

Climate Change Project Implementation in Lamjung: A Case of Hariyo Ban Project



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CCRI case study 3

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List of Abbreviation

ACAP	Annapurna Conservation Area Project
CAPs	Community Adaptation Plans
CARE	Cooperative for Assistance and Relief Everywhere
CFUGs	Community Forest User Groups
CHAL	Chitwan Annapurna Landscape
DANIDA	Danish International Development Agency
DDC	District Development Committee,
DDRC	District Disaster Relief Committee
DFO	District Forest Office
CBS	Central Bureau of Statistics
DISCO	District Soil Conservation Office
FAO	Food and Agriculture Organization
FECOFUN	Federation of Community Forest Users, Nepal
GHG	Green House Gases
GLOF	Glacier Lake Outburst Flood
GoN	Government of Nepal
IGA	Income Generation Activities
INGOs	International Non-Governmental Organization
IOM	International Organization for Migration
LAPA	Local Adaptation Plan for Action
LI-BIRD	Local Initiative for Biodiversity, Research, and Development
LRMP	Land Reform Mapping Project
MoFSC	Ministry of Forest and Soil Conservation
MSFP	Multi Stakeholder Forestry Program
NAPA	National Adaptation Program of Action
NGO	Non-Governmental Organization
NTNC	National Trust for Nature Conservation
REDD+	Reducing Emission from Deforestation and Forest Degradation
RfP	Request for Proposal
SAGUN	Strengthened Actions for Governance in Utilization of Natural Resources
TAL	Terai Area Landscape
USAID	United States Agency for International Development
VDC	Village Development Committee
WWF	World Wide Fund for Nature

1. Introduction

Lamjung is one of the nine districts classified by the National Adaptation Program of Action (NAPA) as highly vulnerable to climate change (GoN 2010). A forestry project named 'Hariyo Ban' has been implemented in Lamjung since 2011 with a strong claimed focus on climate change. The USAID (United States Agency for International Development) funded project has been contracted to a consortium led by World Wide Fund for Nature (WWF) Nepal (with backing from WWF headquarters in Washington DC) along with CARE (Cooperative for Assistance and Relief Everywhere) Nepal, the National Trust for Nature Conservation (NTNC) and the Federation of Community Forest Users, Nepal (FECOFUN).

A conservation agenda of the project is visible in the project aim (stated in the request for proposal (RfP) by USAID) is 'to reduce threats to biodiversity and vulnerabilities of climate change in Nepal' (USAID 2010: 1). The project was primarily designed by the donor and outsourced for implementation within given design framework and specified geographical area. In contrast to the Multi-stakeholder Forestry Program (MSFP 2011) which has been government led and designed with wider stakeholder consultation, the Hariyo Ban is more donor-driven. There seems to have been limited engagement by government and other agencies at national and local levels in the project design. Furthermore, the project has been funded off-budget and implemented through implementing agencies in parallel to the government budgetary mechanisms.

The USAID RfP and the project document (a technical document prepared by the implementing agencies - referred as technical document hereafter) have been reviewed in relation to a number of questions regarding design and implementation of the project with specific focus on how it engages and interacts with the local context and organisations. These questions are:

- a) to what extent and how does the project engage with government organizations (both at centre and organizations levels) in the design and implementation of the project?;
- b) to what extent is the conservation orientation of the project shaped by the agenda of the donor or implementing agencies and in what ways? and
- c) how does the project address climate change related problems faced by local people in the project sites?

This case study of a climate change related project in Lamjung is part of a four year research¹ examining district government responses to climate change adaptation and disaster risk reduction in three Nepalese districts – Dolakha and Lamjung in the mid-hills and Rupandehi in the Terai. The USAID funded Hariyo Ban project was selected in Lamjung for the case study as it was identified as the most significant donor funded project in Lamjung through key informant interviews conducted in 2012. The key informants interviewed were government and non-government organizations from the district working around the climate change related issues. Snowball technique was used to identify the relevant organizations (see annex 1 for list of informants). This case study report is based primarily on a review of project documentation i.e. the RfP by USAID, the technical document developed by implementing agencies, and other project publications and field work conducted in 2012-2014.

¹ Climate Change and Rural Institutions research project funded by Danish International Development Agency (DANIDA) and led by Danish Institute for International Studies (DIIS).

A series of field visits were made during this period when interviews were conducted with staff from implementing agencies of the Hariyo Ban project (CARE Nepal and FECOFUN), representatives of district government organizations (i.e. District Forest Office, District Development Committee, District Soil Conservation Office-DISCO) and a NGO called Committee for the Promotion of Public Awareness and Development Studies (COPPADES) -a local NGO working with WWF to implement project activities. Two Community Forest User Groups (CFUGs) (Dhodsingh and Jagreni) that received Hariyo Ban project support for development and implementation of community adaptation plans (CAPs) were identified to investigate how project facilitated the CAPs and what interventions included under the climate change adaptation. A group interview (meeting) was held with CFUG executive committee members followed by visit of households who had received support as part of CAP implementation in each CFUG. We also visited climate change adaptation related intervention in the selected CFUGs. In addition, four CAPs developed under the Hariyo Ban project (including CFUGs visited) to examine the nature of project interventions on climate change adaptation.

The report starts with a summary description of socio-political and geographical context of Lamjung district. Then it moves to analyse the design and implementation of the project before investigating the content of climate adaptation plans developed under the project. The report then highlights the issues emerged from the empirical material.

2. Socio-economic and disaster context of Lamjung district

Lamjung is a mountainous district located about 155 kilometer west from Kathmandu. This district shares a boundary with Gorkha district in the east, Kaski in the west, Manang in the north and Tanahu in the south. The district which has total area of 1,692 square kilometer (DDC 2014) is divided into 52 VDCs and two municipalities.

Lamjung district has a population of about 167,720 with Gurung comprising 31.2%). Caste wise, the majority population of the district are 'ethnic groups'² (48.59%) followed by Bramin and Chhetri (so called upper castes)³ (28.74%), and Dalit community⁴ (17.87%) (CBS 2012). The population of Gurung (and other ethnic groups i.e. Tamang, Sherpa) is mostly concentrated in mountain in the North while so called higher caste people (Brahmin and Chhetri) occupy productive river valleys and lower altitude slopes.

Like other mountain districts, Lamjung consisted of a mosaic landscape constituted of slopes on the two sides of rivers starting from the mountain in the north flowing down towards south. Marsyangdi is the major river that is snow-fed and emerges from northern district of Manang linking with Tilicho Lake (one of the glacial lakes). Marsyangdi feeds the Saptagandaki, one among the four major rivers systems of Nepal. The Chepe and Madi are other two rivers that flow along the Eastern and Western boundaries of the district (see figure 1).

