sequestrated by forest of developing countries. A large emission from industrial and developed countries is balanced by the protected forest of developing countries. So it has come with notion that developed countries provide economic incentives to developing countries. However concepts of REDD could not address the issues of already the conserved forests. Forest that were sustainably managed from past were excluded from REED mechanism. Strong disagreement of developing countries towards REDD had forced to bring REDD Plus approach. In 2009, the definition of REDD was generally expanded to include mitigation measures from conservation, sustainable management of forests and the enhancement of forest carbon stocks. This was officially accepted in Cancun conference of parties to UNFCCC. So in this paper of REDD is understood in the broader sense including above discussion (conservation of forest, the sustainable management of forest and the enhancement of carbon stock(Hufty, 2011, SNV 2008, )

**Potential of REDD in Community Forestry of Nepal:**

Though the forest degradation was the serious issue in this past. But after the adoption of community forestry in Nepal the condition have improved in forest management. (Pokharel and Baral, 2009). In recent decade’s community forestry is most successful program in common property resource management. Policy and legal instrument such as master plan for forestry sector 1988 and subsequent forest act 1993 and forest Regulation 1995 have provided conducive environment to flourish community forestry in Nepal. Some of the 25 percent of forest have been handover to more than 15,000 of CFUG encompassing 35 percent rural households.(DOF, 2008). Community forestry has been the major source of
carbon stock. The evidences show that about 20% of total carbon has been stocked in community forestry in Nepal (Pokharel and Byrne, 2009).

So if we consider REDD in broader sense in the term of REDD plus or wider payment system including enhancement of carbon, restoration, forest management existing community forest could benefit (Pokharel and Byrne, 2009). A research conducted in Ilam, Lamatar and Manang districts have shown that the quantity of carbon sequestered in three Nepali CFUGs was estimated as 6.89 tons of carbon dioxide per hectare per year, and using CDM market prices of between US$12-15 per ton of carbon dioxide it was calculated that on average payments may be worth up to US$82.68 (Nepali Rs 5,838) per hectare per year. Given that 1.1 million hectares of forest are managed by CFUGs in Nepal that equates with a potential US$90.9 million in payments (Nepali Rs 6.42 billion) (Staddon, 2009).

Recently the Pilot projects run by ICIMOD with the fund of NORAD give incentives to CFUGs of Chitwan Dolakha and Gorkha. The news of Republica June 15 published, “Three watersheds in Dolakha, Gorkha and Chitwan districts on Wednesday received a total sum of $95,000 under the first-ever Forest Carbon Trust Fund (FCTF) in Nepal. Charnawati watershed in Dolakha received $45,535, while Ludikhola watershed in Gorkha received $27,560 and Kayarkhola watershed in Chitwan received $21,905.” CFUGs have claimed payments on the basis of scientifically measured performance in carbon sequestration. Receiving money from carbon polluters for the service of absorbing this major greenhouse gas from atmosphere and storing it in the form of trees is known as forest carbon trade. This shows that rural poor households can benefit from REDD implemented in community forestry.

However this project is model projects to adopt best alternatives in days to come. Despite of model projects that have been implemented, REDD has potential of multiplier benefit in Nepalese context. Which are discussed also discussed.

Like many other developing countries, Nepal allocates a large share of her public funds to agricultural development and other social development sectors like health, education, and law enforcement. Adequate funds are not available for forestry development. Developing countries are under a high threat of deforestation and forest degradation, because of this under investment in forests. To reduce these threats, developing countries need to assess alternative funding sources. REDD could be a potential alternative source of revenue as long as carbon accounting and monitoring processes are affordable and feasible (Acharya, K.P et.al 2009)

Apart from this Nepali CFUG federations and Network are strong to deal with the issues of rights and economies of scale. Availability database on national and local forests. It could be good attraction to lower the cost of measuring the carbon stock. Similarly the Good practice of management forest base on five yearly operation plans provides strong basis to CF to for good payment to Nepal forest by marketing proving track record of CF(LFP, 2008). Community forest user groups have clear management right and use right over
forest resources except high value products. Community forestry can trade directly in international market.

