



Decentralising REDD+: Lessons Learned from REDD+ Himalaya Project of Nepal

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Abstract

How REDD+ (Reducing Emissions from Deforestation and Forest Degradation) can be institutionalised in already decentralised forestry governance remains a critical question across the developing countries. Lessons of pilot projects carried out at local or sub-national level have been crucial to draw insights into REDD+ decentralization. Taking Nepal's REDD+ Himalaya Project as a case study, this paper illustrates how REDD+ can be institutionalised at sub-national level by stimulating the existing enablers and addressing associated issues hand in hand. While doing so, the study adopted number of approaches, including document reviews; key informant interview and small group meetings with the stakeholders of the project at national and sub-national level. We found that the project has contributed to decentralising Nepal's REDD+ process, albeit at a token scale, through adopting number of approaches, including but not limited to, capacitating sub-national level REDD+ institutions and REDD+ actors and encouraging interactive decision-making process. In addition, recognition and redress of livelihood and social problem is other key intervention that acted as an accelerator. The project, however, faced some institutional, programmatic and practical issues which need to be resolved for better REDD+ results in the days to come.

Key words: Forestry governance, interactive decision-making, participatory monitoring and reporting, social inclusion, sub-national level

INTRODUCTION

Reducing Emissions from Deforestation and Forest Degradation (REDD+), a mechanism to conditionally incentivise developing countries for reducing carbon emissions through deforestation and forest degradation and other carbon enhancement work was perceived as a quick and cheap solution for decelerating global warming (Angelsen *et al.* 2012). Though moving at a steady pace, REDD+ participating countries and project all over the world has been remarkably increased over the last few years. While countries engage encouragingly themselves to prepare for REDD+, it is criticised for restructuring forest towards centralised

forms, because of some requirements under REDD+ implementation such as establishment of national carbon-oriented forest management plans, reliable baseline data, Measurement, Reporting and Verification (MRV) mechanisms and national institution for trading and payment of carbon stocks (Phelps *et al.* 2010; Agrawal *et al.* 2011; Bayrak and Marafa 2016; Vijge *et al.* 2016). Sandbrook *et al.* (2010) have warned on potential risk of REDD+ to serve the interest of government institutions and elites in shade of weak rule of law and corruption, which could set apart locals to be benefited through forest resource. To overcome

these issues. It has been suggested that having nested approach in REDD+ implementation allows national as well as sub-national level to attain benefits while making REDD+ actors accountable at both levels. However, application of nested approach only is not sufficient to address the concerns, while interest of all the actors of national and sub-national level also need to be studied carefully so as to overcome challenges in this approach (Hayes and Persha 2010; Ravikumar *et al.* 2015; Bayrak and Marafa 2016;). This holds true in countries like Nepal where REDD+ implementation has received political commitment at central level, and has well-established sub-national community-based forest management institutions.

Nepal is one of the world's well known countries for decentralising forest management through adopting community-based model (Gurung *et al.* 2011). Being in forefront of REDD+ preparedness in Hindu Kush Himalaya region, Nepal initiated REDD+ process in the early 2008 by submitting REDD Readiness Plan Idea Note (R-PIN) to the Forest Carbon Partnership Facility (FCPF) of the World Bank (Roy *et al.* 2015). Soon after, REDD Forestry and Climate Change Cell, currently called REDD Implementation Centre (REDD-IC), was established under the Ministry of Forests and Soil Conservation (MoFSC). The government then prepared and submitted Readiness Preparation Proposal (R-PP) to the FCPF in 2010. Since then, several studies have been conducted as envisioned in the R-PP, and as a result Forest Reference Level was submitted to United Nations Framework Convention on Climate Change (UNFCCC) in 2017.

Followingly the National REDD+ strategy was endorsed by the government in 2018. Further to demonstrate its readiness, Nepal also prepared the Forest Investment Plan (FIP) – a complimentary program to emission reduction program, which has been approved by the World Bank in December, 2017.