² Major ethnic community of the district=Gurung (31.25%), Tamang (7.23%), Newar (3.71%), Garti/Bhujel (2.28%), Magar (2.24%), Dura (1.88%)

³ Barhmin (12.75%) and Chhetri (15.99%)

⁴ Kami (8.63%), Sarki(5.31%) and Damai (3.93%)

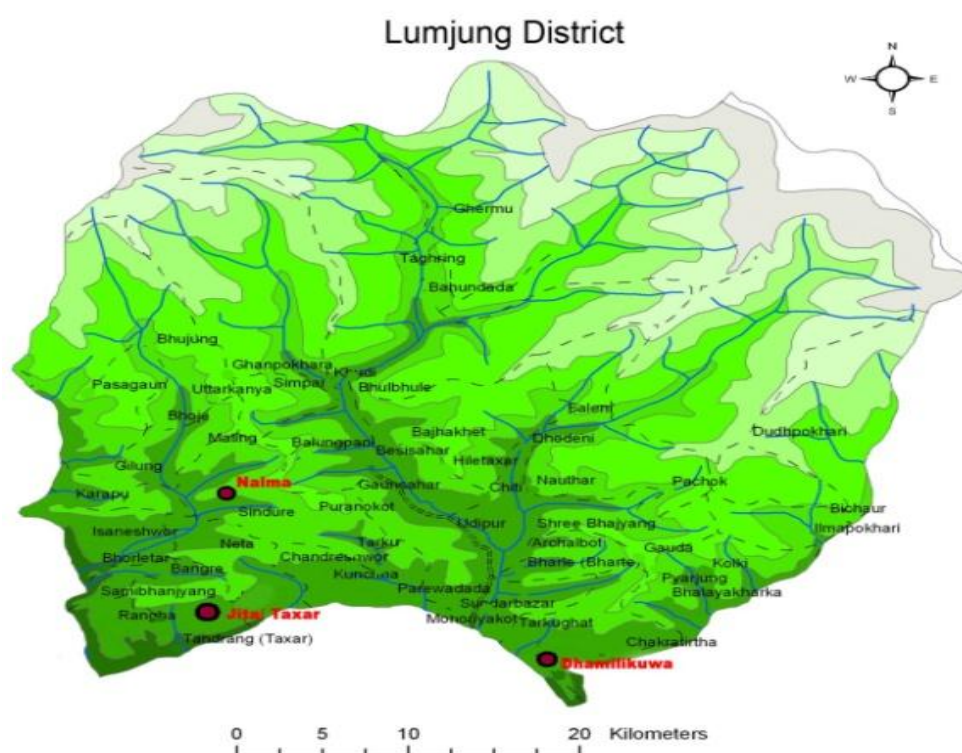


Figure 1: Map of Lamjung district showing major river system (DFO 2014).

Of the total area of district (1,692 square kilometer), about 49% is covered by forestland (including about 10% shrub land) (LRMP 1978 cited in DFO 2014). About 28% (18,849.96 Ha) of the forest area is included in the Annapurna Conservation Area, which is managed under participatory conservation principle by National Trust for Nature Conservation. Of the rest, 30 % (19957.63 Ha) is managed as community forests (DFO 2014). The rest of the forest land is under the control of department of forest (see table 1). The community forest program was initiated in the district in 1995 after the new Forest Act (1993). As of July 2014, the district has 317 CFUGs with a membership of 25,284 HHs (84.68% HHs of district) who manage 66,216 (39.1%) ha of total forest area (DFO 2014).

Table 1: Different forest management regimes

S.No.	Management regime	Area(Ha)	Percentage of total district forest area	No of VDCs Covered
1	Community Forest	19957.63	29.94	53
2	Leasehold Forest	524.52	0.79	16
3	Government managed	27339.45	41.00	
4	Religious	2.03	0.003	1
5	Protected Area (ACAP)	18849.96	28.27	8
	Total area	66,673.6	100	

Source: DFO 2014

The community forestry program in Lamjung was supported in the past by two major donor funded projects: the Danish International Development Agency (DANIDA) funded project called Natural Resources Management Sector Program (NARMSAP) and USAID funded project called Strengthened Actions for Governance in Utilization of Natural Resources (SAGUN). The NARMSAP project, which was implemented during 1998-2005, had a specific focus on promotion of community forestry program in the district. The project had also implemented activities related to soil conservation and watershed management (similar to the work of the DISCO in the district). SAGUN was implemented between 2002-2009 covering different issues related to natural resources management i.e. forestry, irrigation, hydropower etc. The forestry component of the SAUGN focused on activities related to strengthening CFUGs i.e. strengthening CFUG governance, income generating activities for poor members from CFUGs, protection and management of the forest etc. (CARE Nepal 2009). Unlike the NARMSAP, the SAGUN was implemented by a consortium of INGOs and NGOs⁵ with a parallel structure outside of the government budgetary system.

About 17% of the total land is used for agriculture, mostly for subsistence farming, perhaps the major source of district economy. The agriculture land is composed of rain-fed land where people grow cereals such as maize, millet, and paddy. Paddy is cultivated in irrigated lands that are located in the gentler slopes and river valleys.

Lamjung has long history of outmigration of youth, though in different forms over the period. Men from the Gurung community have been serving the British and Indian army historically. This was the main off-farm income source until young men started to go for foreign labor. In recent years, labor migration has increased. A report showed that 12,920 youths from Lamjung went for foreign employment (labor work in Gulf countries, Malaysia, Korea and India) during the years between 2003/04-2009/10 (IoM and FAO 2010). Increasingly, remittance is becoming the main off-farm income source for many rural households. Some farmers, in the areas with access to road, have started commercial agriculture i.e. vegetable cultivation, livestock production, particularly goats for meat and generating income.

In addition to these economic activities, Lamjung has also potential for tourism. The famous trekking route, Annapurna Circuit begins from Besisahar, the district headquarter of Lamjung. The Annapurna Circuit is a famous trekking route with about 129,966 (ACAP) (Shrestha 2015) tourists (both domestic and foreigners) flow yearly. The NTNC has promoted tourist facilities i.e. hotels and homestays along the trekking route.

Being located in the mountain region, Lamjung district has not been remained untouched by the impacts of climate change and is classified by NAPA as one of the most vulnerable district in terms of GLOF. Due to mountain terrain with unstable geological structure, the district has a high risk of landslides and flood. Three landslides in Bhoje, Dhamilikuwa and Bansar are well known in the district. Control of these landslides remains beyond the capacity of existing institutional structures (Pain *et al.* 2015). There are many other small but reoccurring landslides in the district that threaten lives and damage property and land. However, such small but reoccurring disaster events which affect the lives of many local dwellers have not received attention in the national climate risk assessment that informed NAPA.

⁵ The SAGUN was implemented in 24 districts by a consortium led by CARE Nepal with RIMS Nepal, RITI consultancy, WWF Nepal and FECOFUN as partners.

The district disaster preparedness and response plan identified flood/landslide, fire, earthquake, epidemic, storm/snow and lightening as the major disaster risks in the districts(DDRC 2014). A 10 year disaster history showed floods/landslides as the major disasters killing 4 people and two other people were killed by fire and lightning (DDRC 2014).

Table 2: Disaster History in Lamjung

Year	Disaster	Affected			Effect	
		VDC	Family	Population	Injured	Death
2003	Fire	20	24	105	10	
	Flood/landslide	11	21	110	0	
	Lightning	3	3	3	0	
2004	Fire	23	30	140	5	
	Flood/landslide	4	25	121	8	
	Lightning	2	2	2	2	
	Epidemic	4	21	98	0	2
2005	Fire	21	34	165	11	
	Flood/landslide	12	25	125	0	
	Lightning	1	1	1	1	
2006	Fire	30	38	164	0	
	Flood/landslide	6	16	80	0	3
	Lightning	7	10	40	0	
2007	Fire	22	24	122	5	
	Flood/landslide	7	12	120	0	
	Lightning				0	
2008	Fire	20	28	135	6	
	Flood/landslide	10	18	98	0	
	Lightning	2	2	2	0	
2009	Fire	21	27	124	0	
	Flood/landslide	8	18	102	0	
	Lightning	2	2	2	0	
2010	Fire	35	39	195	10	
	Flood/landslide	8	15	76	0	
	Lightning	2	2	2	0	1
2011	Fire	21	31	165	8	1
	Flood/landslide	15	31	128	23	
	Lightning					
2012	Fire	13	15			
	Flood/landslide	16	17			1
	Lightning	4	4			

Source: DDRC 2014

A study of Bhoje landslide (Pain et al. 2015) showed that there has been very limited response to address the long-standing problem threatening the safety of about 60 households. It is partly because the district remains on the margins of the current day national politics. Though there are some representatives from the district in central committees of three major political parties i.e. Nepali Congress and CPN -UML (Communist Party of Nepal-Unified Marxist and Leninist and CPN Unified Maoist, they are weak in terms of influence in drawing attention and response to the chronic landslide risk people in Bhoje village are facing⁶. A study was commissioned to recommend possible measure to address the issue during the period (2011-2013) when Tek Bahadur Gharti, a senior bureaucrat from Lamjung, was minister for Forest and Soil Conservation during 2012-2013. However, there has not been any concrete response from the central government to implement the recommendations of the study, which suggested re-locating the village to a safe area.