Given that forest protection is ongoing, community carbon forestry through REDD may have low start-up costs compared to AR projects under the CDM or voluntary sector projects, which necessitate the purchasing and planting of seedlings and saplings (Staddon, 2009). Definitely it reduces the cost of CFUGs during carbon transaction.

Recently Climate change draft policy has proposed to adopt Polluter pay principle. This means that community forest can directly participate in international trade and which positive towards climate change mitigation and improved livelihood of poor people.

**Challenges REDD in community Forest of Nepal**

**Governance Constrains**

Despite of this potentials of REDD in community forestry, there are several challenges that should be address to achieve benefit from REDD. Until the carbon stock is not conserved or increased, issue of carbon credit is worthless. Moreover all the process becomes irrelevant. So in the Nepalese circumstances, how possible is the task to achieve carbon finance.

Land tenure has been a critical factor determining the management of Nepal’s forests. Deforestation and degradation has been reduced when the forests have been given back to the communities. Without clear tenure this is likely to create serious problems as there will be uncertainty of right to benefit from carbon trade. (SNV, 2008). Several other causes of deforestation and degradation in the country are expansion of agricultural land for food production, extraction of firewood for cooking and domestic heating, forage gathering for livestock and forest grazing, inadequate management of public forests and restrictive forest management regulations (MFSC 2008). Further continuous political instability during the last decade and lack of land use plans has also exacerbated deforestation. Forest fires and disturbances due to floods and landslides are other important factors. However, the rates of deforestation and degradation are lower in the mid-hills, where the community forestry program has been more successful(Dhital, 2009). So all these reveals that it is challenging task to increase carbon stock.

Ownerships of Nepali forest are either government or private sectors. However the use and management have been given to different stakeholders. It is also divided in multiple units. While considering 10,000 ha as a unit, we have to hold thousands of farmers, forest user groups. NGOs and private sectors. So it really hard to coordinate and collaborate for REDD.

Unemployment and poverty and scenario of food insecurity situation are further frustrating in Nepalese context. It is estimated that more than 6 million people are chronically food insecure (WFP, 2009). So all these reveals that environmental insecurity will further exacerbate the current situation of livelihood insecurity. In these circumstances, forest resources will be key assets for their livelihood. So the continuous
pressure can be seen in forest resources for their survival. It is the great risk of forest resource degradation in Nepal due to poverty and food insecurity. It is estimated that current rate of deforestation of 1.7 percent could be further more. FAO’s Global Forest Resource Assessment (2005) based on national data sources clearly shows the decreasing forest area in Nepal from 4.82 million ha (in 1990) to 3.64 million ha (in 2005). In these circumstances, conservation and increment of carbon stock which is pre-requisite for carbon trade in REDD plus seems to be challenging task.

Nepal is most affected by the negative consequences of climate change, such as floods and droughts, glacier lakes outbursts with rising average maximum temperatures (germanwatch, 2004). In the year 2005/06, Eastern Terai faced rain deficit in and crop production reduced by 12.5% on national basis. Nearly 10% of agri-land were left fallow due to rain deficit but mid western Terai faced heavy rain with floods, which reduced production by 30% in the year (Regmi, 2007). In normal year as well, Nepal has failed to produce sufficient food of its national demand. According food balance sheet, Nepal is food deficit of more than 132mt ton (MOAC, 2009). So all these facts reveals that continuous and permanent resource base will only be forest resources in rural areas. They are forced to exploit these resources for their survival. There is high risk of irrational exploitation of resources in changing context. So further pressure to forest resources in days to come. It is necessary to assure their livelihood prior to go in complex and uncertain mechanism of REDD Carbon trade.

There are growing arguments whether forest or agriculture has priority of land use and how much forest should cover land use. Also, it is point of discussion whether systematic deforestation essential for fulfilling agricultural land for needs of landless households. There is argument in the essence of 40 percent of forest in Nepal.