In the meantime, the Government of Nepal implemented REDD+ pilot project in three district- Chitwan, Dolkha and Gorkha in collaboration with International Centre for Integrated Mountain Development (ICIMOD) and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ). This piloting has been built upon substantial knowledge developed through previous pilot project implemented by ICIMOD, Asia Network for Sustainable Agriculture and Bioresources (ANSAB) and Federation of Community Forestry Users Nepal (FECOFUN) from 2009 to 2012 (ICIMOD 2011). The project was successful in developing capacities of REDD+ stakeholder, establishing pilot baselines of REDD+ MRV at sub-national level and building sub-national level REDD+ institution. However, these efforts could not sustain for long time due to the lack of internalisation from the Government of Nepal.

WHY WE NEED SUB-NATIONAL LEVEL REDD+ PROJECT ?

The UNFCCC emphasised the need of continuous, progressive and iterative process of capacity building of REDD+ stakeholders to enable them to participate fully in, and implement effectively their commitments made to the conventions (UNFCCC 2011). Scholars have argued that meaningful stakeholder engagement process is essential to establish robust

institutional governance mechanism for REDD+ implementation (Ojha *et al.* 2013). However, in Nepal, national forest authorities and forest user groups were not able to effectively implement REDD+ projects because of inadequate technical capacity among forest officials, user groups and local institutions (GoN 2014). In addition, the Government of Nepal has committed to establishing institutional structure of institutional structure to make REDD+ work. In accordance to its commitment, the government needs to develop institutional structures and strengthen institutional capacities and coordination mechanisms across all key REDD+ actors at sub-national level (GoN 2018). As there is low level of REDD+ related accountability and benefits at local level, building of champions to implement comprehensive REDD+ awareness package is of utmost importance (GoN 2014).

The REDD+ Himalaya Project is designed to enhance capacity of REDD Implementation Centre to mainstream REDD+ program in forest management practices at sub-national level with scientific evidences through participatory and inclusive approach. For this, MoFSC has set up three-tier institutions. The top level institution, the National Coordination Committee (NCC) provides overall policy guidance to the project. While Project Management Unit (PMU) located at the REDD-IC facilitates project implementation by assisting the District Forest Offices (DFOs) in program planning and implementation, and reporting. The field level institution, District REDD Working Group (DRWG) undertakes program planning and monitoring. District REDD desk has also been set up as a secretariat of DRWG, which has become

a learning center of REDD+.

This paper illustrates how and what approaches of REDD+ Himalaya Project have been able to institutionalise REDD+ process at sub-national level and bridge the gap between decision makers and practitioners. The authors have also assessed what activities of the project have enhanced the shared ownership of the REDD+ as a whole and contributed to achieving multiple objectives of REDD+, including measuring, monitoring, reporting and verification of REDD+ result, restoring the forest landscape, conserving the biodiversity and addressing the social inclusion issues.

METHODOLOGY

The study is based on both qualitative and quantitative analysis of information gathered from various sources, including Literature Review, Key Informant Interview (KII) and Focused Group Discussion (FGD).

At first, documents related to the REDD+ Himalaya Project were reviewed. These include review of log frame and REDD+ Himalaya project document, meeting minutes of REDD+ Himalaya NCC, annual report of REDD+ Himalaya (submitted by PMU and DFOs to ICIMOD), meeting minute of DRWG of three pilot districts, and Joint-monitoring report of REDD-IC and ICIMOD. In addition, national REDD+ related policy instruments and other relevant documents were also reviewed. At the same time, contemporary REDD+ literatures that summarised lessons of REDD+ pilot project in local people's participation, livelihood enhancement, and community-based forest carbon monitoring, private

sector engagement, and biodiversity conservation were also reviewed. Additionally, information obtained from KII and FGD were also cross verified from the reviewed documents.

Essential information with regards to institutional arrangement, major decisions for project planning and implementation, and executed activities were extracted from the above-mentioned documents.

Prior to the field visit, a set of questionnaire (open and close ended) was developed for KII. The participants for interviews were purposively selected as suggested by Bedford and Burgess (2001), which includes District Forest Officers (n=3), District REDD+ focal point (n=3), focal person and coordinator for REDD+ Himalaya Project at REDD-IC (n=2). Nearly thirty minutes of interviews with each stakeholder were conducted in Nepalese language and later translated to English.