This section outlined an ecological, socio-economic and disaster risk context of Lamjung district which informs the analysis in the following sections. In the following sections, we provide an account of a donor funded climate change project, which has claimed focus on analyzing and addressing vulnerability of local people to climate change impacts.

3. Hariyo Ban project: problem framing and project design

Hariyo Ban Nepalko Dhan⁷ (Hariyo Ban in short) is a USAID funded project that has been implemented in Lamjung district (one among 16 project districts) since 2011. According to the technical document, the project has a goal 'to reduce adverse impacts of climate change and threats to biodiversity in Nepal' and to achieve the following three objectives (same order as in the RfP):

- a) To reduce threats to biodiversity in target landscape(s);
- b) To build the structures, capacity and operations necessary for an effective sustainable landscape management, especially reducing emissions from deforestation and forest degradation (REDD+) readiness; and
- c) To increase the ability of target human and ecological communities to adapt to the adverse impacts of climate change.

Each of the objective formed a specific program component i.e. biodiversity conservation, sustainable landscape management (REDD+ readiness) and adaptation to climate change. The document also provided sets of outcomes under each component (objectives (see box below).

⁶ The biggest and most persistent landslide is in the village of Bhoje affecting about 60 households. Case of the landslide was developed as part of broader research on climate change and rural institution (see Pain *et al.* 2015).

⁷ There was a slogan back in the 1980s that 'Hariyo Ban Nepalko Dhan' which literally means in English 'green forest, wealth of Nepal'.

1. Biodiversity Conservation (25% budget):

- Biodiversity threats to targeted species and/or landscapes reduced
- Internal governance of target organizations and stakeholders strengthened at the local level (for improved natural resource management, biodiversity conservation and addressing climate change adaptation and mitigation)
- Income from sustainable sources of market and value-chain-based livelihoods which provide incentives for reducing threats to biodiversity increased
- Policy and planning environment that facilitates participatory and sustainable management of natural resources and biodiversity conservation improved

2. Sustainable landscapes (REDD+ Readiness) (30% of budget):

- Support for analysis, formulation and implementation of REDD+ policies, strategies and working guidelines provided
- Capacity for forest inventory and greenhouse gas (GHG) monitoring, and equitable benefit sharing developed
- Drivers of deforestation and forest degradation analyzed and systematically addressed
- Sustainable payment schemes for carbon credit including other ecosystem services developed, tested and expanded

3. Adaptation to climate change (40% of budget):

- Government and private sector understanding on vulnerabilities of climate change and adaptation options increased
- Participatory and simplified systems for vulnerability monitoring established
- Pilot demonstration actions for vulnerability reduction conducted and expanded
- Support for climate change adaptation policies, strategies, and guidelines provided

Source: USAID 2010

These project objectives are justified referring to threats of loss of biodiversity and impact of climate change. The text outlined in the USAID's RfP argues that 'if current trends in climate change and the over-exploitation of ecosystem and threats to biodiversity continues unaddressed, Nepal risks reversing past accomplishments and local conflict is likely to reignite' (USAID 2010:2), thus securitizing environmental risks (Floyd, 2008). The threat of climate change is particularly seen in terms of melting glaciers and possible risk of Glacier Lake Outburst Flood (GLOF). Similarly the risk of biodiversity loss was highlighted in terms of 'overexploitation of ecosystem and habitat loss'. In the RfP, it was argued that the climate change has posed threat to both biodiversity and affecting the lives of poor people. The RfP justified the implementation of the Hariyo Ban project arguing that 'through effective management of ecosystems, it is possible to concurrently help to mitigate the effects of climate change, and conserve biodiversity. Opportunities to decrease the vulnerability of human and ecological system to the impacts of climate change and further integrate climate change adaptation measures will likely be important elements' (USAID 2010:3). This line of argument assumes that the project's interventions to conserve ecosystem will eventually help poor people adapt with climate change impacts.

The project seems to equate vulnerability to poverty. The USAID RfP states that 'the economically disadvantaged (particularly subsistence farmers) are often the most vulnerable to temperature change, and increased variability in weather patterns and severe climate events'

(USAID 2010: 3). The focus on the economic aspect ignores the other dimensions of social inequality (i.e. gender, ethnicity and geographical marginality) which are also significant aspect determining people's vulnerability to climate change impact (Ribot 2014).

Though the project is designed focusing on biodiversity conservation (order of the objectives in the RfP also indicates the emphasis), it has a significant climate change adaptation component. In terms of the budget allocation among the three major components, climate change adaptation component has the highest budget of 40% followed by enhancing ecosystem services (REDD+ readiness) 30% and biodiversity conservation 25%. The technical document (prepared by WWF led consortium) shows that the majority of activities in the climate change adaptation component address poverty i.e. income generating activities. This is in consistent with the project's explanation about climate change vulnerability i.e. equating vulnerability to poverty (USAID 2010:3). The project interventions' theory of change assumes that ecosystem conservation will help improve income and access to forest products enhancing peoples' livelihoods, and this will eventually help reducing their vulnerability to climate change. The RfP mentions that in the 'more productive utilization and effective management of forest ecosystems there is an enormous potential for forest and biodiversity resources to be mobilized in order to sustainably improve livelihoods of poor and vulnerable segments of the society' (USAID 2010:4)

The project has put the biodiversity conservation at center with explicit objective to promote wildlife corridor to link the existing protected area system. The RfP stated that '[s]uccessful conservation often link current protected areas through wildlife corridors and protect important ecosystems and biodiversity that occur in the mosaic of land uses outside of formally protected areas' (USAID 2010: 18). To materialize the corridor approach the project identified two specific geographical areas with objective of linking existing protected areas.

Those geographical areas include a) Chitwan-Annapurna Landscape (CHAL) which connects Chitwan National Park with Annapurna Conservation area, and b) Terai Area Landscape (TAL) that starts from Chitwan in the east connecting Bardia National Park and Suklaphanta Wildlife Reserve (see annex 2 for map). Selection of these two landscapes is argued on the basis that both face threats to biodiversity as well as climate change, although this is more asserted than evidenced.

Project's strategic focus on those two geographical areas and promotion of wildlife corridors reveals the conservation priority of the project. The conservation priority and the selection of the specific corridors seem to have been influenced from the previous projects funded by USAID landscape based conservation approach promoted by WWF, the lead implementing agency of the Hariyo Ban project. WWF Nepal claimed that it had introduced the landscape based conservation approach in Nepal in early 2000 through identification of corridors linking four protected areas of western Nepal. The webpage on Terai Arc Landscape Program in WWF Nepal says: 'TAL was conceived as a system of corridors and protected areas for landscape-scale conservation of tigers, rhinos and elephants. In order to attain this goal of connecting the core areas, the TAL program focuses on restoring the corridors and bottlenecks between important protected areas of Nepal and India using the primary strategy of community forestry' WWF Nepal has been implementing different conservation projects in the TAL area in collaboration

with the Ministry of Forest and Soil Conservation (MoFSC) of Nepal⁸. CHAL is a new catchment identified for Hariyo Ban project to scale up the experiences of TAL in mountain landscapes.

On top of that, the project interventions have also drawn from a previous USAID funded project named Strengthening Actions for Governance in Utilization of natural Resources (SAGUN). As mentioned in the RfP, the Hariyo Ban project builds on the experiences and lessons of the SAGUN implemented during 2002-2009. As mentioned in the RfP, the 'SAGUN program supported forest user committees to acquire and consolidate tens of thousands of hectares of forested area under improved management; build stable, equitable and transparent systems of governance; apply practical methods of biodiversity conservation, registration, and monitoring; supported issue-based advocacy campaigns and facilitated participation in critical policy dialogue and information dissemination; and helped improve livelihoods of the thousands of CFUG members' (USAID 2010:7). The Hariyo Ban has also similar sets of activities though they are organized under some new titles i.e. climate change adaptation, payments for ecosystem services.