Another major issue is the legal incoherence reflected in the Local Self-Governance Act 1999 (LSGA) and the Forest Act regarding the management of forests and related revenues. The LSGA gives autonomy to local governments to District Development Committees and Village Development Committees to manage natural resources including air, water, land and forests. However, these provisions are not aligned with many of the sectoral acts, including the Forest Act 1993, and thus create legal ambiguities between local governments and CFUGs. The question of ownership of forest resources or the stipulation to tax the sale of forest products (possibly including carbon) will need to be clarified and a benefit sharing mechanism crafted that can function in a federal state structure(Acharya, K.P. et.al 2009)

So all these factors excludes large rural households to take direct benefit from carbon credit. In addition increasing and carbon stocks and conservation of forest itself become uncertain for REDD trade.

Despite of all this constrains of REDD in community forestry, REDD is contentious in itself. REDD has several ambiguities in measuring carbon stock, carbon finance and income
distributions. Details on concepts and constrains regardin community forestry of Nepal is discussed.

**Technical Constraints:**

As like the process of sequestrating carbon, measurement is also challenging task. It is more over technical issue. We need the experts, advanced technologies and enough financial resources to complete the measurement process as we have to regularly assess the increasing or decreasing rate of forest carbon stock. Light detection and Ranging (LIDAR) technology has made measurement process a bit easier to developing countries. However the measurement process is not easy take with complexity of technology and financial resources. There are several challenges with associated with measurement of carbon stock.

- Precision in measurement issue.
- Additionality issue
- Leakage Issue
- Permanence Issue

**a. Additionality Aspects:**

Additionality is the idea that reduction in deforestation should be greater than what would have occurred otherwise. This concept says that natural growth of forest trees is not eligible for carbon trade where as extra growth carbon stock due to better care and management are under the carbon trade. Basically it is the concepts of how much the REDD has contributed to decrease the current rate of deforestation and degradation. So simply our community forestry don’t meet the criteria of Additionality. Community forest should go to REDD+ Scheme, However the mechanism have not been developed. There is some concern whether the criteria of additionally would in fact exclude existing community forests areas (Karky and Banskota, 2007 and Staddon, 2009), even from REDD+. Karky and Banskota conclude that “it would be difficult to argue that the forest management activities of villages like Lamatar are truly “additional” in Kyoto terms”

**b. Permanence Aspects:**

Permanence in REDD means that our forest policies and programs of protection should be more than 30 years. Carbon credit is only achieved when it should be guarantee of the 30 years. In the Nepalese context, community forest user groups have only management and user right for 10 years. So these forest user groups cannot ensure for 30 years. The right to user in community forestry has granted through operational plan. However, OPs last for only up to ten years, after which time they must be renewed and approved by the government’s Department of Forests. The access rights may not be assured for the entire
length of a carbon financing project which need long period for permanency. This problem would need to be addressed to give confidence to financing companies, traders and buyers (Staddon, 2009).

c. Leakage Aspects:
Leakage means the assurance of forest conservations at all places. Leakage is a situation in which deforestation avoided in one area results in deforestation in another, Conserving and increasing the forest in one area cannot take benefit if the forest is degraded in other areas. We should guarantee of no leakage within Nation. Firstly, if leakage does occur, REDD will fail to reduce overall carbon emissions to the extent predicted, even if credits are successfully delivered on a project-by-project (Pokharel and Byrne, 2009). In Nepalese context the National deforestation rate is more than 1.7 percent. In community forestry as well, situation is not satisfactory in high hill and tarai. Community forests of more than 15,000 of mid hills are able to conserve the 1.8 metric ton of carbon per year. It is still not clear that community contribution of carbon stock would be treated independently or whole national stock. Especially industrial countries are questioning on leakage from sub-national forest level account keeping system. However developing countries have emphasized to recognize the local contribution to forest management. Terai and high hill have different context. Only three lakh ha of terai forest land have been transferred to community which is also not functioning well. Governmental forests are also not safe from increasing rate of deforestation.