Five sets of separate questionnaires were developed for Small Group Meetings (SGM) to get perspectives of the project from REDD+ multi-stakeholders located at sub-national level. The SGM participants were purposively selected as suggested by Bedford and Burgess (2001), and included members of District REDD+ working group (n=15), local resource persons (n=17), members of Ilaka level REDD+ working group (n=18), community forest user groups (n=30), district chapters of FECOFUN (n=17). Nearly four events of SGM in each district (all together 15 SGMs) were conducted by gathering representative of REDD+ stakeholders. The discussion topics in the FGD and SGM were, however, stakeholder specific.

Both qualitative and quantitative methods were followed for analyzing the data. The information gathered from KII FGDs, and SGMs were transcribed and grouped into different themes, and were analysed.

Review of contemporary literatures were undertaken to appraise, encapsulate, compare, contrast, and correlate to the current study. Throughout the analysis, effort was laid to figure out the project institutional framework, approach to program planning and implementation, decision making and capacity development, project's response to cross-cutting issue, gender and social inclusion (GESI), and success stories about decentralisation process of REDD+ from documents and related them to interviews.

RESULTS

REDD+ Governance Structure

The REDD project establish functional three-tier REDD+ institutions, including the apex body- NCC - chaired by chief of Foreign Aid Coordination Division, MoFSC, PMU at REDD IC and District REDD+ Working Group at the sub-national level. These institutions were found to interact regularly through meetings and annual workshops, and duly undertake their assigned task as mentioned in the project document. The review of meeting minutes of NCC further revealed that the top level institution has addressed many of the sub-national level issues, including but not limited to, program implementation by exploring immediate way out. As a result, the project was able to achieve significant financial progress in the fiscal year as reflected in the annual report of the project.

Despite the multi-level governance structure, some REDD+ governance issues at the sub-national level may pose risk to the regular function of these institutions, including limited human resource and budget to deal with the additional programs.

Decision-making Approach

The REDD+ Himalaya Project has embraced hybrid approach, integrating both bottom-up and top-down for planning and implementing its activities. In addition, every decision, be it a program planning or implementation, has been made in consensus way, which was reflected in meeting minutes of DRWG, photo plates and project's progress report.

The program planning of the project starts with a meeting call from the District REDD Desk- a secretariat of District REDD working group to the representatives of district level government and non-government organisation, including the representative of Non-governmental Organization (NGO) federation, FECOFUN, Association of Private Forest Growers, Women's Wing of Tharu Welfare Assembly, Vigilance Group of Disadvantaged Women, Community-based Forestry Supporter's Network and Nepal Federation of Indigenous Nationalities. Following that, the stakeholders identify and prioritise detail activities to be implemented in the upcoming years within the five broad themes mentioned in the project's log frame¹ including knowledge generation, awareness and capacity development, addressing drivers

of deforestation and forest degradation, data generation for MRV of REDD+ results, and establishment of REDD+ institutional structures at multiple levels and get approved from the NCC via PMU. However, the indicative plan does not necessarily restrict the DFOs official implementing other REDD+ activities at the sub-national level. Once the program is approved, then the DFOs and sub-national REDD+ actors start implementing the program. The DRWG and PMU and ICIMOD either individually and/or jointly monitor the program and do necessary adjustments and address the encountered issues if any. Because of the flexible working modality of the project, on-time management of associated risk, and incorporation of interest and need of sub-national REDD+ actors in project's annual program, the project has been able to enhance multi-stakeholder participation in REDD+ , thereby reduced techno-bureaucratic hegemony in program planning and implementation.

Gender and Social Inclusion

The review of reports produced by respective DFOs and PMU, and the meeting minutes of DRWGs revealed that there is a high level of participation from both women and socially excluded groups in the project's activities (Table 1). For instance, more than 35 per cent of women participated in REDD+ awareness project and Ilaka Level REDD+ Working Group strengthening program. The level of women participation was even higher in other activities of the projects, particularly in Local Resource Person (LRP) mobilisation, where 90 per cent women have been engaged.