The project designed by USAID, was outsourced to implementing agencies. However, it is far from clear who was involved in the project design and which national and local organizations were involved in the process. USAID announced the RfP in November 2010 to implement the project with earmarked budget of US\$ 30 million for five years period⁹. The project was awarded to a consortium led by WWF Nepal (with backing from WWF US) with CARE Nepal and two other Nepali NGOs. The 'technical application' document submitted by the WWF consortium simply follows the USAID framework with some elaboration of activities and implementation strategy (see WWF 2011). It is mentioned in the technical document that, the WWF led consortium held consultations during the application process. For example, it is mentioned in the document that meetings were organized with ministries in Kathmandu and five different districts to get 'stakeholder input' on the application (WWF 2011: b). However, no detail of this consultation event is provided in the document and it is far from clear who participated in those events. Moreover, since the technical document elaborates the project description provided in USAID RfP, there are reasons to doubt if such consultation events contributed to the design of the project.

In terms of project management, the two INGOs are playing a leading role with assistance from two national organizations. WWF Nepal has the central role both in terms of administrative and technical leadership. In addition to the overall management coordination, WWF is leading two specific components i.e. biodiversity conservation and ecosystem services (focusing on REDD+) leaving the component of climate change adaptation to CARE Nepal. The FECOFUN is expected to mobilize its network of community forest user groups (more than 18000 groups) to effectively implement the project activities whereas NTNC is expected to bring its specific expertise on wildlife management (more technical expertise) (WWF 2011).

The project was designed to be implemented through the consortium partners through a project management structure, which is parallel to the government structure. From the interview with

⁸ Tarai Arc Land (TAL) program, WWF 2015. Accessed in August 2015 at http://www.wwfnepal.org/about_wwf/conservation_nepal/tal

⁹ USAID request for proposal notice issued on November 22, 2010.

field staff in Lamjung and regional officer in Pokhara, it was learnt that the budget is not provided to government organizations for implementation of the project activities. The District Forest Officer and District Soil Conservation Officer from Lamjung shared their concern that the project has bypassed government organization in project implementation¹⁰.

The project implementation framework presented in the technical document shows that the project is implemented through separate structures consisting of implementing agencies (see WWF 2011: 31). Yet, the implementing agencies are required to develop 'trust worthy relations' with the government especially ministry of forest and soil conservation (MoFSC) and ministry of environment (USAID 2010: 22). While MoFSC and other government organizations were not directly involved in design and implementation of the project, there is reasons to doubt whether and to what extent government will 'buy-in or provides leadership' to the project as expected by the donor (USAID 2010:22).

In summary, the project is primarily framed from a bio-diversity conservation perspective with climate change as one of the threats to biodiversity (and people's livelihood). The project takes a wildlife corridor approach of conservation and promotes bio-diversity outside of protected area system. This is also in consistent with the expertise and past experiences of lead implementing agency i.e. WWF. In terms of the project design, the project is primarily driven from the framework and approach provided by the donor.

4. Project implementation in Lamjung

4.1 Hariyo Ban project in Lamjung

Although all four Hariyo Ban consortium partners are involved in implementation of the project activities in Lamjung, FECOFUN Lamjung has primary responsibility to implement field activities. CARE Nepal has a program officer stationed in the district whose responsibility is to support FECOFUN. Lamjung FECOFUN has three full-time staff working for Hariyo Ban project. Concerning the FECOFUN's leading role in implementation of project activities, CARE Nepal staff working in Lamjung district reported that the "virtue of involving FECOFUN as local implementing partner is that it has easy access to CFUGs and hence it is comfortable for project delivery"¹¹. In addition to the hired staff, executive committee members of FECOFUN are also involved in delivery of the project activities.

The other two consortium members i.e. WWF and NTNC are undertaking some specific activities in the district. For example, the NTNC is implementing activities in Annapurna Conservation Area focusing on biodiversity conservation and eco-tourism promotion. Similarly, WWF implements infrastructure related projects through a local NGO. The support on small infrastructure is part of the implementation of the climate change adaptation plans developed under the project (detailed accounts of the adaptation plans are included later in this section.

Besides the Annapurna Conservation sites, Hariyo Ban has been implementing activities in 21 VDCs from the Marsyangdi catchment. The selection of Marsyangdi catchment was done before the project was contracted out the WWF led consortium, which is primarily driven from a

¹⁰ Interview on Nov 20-24, 2014.

¹¹ Interview on Nov 20, 2014, at FECOFUN Office, Lamjung

wildlife corridor approach as discussed in the previous section. Hariyo Ban project staff from FECOFUN and CARE Nepal in Lamjung reported that the project sites were determined in the USAID RfP. The district government organizations (i.e. DDC, DFO and DISCO) in interviews during 2013 and 2014 reported that the project sites were pre-set in Kathmandu during the project design process. Official from District Development Committee (DDC) Lamjung, expressed dissatisfaction over the planning process of Hariyo Ban saying that "the project came up with the predetermined activities and project sites. District organizations did not have a say, even to select. The VDCs were already determined in the project document which was presented in district level inception workshop.

The district based government organizations including those responsible for forest management and soil conservation have only been included in the monitoring committee. A project monitoring committee was set up at district level include some district government organizations i.e. DFO, DISCO, DDC, few journalists and selected non-government organizations. They are often invited to joint field monitoring and periodic review workshops in Beshisahar (district headquarter). In addition to this, the project has recently formed an advisory committee including thematic experts representing district organizations and few journalists to oversee the project's recent initiative — payment for a sedimentation retention mechanism in Marsyangdi Hydropower. The committee has been asked to mediate discussion between the hydropower management and the upstream community (some CFUGs).

4.2 How adaptation plans were developed?

Development and implementation of local adaptation plans is the key activity under climate change adaptation theme of the project. The plans have been taken as entry point for climate change related interventions at the local level. Project primarily focused on community adaptation plans (CAP) taking CFUGs as entry point. Until the end of 2014, there were 39 CAPs developed in Lamjung. However, a framework for Local Adaptation Plan for Action (LAPA) developed by government of Nepal in 2011 provided focus on developing adaptation plans taking VDC or municipalities as an entry point. After the LAPA framework, Hariyo Ban program has also initiated to develop LAPAs. So far, LAPA of only two VDCs have been developed in Lamjung district. In this sub-section we discuss how the local adaptation plans (both LAPA and CAP) have been developed under the Hariyo Ban project.

Hariyo Ban project developed CAPs in its project sites following the procedure and guideline that was developed by CARE (CARE 2014). According to the guideline, the process of developing CAP includes an assessment of climate related risks/threats and identifying possible adaptation measures. In Lamjung such assessment was done through a 3-4 days' workshop organized in the respective community (i.e. CFUG) by facilitators from the project partners (i.e. CARE, FECOFUN). As written in each CAP document the exercise in the group had four steps: a) sensitize local people about the climate change and its impact; b) participatory vulnerability assessment; c) identification of adaptation options and prioritization of adaptation activities and d) stakeholder analysis and developing working plan (with budget and responsibilities). Then a document is prepared by the project staff which is called the CAP.

The project staff consider this process as participatory and bottom up. CARE officer asserted "project makes its fullest effort to make the workshop more participatory ensuring participation

of women, Dalit and other marginalized group"¹². The workshops organized in the groups we visited were attended by CFUG members representing different social groups i.e. Dalit, women, ethnic people etc. For example in workshop organized in Raniswara Sakhar Pakha CFUG, 26 people were participated of which 14 were women and two Dalit.