This means that how contribution of community forestry in mild hills are not able take benefit from REDD mechanism. Nepal should go for project level crediting to take benefit however the Project-level crediting, expected to result in more leakage. However, it is likely to be preferred by carbon finance investors because it is easier for the private sector to engage with, the risks associated with specific projects can be managed more effectively, and because poor national governance will be less of a risk factor. It may also take longer for entire countries to get ‘ready’ for REDD (Eco Securities, 2007 cited in myth 2009).

d. Measurement
Ownerships of Nepali forest are either government or private sectors. However the use and management have been given to different stakeholders. It is also divided in multiple units. While considering 10,000 ha as a unit, we have to hold thousands of farmers, forest user groups. NGOs and private sectors. So it really hard to coordinate and collaborate for REDD.

Similarly another major aspects is geographical constrains which further increases cost and delays the process of measurement. Industrial countries have brought the issues complexity of measurement. They have emphasized for external independent experts outside the country for their complete assurance. However developing countries are having questioned on increased measurement cost over received benefit. The first issue is setting the Crediting baselines need to be based on historical rates of deforestation, as well as projected business-as-usual scenarios. Many of the submitted proposals consider historical
references of deforestation as REDD crediting baseline. But there are concerns that historical baselines do not provide accurate projections of future deforestation for countries that have low deforestation pressures. Nepal has proposed nested baselines for different sub-regions (LFP, 2008).

**Carbon Financing**

It is not yet finalized how carbon the will be traded among them. Most of the industrial countries are arguing that payment can be after the verification of Carbon. However the developing countries are in favor of investment in institutional structures and conservation activities so that forest resource could be increased. Another issue in carbon trade is the financial transaction. Developed countries are saying that financing should be done by market mechanism where as developing countries are questioning complete assurance market mechanisms. So both parties have their own stand on carbon finance. Developing countries are having proposed of different unit of financing under the UNFCC.

There are several approaches discussed for carbon transaction. Government funding approach, Market based approach and combined approach are in discussed for REDD mechanism.

**a. Market based approach**

REDD credits would be traded alongside existing certified (or verified) emissions reductions (CERs), and could be used by companies in Annex I countries to meet emissions targets in their national cap-and-trade systems (Simaula, 2009). Market-based approaches focused on the generation of carbon credits that is sold in an international market and the money that is generated from these sales is used to support REDD actions. In this regards, generally Countries that emit carbon can be “carbon buyers” and countries that capture carbon are “carbon sellers”. However, some countries might be both. The prices are determined by market forces (like other commodities). In this concept markets operate under strict guidance of the UNFCC mandated protocols agreed in the negotiations and thus is a formal one (Dahal and Baskota, 2009). However critics argue on market based approach saying that Markets could easily vary wildly from one day to the next. Any sudden increase in the price of timber or agricultural commodities could greatly reduce the area of forest that could be protected, if it suddenly becomes more profitable to harvest the timber and/or use the land for commodity production rather than maintain a REDD agreement. It has been seen problematic for a number of reasons such as (a) interfering in the developing countries’ sovereignty, (b) possible conflicts or difficulties related to the property rights of the forest carbon, (c) slowness of the complicated but necessary policy and institutional reforms which would lead to long delays in the implementation, etc. (Simaula, 2009).
b. Government funding approach

There is an argument that REDD should take a fund-based approach. Under fund-based mechanisms, payments come from a dedicated international fund rather than from carbon markets. This payment could be made directly to central government or sub-national entities, and the payments may be used to leverage more indirect activities like policy reform, institutional re-designing and cooperative action between developing and developed countries to combat deforestation. A key benefit is that there is scope for upfront funding to design and implement policy and measures to address deforestation (LFP, 2008). A fund approach would avoid disruption to the carbon market, but would likely fail to mobilize sufficient financial resources to reduce the deforestation significantly (Simaula 2009). Community carbon forestry projects would bring together carbon trading companies operating on the international market with poor rural farmers in developing countries. The interests and expectations of these two parties may not necessarily be the same, and it is likely that the international trader will generally be in a position of far greater power in negotiations than the often illiterate and inexperienced rural poor (Staddon, 2009).

So these both trade mechanisms have merits and demerits. But Nepal is still not clear to adapt the funding mechanisms. However market based approach have been adapted in climate change policy draft paper, still debate among experts. Nepal has challenge of small scale community forestry to compete in international market to sell their carbon. Community forest user groups with low level of technical manpower and information may create challenge to trade in international level.