1 The project has developed its log frame, which aims to enhance the capacity of national and sub-national institution on REDD+ through knowledge production and dissemination, and capacity development.

Table 1: Participation in REDD+ Himalaya Project

Activities	Average (%)		Inclusion of socially excluded group (disadvantaged and ethnic group) in per cent
	Male	Female	
DRWG meeting	80	20	27
REDD+ Awareness Workshop	50	50	32
ILRWG Strengthening	65	35	47
LRP mobilization	10	90	26
Forest Carbon Assessment Training	70	30	36

If assessed the participation from the inclusion lens, the project has given enough space for people from disadvantage and ethnic background. For example, nearly 25-35 per cent socially excluded group participated in most of the project's activities, including District REDD Working Group Meeting, LRP mobilisation project, REDD+ awareness workshop and Forest Carbon Assessment Training in particular. It indicates that the project has integrated Gender and Social Inclusion in sub-national level REDD+ institutions and programs.

Although the project gained momentum in terms of women participation and inclusion, the challenge still remains to make their voice heard.

Knowledge Generation and Dissemination

The REDD+ Himalaya Project produced number of knowledge products for general public and decision makers both at local and central level. The sub-national level stakeholders, particularly the DFOs were found to produce REDD+ related articles/publication and

extension material for Forestry Week/ Environment Day, and disseminated it through radio and local newspapers. DFOs of Chitwan and Gorkha organised rallies to create awareness on forest fire hazard management. In the meantime, the PMU at central level with support from ICIMOD produced number of knowledge products targeted for REDD+ decision makers and conducted several REDD+ related studies (For instance; Scoping study for National REDD+ Strategy under federal structure, Interpretation of Cancun REDD+ safeguards in Nepalese context, Strategic Environment Assessment of 13 district of Terai Arc Landscape Area, and REDD+ process in Nepal). Production of REDD+ related knowledge and its dissemination are found to be instrumental in enhancing knowledge of practitioners and decision makers, and contributing in Nepal's REDD+ readiness process to some extent. But in the present context, there are handful of human resources and funds for producing and disseminating REDD+ knowledge both at national and subnational level that may hinder the extension of REDD+ program in other parts of the country.

Capacity Building

It was revealed from FGDs with LRP that the training on carbon assessment and REDD+ awareness workshop enhanced not only the skills and expertise of LRPs on forest resource and carbon inventory, but it also broadened their horizon of knowledge on theory and practice of REDD+. Another activity, for example REDD+ related field exposure was found to have built strong networking among forest users groups, and became a cross-learning platform for replicating forestry/REDD+ related good practices. One of the notable examples is from DFO Dolakha, where Sustainable Forest Management (SFM) practice was replicated in Khorthali Community Forest following an exposure visit to SFM site in Nawalparasi.

On the other hand, the project mobilised number of LRPs from different economic and social background in implementing annual programs of district forest offices. The subnational level REDD+ cadre (or LRPs) found to have brought positive implications by bridging the communication gap between DFOs and community forestry user group. In addition, LRP mobilization has helped timely redress the grievances of forest users group in a cost-effective way.

As the project is going to terminated at the end of 2018, there is a risk of derailing whole REDD+ process at sub-national level due to brain-drain of sub-national level REDD+ cadres, including LRPs and member of district and Ilaka level REDD+ working group. The provincial and local level government can provide space and opportunities to the REDD+ cadres. But in the present context, these institutions have not yet reached at that maturity stage to support them.

Investment in other Areas

From the document review, and FGDs and KII with the project's stakeholders, it was found that the project made significant investments in promoting income generating activities and addressing drivers of deforestation and forest degradation. For example, investment in bio-briquette enterprise in leasehold forestry users (of Chitwan district) and plantation of highly valuable forestry species (in all three districts) has not only enhanced the income of forest dependent poor but also abled to restore 70 ha of forested landscape. Moreover, the project indirectly contributed in the conservation of highly vulnerable and endangered species of flora, particularly to the Article 9 (ex-situ conservation) of the Convention of Biological Diversity, 1992 by conserving threatened species (species of IUCN Red List), particularly *Taxus wallichiana* (Lauth salla) and *Aquilaria malaccensis* (Agarwood) ex-situ in the project districts.