On the other hand, as reported by CARE staff the LAPA is developed following the LAPA framework. According to CARE Nepal staff in Lamjung¹³, the procedure for developing LAPA is very similar to that of CAP but the institutional base of the LAPA are local bodies i.e. VDCs/municipalities. The participants of the discussion for LAPA development include representatives of political parties, different community organizations like CFUGs and representatives of government organizations in the VDC.

4.3 What the adaptation plans contain

We reviewed content of CAPs from four CFUGs (see Annex 3 for general overview of CFUGs) and a LAPA from Sundarbazar VDC in Lamjung. The four CAPs were developed under facilitation by different implementing agencies of Hariyo Ban project. The CAP of Dhodsingh CFUG was prepared by FECOFUN Lamjung, that of Kamerepani Raniban and Jagreni CFUGs were prepared by CARE and the plan of Raniswara Sakhar Pakha CFUG was prepared by WWF with support from Local Initiative for Biodiversity, Research, and Development (LI-BIRD)¹⁴. Our review of CAP content focused on climate related risks and shocks identified, adaptation options identified, and the specific activities planned.

Review showed that all CAPs have identified almost the similar climate related risks/threats i.e. flash flood/landslide, drought, invasive species and forest fire (see table 3). Some CAPs have mentioned some specific issues like problem of riverbank cutting and forest fire. The CAPs also proposed similar adaptation measures and activities which include plantation of tree and grass species, gabion boxes, construction of plastic ponds, construction of fire line or activities to minimize risk of forest fire, use of drought resistant crop varieties, construction/maintenance of irrigation channel etc. Most of the groups have also planned small irrigation schemes linking with promotion of off-farm and commercial vegetable for targeting poor households.

Table 3: Climate related risks/threats and adaptation activities included in CAPs

CFUG Name	Climate risk/threats identified	Adaptation activities planned	Support expected from:
Dhodsingh (supported by FECOFUN)	<ul style="list-style-type: none"> • Flash flood/landslide • Riverbank cutting • Invasive species • Forest fire • Pest diseases 	<ul style="list-style-type: none"> • Plantation and small infrastructure (bio-engineering work) for erosion and gully control • Removal of invasive species • Construction of fore-lines in forest and organize workshop for public awareness • Bio-pesticides management, promotion of integrated farming 	Red Cross, VDC, World Vision, DDC, DISCO, DFO, Irrigation office, Livestock Development Office, Agriculture Service Center

¹² Interview on November 20, 2014.

¹³ Interview on November 20, 2014.

¹⁴ LiBIRD was hired by WWF to prepare CAP in the specific areas.

<p>Jagreni (supported by CARE Nepal)</p>	<ul style="list-style-type: none"> • Riverbank cutting • Landslide • Invasive species • Drought • Pest/diseases in agriculture field 	<ul style="list-style-type: none"> • Gabion boxes and bio-engineering work • Clearing river bed materials • Plantation in landslide prone areas • Maintenance of irrigation channel • Construction of plastic pond (for small irrigation and fish) • Removal and burring invasive species • Support on income generation for poor households • Promote drought resistant crop species • Integrated cropping (avoid monoculture) 	<p>DFO, DDC, VDC, Agriculture office, Local NGOs, Livestock development office, CHESS Nepal (NGO), Hariyo Ban project</p>
<p>Kamerepani Raniban (support by CARE Nepal)</p>	<ul style="list-style-type: none"> • Flood • Fire • Drought • Invasive species (Banmara) • Pests and diseases • Hailstone/thunders torm • Drying water sources 	<ul style="list-style-type: none"> • Conservation of water source conservation • Bio-engineering work (embankments and check/dams) • Plantation of trees and fodder species • Drip irrigation and plastic ponds • Gabion boxes to control river cutting/flood • Fire line construction • Forest management training • Drought resistant crop variety and training • Income generating scheme to poor households (off-season vegetable) • Remove of invasive plants 	<p>VDC, DISCO, DDC, District Agriculture Office, District Livestock Development Office, DFO, World Vision (charity INGO),CHESS Nepal, Naulo Gumti, Global Action, Hariyo Ban Project, Suryaodaya cooperative and local mother groups etc.</p>
<p>Raniswara Sakhar Pakha (supported by WWF/LIBIRD)</p>	<ul style="list-style-type: none"> • Landslide/flood • Drought 	<ul style="list-style-type: none"> • Plantation and forest protection • Gabion boxes and small structure to control river cutting • Training for bio-pesticide and integrated pest management • Support for vegetable (tunnel for off farm vegetables) • Drinking water supply (pipe) • Irrigation management • Relief fund for immediate response in case of disaster 	<p>DDC, DISCO, DFO, health office, District Livestock Development Office, District Drinking Water Office, Hariyo Ban Project, and local groups and clubs</p>

Source: CAPs of Dhodsingh, Jagreni , Kamerepani Raniban and Raniswara Sakhar Pakha CFUGs ¹⁵

¹⁵ Based on CAP report of CFUG, CAPs were prepared by the CFUG with technical and financial support from Hariyao Ban Project.

However, the CAPs vary slightly in terms of budget estimation. It appears that the plans prepared by WWF/LIBIRD have estimated a higher budget than those prepared by FECOFUN and CARE. For example, estimated budget of Dhodsingh, Kamerepani Raniban and Jagreni CFUGs are in the range of between NRs 120,000-1,60,00,000. In contrast, the estimate budget of CAPs of Raniswara Sakhar Pakha, which was supported by WWF/LIBIRD, is NRs 1,66,85,000. As mentioned by the CARE staff, it is because the WWF had the budget to support some small infrastructure activity to implement the CAP.

On the other hand, the review of LAPA of Sundarbazar VDC shows that drought and declining water sources, flood and landslide, crop pest/ diseases, invasive species, and riverbank cutting are the major climate related risks identified in the VDC (see table 4). The climate related risks and adaptation options enlisted in the LAPA resemble with that of the CAP we reviewed. The LAPA has estimated budget of NRs 66,51,000 which is expected drawn VDC budget and support from different district organizations.

Table 4: Climate related risks/threats and adaptation activities included in LAPA of Sundarbazar VDC

Climate risk/threats identified	Adaptation options	Support expected from
<ul style="list-style-type: none"> • Decline water sources • Drought • Flood/landslide • Pest diseases • Invasive Species • Riverbank cutting 	<ul style="list-style-type: none"> • Plantation and small infrastructure (bio-engineering work) for erosion and gully control • Water Sources protection/conservation • Use of drought recessive crop varieties • Construction of fire line and equipment to control forest fire • Bio-pesticides management, promotion of integrated farming • Training on bio-briquette and organic fertilizer from invasive species 	<p>Hariyoban project partners (i.e. WWF, CARE), VDC and district level government and non-government organizations including DISCO, DFO, District Livestock Development Office, RedCross etc.</p>

Source: LAPA of Sundarbazar VDC, Lamjung

A review of the four CAP and a LAPA showed that the content of the plan are determined by the project's framework i.e. guideline developed by CARE Nepal under the Hariyo Ban project (CARE 2014). The activities planned in the CAPs are broadly related to small infrastructure to stabilization of slope, control soil erosion or river training to protect agriculture field or settlements. Those sets of activities resemble with what DISCO has been doing in the district. Other sets of activities are related to protection of forest from fire and grazing and plantation of new seedlings which are intended to enhance biodiversity conservation. The third set of activities is related to income generation of poor people in the CFUGs. These set of activities are widely implemented by different development project across the country. All these sets of activities seem to have been driven from the project framework provided in the RfP and technical document submitted by WWF.

Though the activities enlisted in the local climate adaptation plans are supposed to address the climate related risks/threats the people in the respective groups or VDC are facing, many of the activities are not well connected to the specific risks/threats identified in the group. Hariyo Ban

staff we interviewed in Lamjung and regional coordinator based in Pokhara were not clear about whether and how the activities enlisted in CAP will contribute on different aspects of climate related stress or shocks i.e. adaptation or disaster risk management (this is discussed in the next section). Moreover, the CAPs we reviewed not only very similar in terms of the risks/threats identified, and risks as outcomes of natural resource hazards but also they include very similar adaptation activities. This formulaic nature of local adaptation plans also supports the point that they are driven from standards and frameworks of the project rather than examination of the local risks as opposed to claimed in the specific plans.