**Income distribution**

Income distribution is also not clear in REDD. However few fundamental processes are discussed and practiced in model projects of REDD for income distribution. Income distribution is also interlinked with funding mechanism as well. It also determines the income distribution process. However it is considered as national mechanism of distribution of share of REDD among different stakeholders.

This also raises the issue of what is the most appropriate mechanism for transferring the funds. Choices include using existing government structures or creating new funds in the country or do it project by project. Each scheme has its pros and cons. The impact on the poorest will ultimately depend on whether decision making power and ultimately the funds feed down to the groups who need to make the behavioral changes and the right incentives are in place. The scale at which the REDD mechanism is introduced – either at a national level or at a project level - is likely to have implications for how the benefits are distributed (SNV, 2009).

The Currently, CFUGs retain the entire revenue from the sale of forest products except for high value products (Acharya, K.P et al. 2009). The absence of ownership rights have not created conflicting situation. But till date operational Plans of CFUGs have not included carbon management in their program. This means that at the community level, the
ownership of carbon is not clear. It is not yet known whether and how the UNFCCC REDD policy will recognize the ownership of forest carbon at local levels. However, if local communities are prevented from accessing areas they have traditionally used for various purposes, such as harvesting timber or using non-timber forest products, then this could lead to future conflict. Also, it is highly likely to undermine the permanence of any carbon credits. There are different stakeholders like national government, local government and community. If the income distribution among these stakeholders will not be with social justice, then effective contribution to forest conservation won't be achieved. So it is necessary to divide their right and among each stakeholder.

Conclusion and suggestion:
After the little success of CDM under Kyoto protocol, REDD was introduced in the Bali conference in Indonesia in 2007. Nepal has also participated in pilot project of REDD as through the Forest Carbon Partnership Facility program in support of World Bank. Community forests have also participated in REDD for mutual benefit. Utilization continues support from FCPF, could help to enhance capacity forest all stakeholders and especially forest user groups to participate in REDD. So the benefit received by communities could utilize in climatic adaptations and sustainable forest management. Since after the formation of CFUGs, forest capital formation has been fairly successful in the mid-hills of Nepal. Nepal’s community forestry is the key element behind the projection of a positive image of Nepal’s overall forest status. Under Nepal’s current laws and policies, communities have clear rights to manage and use trees and forest products. So they can benefit from carbon trade. However, ownership right of forest could create some complication in between government and community forest user groups in benefit sharing of REDD.

Further more current rate of degradation in overall forest with 1.7 percent annually could create several constraints with in success of REDD. Unclear tenure right, poverty, food insecurity and climate change itself act as barrier to reduce the current rate of deforestation and forest degradation. Similarly increasing the forest and sustainable management of forest could be another challenge. Current status of forest of 40 percent status in total land is itself debated issue in land reform process. Finally overall ambiguity in REDD mechanism and its compliance to Nepalese community forest and climate change polices and programs makes the REDD as the black box. So it is necessary to defined clear tenure right for community forestry so that it won’t be conflicting situation between state and community in benefit sharing of REDD finance. Policy overlap between the LSGA 1999 and Forest Act 1993 should be addressed so that community could take benefit carbon trade. Community forestry should be autonomous to take decision in carbon transaction. Operation plan of CF should incorporate the REDD so that they could empowered and could easily take part in international carbon trade in days to come.

Despite of our own problems regarding the policy gap institution complexity, REDD itself is contentious issue. REDD has technical constrains, carbon financing constrains and
distribution of income constrains. Technical aspects trading aspects have made REDD
bundle of prior-conditions which is really hard to meet by developing countries. It is
necessary to bring the REDD the issue of national debate. Intensive debate among different
stakeholders experts and academia should be carried out so that we could come up clear
understanding on this matter to take stand in international arena of REDD.

Finally REDD could bring potential benefits to community forestry and rural livelihood.
And this could be right alternative to mitigate the climate change. but its complete
implementation in days to come is challenging task. Nepali community forestry user
groups should be well prepared for penetrating the complications of REDD for carbon
credit.

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