The cost of investment from the project is, however, very high compared to the return and the extent of impact zone is minimal. Therefore, there remains a greater challenge to get funding and provide other necessary supports in this regards.

Forest Monitoring and Reporting

In the context of REDD+, community participation on forest monitoring is increasingly seen as scientifically efficient and cost-effective with greater local acceptance (Shrestha *et al.* 2014; Boissière *et al.* 2014; Junttila *et al.* 2015; Boissière *et al.* 2017). Such involvement could bring a sense of ownership to the communities and increases the likelihood of success of REDD+ measures (Junttila *et al.* 2015). At

the same time, upward flow of community-based data into national forest monitoring system contributes in data validation, thereby improves transparency (Murthy *et al.* 2017).

Realising this fact, DFOs (with the help from CFUGs) were found to have incorporated carbon analysis part in the operation plans of 18 community forests. These inventories have not only had rich datasets but also contained up-to-date information, which may play key role in decision making for avoiding deforestation and forest degradation at local level. In the meantime, the carbon database is likely to update regularly during renewal of operation plans of CFUGs (with 5-10 years interval). Such integration of forest carbon monitoring in particular in community forest management plan not only helps to enrich forest monitoring data pools at sub-national level but also sensitise the sub-national level stakeholders on the importance of forest monitoring or self assessment of forest resources. With the link of sub-national data to the national database integrated with remote sensing data, it is highly likely to ensure higher level of credibility and reliability of REDD+ MRV² in Nepal.

The project has attempted to mobilised local people in linking local forest carbon data to the National Forest Information System. However, there remains gap in this front too. Since, lack of permanent sample plot in the community forests, associated measuring, monitoring and reporting cost, and possible brain-drain of

sub-national REDD+ cadres, may restrict the sub-national level REDD+ institution in linking sub-national database to National Forest Inventory and National Forest Information System.

Interagency Cooperation and Coordination

The REDD+ Himalaya Project has established synergies and cooperation with other agencies both at national and local level. The fund received from the multilateral organisations, including but not limited to, the United Nations Program on Reduced Emissions from Deforestation and Forest Degradation, Food and Agriculture Organization of United Nations (FAO) and Norwegian Agency for Development and Cooperation and GIZ is being used in shaping both project's REDD+ intervention packages and REDD+ readiness in the country. For example, UNFAO has established complimentary synergy with the country's REDD+ process by organising South-South learning on Safeguards, REDD+ MRV, Forest Reference Emissions Level (FREL)/Forest Reference Level (FRL)³ and have also made core synergy by replicating project's REDD+ intervention packages in District REDD+ Action Plan of Chitwan and Ilam district. Additionally, the project created environment for cooperation with local level NGOs and REDD+ related stakeholders. For instance, many of the project's components/program in the field level was found to be implemented by the

2 MRV of REDD+ stands for measuring, reporting and verification of greenhouse gas emissions by sources and removals by sink. Any country participating in REDD+ should developed sophisticated and credible MRV system for documenting its carbon sequestration performances so as to sell carbon credits and for assuring the equitable benefit sharing.

3 FREL/FRL: The FREL/FRLs are benchmarks for assessing each country's performance in implementing REDD+ activities. The FREL only includes activities which reduce emissions, for example reducing emissions from deforestation and/or forest degradation. A FRL includes both activities which reduce emissions and activities which increase removals. Countries wish to access result-based payments require an assessed FREL/FRL.

FECOFUN, private forest entrepreneurs, nursery growers (including Dabar Nepal), District Soil Conservation Office, District Agriculture Development Office under the guidance and supervision of DFOs. The good practice, establishing cooperation and coordination with other agency, however does not necessarily indicate that all the involved agencies recognise, respect and compliment one another's needs and priorities. There is also a big gap in this regards.