4.4 Project's interventions on climate change adaptation

Funding for CAP implementation is expected from different sources including CFUGs own income, support from the Hariyo Ban project and other organizations at VDC or district levels. The CFUGs have a very limited income source compared to the budget planned in the CAP. For example in case of Jagreni CFUG, the group average annual income (average of recent five years) covers only 0.32% of the CAP budget (see table 5). Similarly, the group average annual income of Dhodsingh CFUG covers 3.4% and that of Rainswara Sakhar Pakha covers 0.2% of the CAP budget plan. This indicates that the CAP implementation depends primarily on external funding.

Table 5: Hariyo Ban project support to implement CAP in four CFUGs

CFUG name	Annual average income of CFUG (5 years average), NRs	Estimated budget in CAP (NRs) ¹⁶	Hariyo ban support for CAP implementation (NRs)
Jagreni, Gausahar VDC	51,800	1,61,55,000	1,70,000 through CARE
Dhodsingh, Sundarbazar VDC	50,635	12,00,000	1,85,000 through FECOFUN/CARE
Kamerepani Raniban, Bharte VDC	33,500	4,10,000	1,88,000 through CARE
Raniswara Sakhar Pakha, Archalbot VDC	32,000	1,66,85,000	6,96,000 through WWF

Hariyo Ban provides only a limited budget to implement the CAPs or LAPA. As shown in table 5, out of NRs 161,55,000 budget planned in Jagreni CFUG, only 1.05% was available from the project. And the level of support from the project differs among the implementing agencies. For example, CARE (through FECOFUN) provided grant support of about NRs 170,000 to CFUGs (in subsequent two years). However, WWF provided NRs 696,000 to Raniswara Sakhar Pakha which is four times higher than that provided by CARE. As explained by the CARE staff, the WWF support is higher because it is responsible for implementing infrastructure related projects within the Hariyo Ban.

¹⁶ Exchange rate of US\$ 1 is equivalent to NRs 100.

This shows that the CAPs were developed expecting support from VDC and district based organizations for its implementation. CARE staff reported: "the CAPs are prepared expecting that the community (i.e. CFUG) coordinate with VDC or district level organizations to implement the activities prioritized in CAP¹⁷". All four groups have approached the DISCO asking for gabion boxes and support to construct small bio-engineering structures. Similarly, the groups have tabled their demand in DDC planning meetings and other district government organizations including irrigation office, agriculture development office, veterinary development office and so on. The District Soil Conservation Officer from Lamjung reported that "many CFUGs have come to my office asking for support to implement CAP. They come to me with CAP and ask for some soil conservation related activities like gabion boxes, bio-engineering work. It has been difficult for me to handle this because I have only small budget and Hariyo Ban project has not provided any budget for us".

Yet, for the CFUGs generating resources to implement CAP is still challenging. In a meeting in Jagreni CFUG, CFUG leaders reported that "to find fund to implement CAP is the main challenges they are facing. We visited different organizations asking for support to implement the plan i.e. DISCO asking for gabion boxes, but without much success"¹⁸.

The project's support to implement CAP has been under five categories: a) support income generating activities; b) plantation or protection of forest from fire or grazing; c) bio-engineering work and small infrastructure for slope stabilization or control gullies and river cutting; d) water conservation activities i.e. conservation ponds and e) protection or maintenance of water sources. Figure 2 presents the aggregate of project investment in four CFUGs which shows that major part of the project investment has gone in small infrastructure and bio-engineering work followed by protection/management of water sources, forest protection/management, IGA and water conservation.

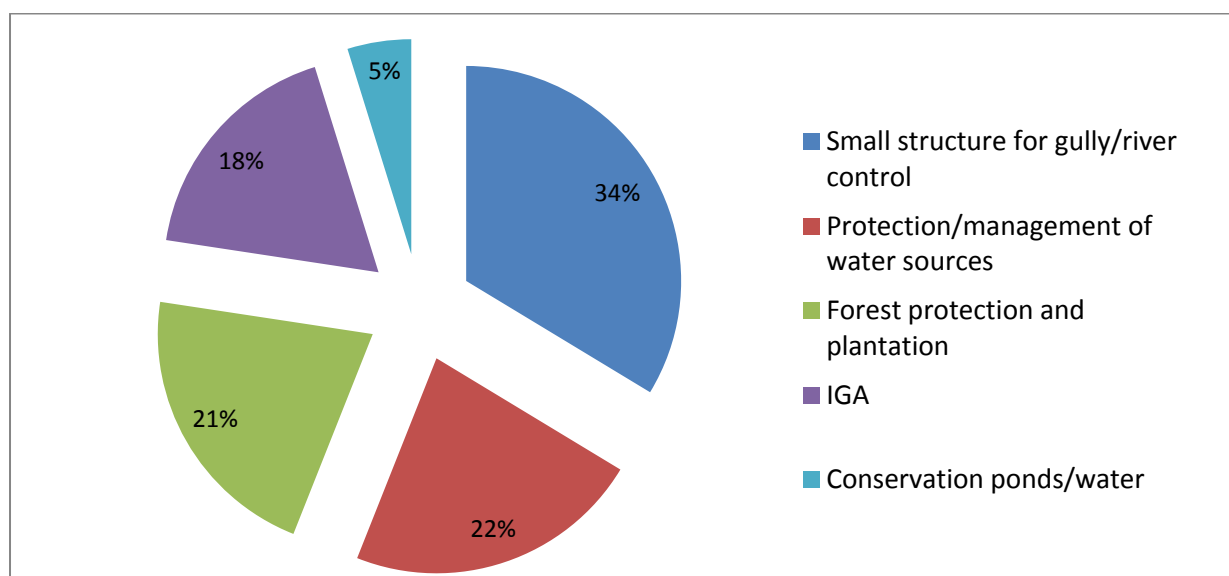


Figure 2: Hariyo Ban project support under climate change adaptation in four CFUGs

¹⁷ Interview on November 20, 2014.

¹⁸ Interview on November 21, 2014.

Some interesting observations can be made about the project's intervention on climate change adaptation i.e. support to implement CAPs. First, a major part of project support (34%) has been used on small infrastructure and bio-engineering work. These interventions have been widely used by DISCO for long time which, as reported by DISCO officer in Lamjung, are meant for stabilization of slope or minimizing risks of damage to agriculture field or settlements from small landslides or flashfloods. The interventions are more related to addressing the disaster risks that the local people in the hills are facing (see Pain *et al.* 2015). What this tells us that the project's interventions on climate change adaptation are not conceptually differentiated from responses to the disaster risk and therefore cannot be seen as specifically adaptation activities.

Second, about 22% of the project intervention expenditure has been put in forest protection or plantation of tree species in the community forest area. Those activities are intended to address some of the risks identified in the CAP i.e. forest fire, invasive species etc. However, it is worth noting here that this is not the primary concern of the people in terms the risk they facing from climate change. During the field visit, people reported that crop failure due to change in weather pattern and landslide and flash-flood during the monsoon seasons are the two most significant risk people in Lamjung are facing. However, the project interventions are more directed towards forest protection which is arguably because of project's bio-diversity conservation priority which is clearly spelled out in the project technical document as discussed in section three.

Third, about 18% of the project support on implementation of the CAPs gone on income generation related activities. In doing so, the project supported the CFUGs to identify the poorest households through the process of wellbeing ranking and facilitated the creation of a revolving fund from which the poor household can take a loan interest free. This is not a new approach as many other aid projects have been using similar interventions to address the poverty issue. However, it is worth noting here that the idea of providing livelihood support under the climate change adaptation has to do with how the project conceptualized vulnerability i.e. equates it with poverty. During the field visit, we observed that the identification of beneficiary households for IGA related interventions was simply based on well-being ranking exercise which has no clear connection to any climate related risks or threats.

In summary, the project interventions in the CFUGs undertaken under the rubric of climate change adaptation were found either influenced from the project's biodiversity conservation priority or relabeling of conventional conservation and development interventions. The interventions related to improvement to livelihood, forest protection and plantation, watershed management are not that different from what the previous USAID funded project implemented by CARE Nepal in the district (see Annex 4). Moreover, those sets of activities do not clearly address what local people reported as the primary risks they are facing i.e. drought. While doing this neither the project interventions or the CAPs have taken into consideration the changing dimensions of the rural economy i.e. increasing role of remittances. Many households in the village receive a major source of income from remittances from their relatives working in the Gulf, India or Malaysia. However, the significance of this income source has not been considered in the local adaptation plans.

5. Discussion: emerging issues

Donor influence and limited government engagement in design and implementation of climate change related projects: Analysis in the previous sections showed that there was a significant level of influence of donor and past experiences of implementing agencies in both design and implementation of the project. The process was donor driven because; first, there was no direct involvement of the government in both design and implementation of the project; second, the donor provided with the predetermined sets of interventions and geographical areas to the implementing agencies. Moreover, the project has been implemented through a parallel structure of implementing agencies at central, regional and district levels. The district level government organizations have not directly engaged in the implementation process. Rather, it is evident that the project partners mobilize the district organizations to accomplish the project activities. This donor driven approach has limited the opportunity to government and other stakeholders to set the priority and interventions. Hence, the project interventions were largely determined either by donor influence or its experiences of working in the field.

Framing of climate change agenda and project interventions were driven from conservation priority: As revealed in analysis in the previous sections, a strong conservation orientation of the project has influenced the project's framing of climate change problem and intervention to address them. In the first place, such conservation priority has been reflected in the project design framework (USAID 2010) and the way project sites were selected. The project identified two wildlife corridors for as project sites with the explicit objective of promoting wildlife corridor. A conservation focus has also been reflected in the project's interventions at local level as part of support to implement the CAP also revealed project's conservation priority. Such a conservation priority, as argued in this paper is not only determined by the donor's priority but also driven from the past experiences of implementing agencies. The wildlife corridor approach was introduced in Nepal by WWF which has been implementing projects in the TAL area (WWF 2015).

The projects focus on river corridor driven from the conservation priority contradicts addressing the climate change vulnerability through adaptation related activities. The settlements along the Marsyangdi river catchment are not necessarily the most vulnerable ones as it is more accessible in terms of road network and has the most productive river valley land. The district organizations i.e. DDC and DISCO in interview have asserted that Hariyo Ban project could focus on other more remote VDCs if it had primary focus on addressing climate change vulnerability in the district.

Climate change related interventions were determined by the project framework and there were limited account of local context of climate risks: Analysis showed the formulaic nature of local climate change adaptation plans (i.e. LAPA and CAP) which were because those plans were driven from the standard guidelines used to develop such plans. The climate change related interventions included in those plans were found to be primarily driven from the way project framed climate change problem and so the climate change related interventions were planned. What we found that the project's climate change related interventions were a relabeling of conventional conservation and development activities i.e. IGA, forest protection and bio-diversity conservation and conservation of water sources. To a large extent, these interventions

are similar to what the USAID's previous project called SAGUN from which the Hariyo Ban project drawn from (see section three). This is partly why the climate change related interventions had less direct relevance to the risks that local people have been facing i.e. drought.

Mobilization of community institutions, networks to accomplish the project: As analysis revealed in the previous sections, project has used community institutions i.e. CFUGs as entry point for climate change related interventions i.e. development and implementation of CAPs. This though is not a completely new phenomenon as other donor funded projects have also used the CFUGs as entry point for adaptation planning (Paudel *et al.* 2013). Involvement of CFUGs in adaptation planning might have some benefits as argued by Paudel *et al.* (2013); however, there are reasons to question what implication such deviation of CFUGs from their core objective of managing the forest would have. As reported by the project staff, CFUGs were used primarily for effective delivery of the project interventions.

Moreover, the project can also be seen to have instrumentally used FECOFUN's network to deliver project activities effectively at local level. This is in consistent with the concern raised by some experts (Ojha *et al.* 2007) that the increasing involvement of FECOFUN in implementing donor funded development interventions, has weaken its ability to effectively advocate local rights and defend decentralized forest governance.

With this, we conclude that the climate change related approach and interventions undertaken under the Hariyo Ban project were primarily driven from the donor framework and legacy of the implementing agencies and are poorly informed by the local context of climate related risks. Moreover, the project has limited engagement with local organizations in both design and implementation of the project. We argued that despite good intention, the donor driven and technical approach of framing climate change problems and formulaic interventions might have limited contribution to address the climate risks people are facing and develop local capacity (of government agencies responsible for development planning and interventions particularly at district level) to access and address the increasing challenge posed due to climate change.

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7. Annexes:

Annex 1: List of participants of interviews and focused group discussions

A. Participants of key informant interviews

S. No	Interview date	Key informants interviewed	Organizational affiliation
1	27-09-2012	Bhawana KC	CARE/Hariyo Ban
2	28-09-2012	Divakar Maskey	DISCO Officer, District Soil Conservation Office (DISCO)
3	28-09-2012	Meghendra Pokhrel	District Development Committee (DDC)
4	28-09-2012	Kishor Pant	District Agriculture Development Office (DADO)
5	28-09-2012	Rajkumar Pandey	Child Health and Environment Safe Society (CHESS) Nepal
6	29-09-2012	Khem Gurung	Chair, FECOFUN Lamjung
7	29-09-2012	Bijay Gurung	Community Promotion of Public Awareness and Development Studies (COPPADES)
8	29-09-2012	Khem Jung Gurung	NEFIN
9	30-09-2012	Ganesh Neupane	Chairperson, Red Cross
10	30-09-2012	Suklalal Yadav	District Forest Office

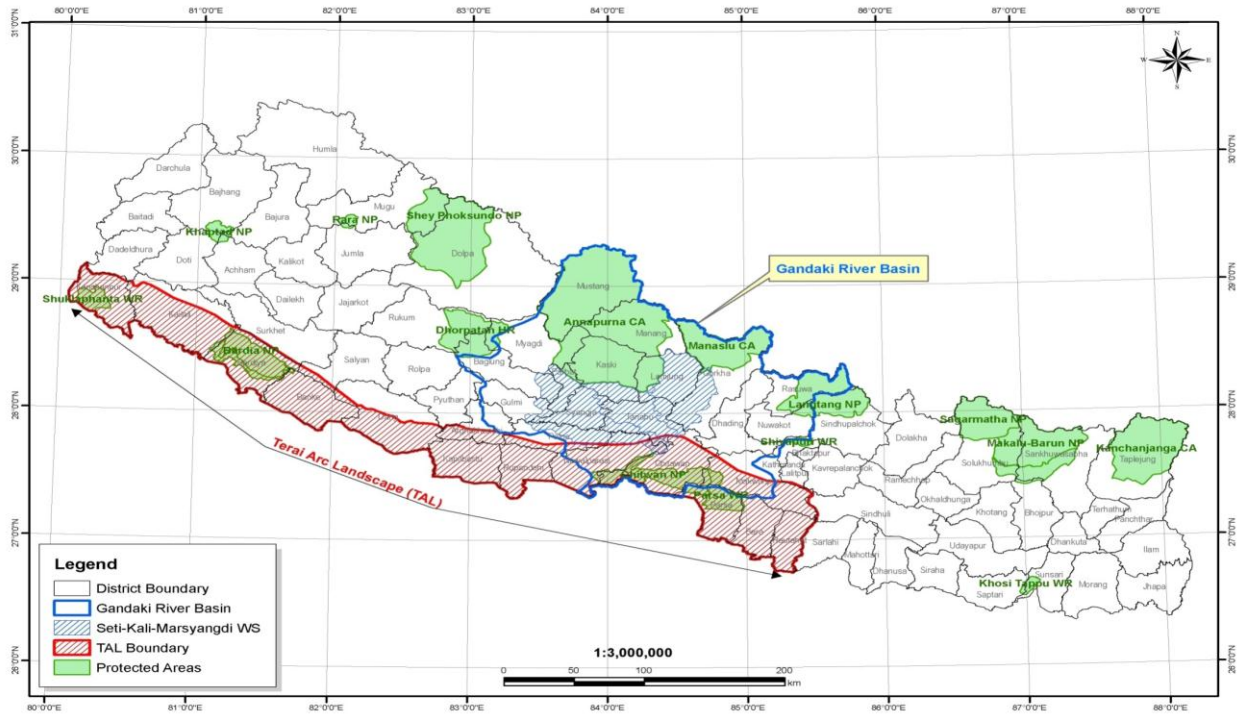
B. Participants of focused group discussion organized in Besisahar (Lamjung) in 29 September 2012