Lessons for Decentralising REDD+

We argue that decentralisation of REDD+ in already decentralised forestry governance requires an effort for stimulating the existing enablers and resolving the associated issues hand in hand. The key factor that dictates REDD+ decentralisation is permanent and functional sub-national level REDD+ institutions and participatory decision-making. Since enabling robust institution and participatory decision-making brings transformational changes in resource governance, that helps to shift in discourse, attitudes, power relations, and deliberate policy and protest action, thereby makes policy formulation and implementation process more interactive and inclusive than business as usual (Brockhaus and Angelsen 2012; Babon *et al.* 2014; Hauser *et al.* 2014), and accommodate interest and need of all stakeholders in REDD+ related plan. Interaction between horizontal and vertical governance is also equally important in REDD+ process for managing the risk and maintaining synergies with global advancement. There are many instances where multinational REDD+ project has not addressed these

components, and therefore moved to the path of failure (see Cox *et al.* 2010; Fischer *et al.* 2016).

Adoption of participatory approach and establishment of separate but functional REDD+ institutions at sub-national level is not an easy task for the country like Nepal where the forestry tenure is unclear between the governments. The constitution of the country has given legal authority to manage the forests to both provincial and local governments through explicit rights (Schedule 6 and Schedule 8) and Concurrent Rights (Schedule 9), while the federal government is given a rights of making forestry related policy instruments. It means that the federal government has rights to set standards for REDD+ policy, while provincial and local governments need to design REDD+ policy and measures within the broader framework set by the federal government. Similarly, the Local Government Operation Act 2017 envisions that local governments can manage environment and conserve the biodiversity. The recent advancement in the country, however, shows that the functions of the community-based forest management regimes where REDD+ is grounded- are being disrupted due to unclear yet overlapping jurisdiction of provincial and local governments with regards to forestry resource. On the other hand, no any governments (even the federal) has finalised forestry related (and/or REDD+) policy instrument as per the provision of new constitution. As REDD+ activities are implemented beyond the administrative boundaries, this kind of overlapping jurisdiction and uncertainty has pushed Nepal's REDD+ at crossroads by leaving pressing questions: Does the established collective actions for forest

resources management go in perpetuity? Are the provincial and local governments able to resolve conflict related to forest resource utilisation? Will the governments equitably share the benefit accrued from REDD+? Will the governments mobilise or engage local people in forest resource management as before? But considering the delay in policy formulation as per the provision of the constitution, it is highly likely that it will take few more years to address these questions. In the present context of uncertainty, it may induce leakage, displacement and reversal of deforestation and forest degradation in trans-boundary regions between provincial and local governments. It's high time that both governments should develop forestry-related policy instruments based on the principle of "coexistence, cooperation and collaboration" as envisioned by the constitution. That would provide enough space or platform for discussion, strengthen people's participation and social justice and ensure equitable sharing of the benefits in forest resource management and resolve conflict related to forest resource use.

The capacity development and social extension is equally important in decentralising REDD+. But how the local REDD+ stakeholders are capacitated and mobilised and what approaches are adopted to communicate matter the most. Our study suggests equipping local REDD+ stakeholders with adequate knowledge and skills, including but not limited to, the theory and practice of REDD+ and other forest management skills makes difference in service delivery and redressing grievance related to resource use. However, there still remain sustainability issues of how these well-equipped human resources are capitalized

and used at subnational level after the termination of the project. Since, there is high risk of derailing REDD+ process at sub-national level as a whole due to highly likely brain-drain of the REDD+ cadres, including LRPs at the end of this project. And there is very few available space for them to be retained at subnational level. To overcome these issues, we suggest that REDD+ cadres developed by the project should be integrated at sub-national level government (or in any local forestry projects) and strengthen their capacity through regular support.