S. No	Participants	Organizational affiliation
1	Khem Gurung	NEFIN- Chairperson
2	Khem Jung Gurung	FECOFUN- Chairperson
3	Diwakar Maskey	DISCO- Officer
4	Megrendra Pokheral	DDC- Program Officer
5	Anjan Neupane	DDC- Planning officer
6	Pratigya KC	FECOFUN
7	Sangita Gurung	LRP-FECOFUN

C. Participants of interview

S. No	Interview date	Key informants interviewed	Organizational affiliation
1	13-03-2013	Bhawana KC	District Coordinator ,CARE/Hariyo Ban
2	13-03-2013	Ram Chandra Regmi	Secretary, FECOFUN Lamjung
3	13-03-2013	Mr. Shrestha	DTO, District Technical Office(DTO)
4	13-03-2013	Anjan Neupane	Planning Officer,DDC
5	13-03-2013	Sita Dhakal	Secretary, Paropkar CFUG
6	13-03-2013	Aanad Raj Adhikari	District Soil Conservation Office
7	14-03-2013	Baburam Bhandari	CDO, District Administration Office
8	07-07-2014	Kaushila Awal	FECOFUN Lamjung
9	07-07-2014	Srijana Rimal	FECOFUN Lamjung
10	07-07-2014	Pabitra Jha	Field coordinator, CARE/Hariyo Ban
11	07-07-2014	Arun Adhikari	Field coordinator, CARE/Hariyo Ban
12	08-07-2014	Meghendra Pokhrel	DDC
13	08-07-2014	Bhairaja Khadka	Nepal Red Cross
14	09-07-2014	James Pradhan	World Vision
15	09-07-2014	Sandeep Sharma	CARE/Hariyo Ban
16	09-07-2014	Bijaya Gurung	COPPADES
17	20-11-2014	Sandeep Sharma	Field coordinator, CARE/Hariyo Ban
18	20-11-2014	Loka Devi Adhikari	Chair, FECOFUN
19	20-11-2014	Mahesh Dhungana	District soil conservation office
20	21-11-2014	Executive committee member and users	Jagreni CFUG, Gaun Sahar
21	21-11-2014	Executive committee member and users	Dhodsingh CFUG, SundarBazar
22	21-11-2014	Padma Raj Kandel	General Secretary, COPPADES
23	21-11-2014	Ram Chandra Adhikari	Advisor, COPPADES
24	21-11-2014	Bijaya Gurung	Program Coordinator, COPPADES
25	22-11-2014	Chandraman Dangol	DFO, District Forest office
26	22-11-2014	Meghendra Pokhrel	Program officer, DDC
27	24-11-2014	DevRaj Gautam	CARE/Hariyo Ban, Pokhara
28	02-02-2015	Sandeep Sharma	CARE/Hariyo Ban

Annex 2: Prioritized landscapes for Hariyo Ban project



Annex 3: Contextual overview of four CFUGs

CFUG Name	CF Area (ha)	Ethnic composition of CFUG	Geographical Location(river/hill)	CF Handed over to Community	Forest type/species composition
Dhodsingh, Sundarbazar-1&2	78	Dalit- 2.2% Ethnic- 2.2% chhetri-95.6%	Located at 650-1000 msl with south and southern west facing slope. It is close to Sundarbazar Municipality	2050/09/29	<i>Tropical mixed forest with Shorea robusta (Sal), Castanopsis indica (Katus), Schima wallichii (Chilaune)</i> as major species
Jagreni Gausahar-8	83.87	Dalit- 13.9% Ethnic- 28.9% BCT-57.1%	CF is close Besishahar Municipality and located at 850-1648 msl.	2059/03/26	<i>Tropical Mixed Forest with major tree species Shorea robusta (Sal), Castanopsis indica (Katus) and Schima wallichii (Chilaune),</i>
Kamerepani Raniban, Bharte-8 and 9	14.24	Dalit-29.8% Ethnic-17.4% Brahmin/Chhetri- 52.8%	Located at 800-1200 msl. northern facing to Pyardi khola		<i>Tropical mixed forest with major tree species Castanopsis indica (Katus) and Schima wallichii (Chilaune)</i>
Raniswara Sakhar Pakha Archalbot- 7, 8 & 9	54.17	Dalit- 15.45% Ethnic- 1.02% BCT- 73.53%	Located above 815 msl northern facing to Pyardi khola, western to Marsyangdi and southern to Dordi khola.	2052/12/29	<i>Sub-tropical mixed forest with major tree species Shorea robusta (Sal), Castanopsis indica (Katus) and Schima wallichii (Chilaune),</i>

Annex 4: Hariyo Ban project support for implementation of CAP in four CFUGs

CFUG name	Annual average income of CFUG (5 years average)	Estimated budget in CAP	Support provided by Hariyo Ban project
Jagreni, Gausahar VDC	NRs. 51, 800	NRs.161,55,000	Hariyo Ban provided NRs. 1, 70,000 to implement CAP through CARE. The amount was used for the following activities: <ul style="list-style-type: none"> • 60,000 for maintaining irrigation canal, • 40,000 for plastic pond (use for vegetable cultivation and fishing) • 20,000 to remove invasive species • 50,000 revolving fund for IGA to poor and marginalized people
Dhodsingh, Sundarbazar VDC	NRs.50,635	NRs.12,00,000	Hariyo Ban provided NRs. 1,85,000 to implement CAP through CARE. The amount was used for the following activities: <ul style="list-style-type: none"> • 28,000 revolving fund for IGA, • 138,000 construction of check dam (about 50 gabion boxes along the side of stream that flows through the village) • 19,000 for two water pond construction in forest (with the objective of forest fire control or water for wildlife). • DISCO provided material support for check dam and water pond construction.
Kamerepani Raniban, Bharte VDC	NRs.33,500	It is not indicated in CAPA report	Hariyo Ban provided NRs. 1, 88,000 to implement CAP through CARE. The amount was used for the following activities: <ul style="list-style-type: none"> • 75000 for construction of well and maintenance of water sources • 34,000 for plantation and forest protection (invasive species, fodder tree plantation etc.) • 20,000 for forest management and fire management training • 50,000 for IGA (for 5 hhs @ 10,000 per household)
Raniswara Sakhar Pakha, Archalbot VDC	NRs.32,000	NRs.1,66,85,000	Hariyo Ban provided NRs. 6,96,00 to implement CAP through WWF. The amount was used for the following activities: <ul style="list-style-type: none"> • 91,000 for 7 vegetables tunnel, • 2,00,000 for 4 water pond/ditch, • 1,50,000 for 1 Nursery construction • 39,000 for conservation and plantation activities • 216000 for gabion boxes for check dam)

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