Integration of social and livelihood issues in REDD+ enhance shared ownership of the project and build the trust amongst the stakeholder, thereby increases the socially acceptability of the project. Our results show that the project has been able to attract women and socially excluded, and forest dependent poor in the project implementation. But it does not necessarily reflect the fact that project has totally heard and respected their needs and voice and redressed their issues and concern. For enhancing meaningful participation and shared ownership in REDD+, we suggest developing a platform for learning and doing and grievance redress mechanism to conducive environment for decision-making. Our study also found that integration of forest-based livelihood program in REDD+ brings non-carbon benefits to general public as well and help address underlying cause of deforestation and forest degradation to some extent. Our findings corroborate with previous studies (Boyd *et al.* 2007; Hajek *et al.* 2011; Atela *et al.* 2015) on with the inference that accommodation of social objective in the REDD+ project help address social drivers of deforestation.

Measuring, monitoring and reporting of the REDD+ results obtained from locally available resources is another pre-requisite to institutionally decentralise REDD+ process. Since, deforestation is easy to measure by applying number of tools and techniques, including remote sensing and geographic information system (RS and GIS), but measuring forest degradation by using RS and GIS is complicated (Danielsen *et al.* 2011), and expensive too. Our study therefore recommends that mobilizing forest users group and local level REDD+ cadre in MRV reduces the cost and time, as also suggested by previous studies (Burgess *et al.* 2010; Shrestha *et al.* 2014; Boissière *et al.* 2014; Junttila *et al.* 2015; Boissière *et al.* 2017). In addition to cost reduction, the engagement of local people in monitoring help to produce robust and scientifically valid datasets, and improve institutional capacity at sub-national level (Fry 2011). It will have positive implication in maintaining the permanence of emission reductions (Danielsen *et al.* 2011), and allow them to speculate the amount of benefits they could reap from REDD+ carbon credits.

The project has tried to link local forest carbon data to the National Forest Information System to some extent. However, there remains big challenge. Since, community forests that incorporated forest carbon analysis in their operation plans have not established permanent sample plots which create difficulty in re-measurement of the enhanced carbon at Tier 3 level, thereby limiting the synergies with National Forest Inventory and National Forest Information System to the MRV data generated at sub-national level. As the carbon accounting project has not yet been integrated in government's

regular forestry programs despite the project's initiative, stability of carbon accounting practices/data at grassroots level may be disrupted after the termination of this project. This kind of REDD+ MRV related issues can be addressed in number of ways. Firstly, the government should make mandatory provisions to incorporate permanent sample plots in the community forest with adequate budget while preparing or renewing the operation plans of CFUGs. To institutionalise MRV practices at subnational level, the newly created divisional forest office can capacitate the forest user groups and other REDD+ stakeholder by providing regular coaching and orientation. At central level, the federal government should developed community-based REDD+ MRV protocol, compatible to national forest monitoring requirements made by the UNFCCC for the prospective REDD+ framework by integrating hybrid approach, i.e. both remote sensing and community monitoring systems (Fry 2011; Bernard *et al.* 2014). For this, technical MRV cooperation between countries of the South should be further strengthened (Fischer *et al.* 2016).

Interagency cooperation plays important role in making the REDD+ program sustainable. Our study found that the project has been able to establish synergies with sectoral and cross-sector agencies to some extent. There is observed gap in complimenting the national and sub-national government's need and priority by the agencies and full-fledged coordination and synergies is yet to be achieved to the satisfactory level. To augment the interagency synergies and secure sustainable finance for REDD+, we suggest that the government should

proactively come forward with long term national priorities, including REDD+ together with enabling environment.

CONCLUSION

Our study found that REDD+ decentralisation in already decentralized forestry governance requires stimulation of existing enablers, including, but not limited to, people's participation, interactive decision-making, capacity development and participatory forest monitoring. Number of associated risks may decelerate REDD+ decentralisation process at sub-national level in the present context. But it should be immediately resolved by the governments with transformative policy instruments and working modalities at all levels.

As the country has recently started implementing REDD+ program, for example, emission reduction program) at sub-national level, the learning from this case study may provide some policy and field level insights to the concerned decision makers and practitioners. We suggest that decision-making and program implementation approaches and other resources that the project developed should be embedded within the country's forestry or REDD+ program and plan in the years to come.

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