Report on Field Visit

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Submitted by

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A Report on Field Visit

Background

As a part of Master of Arts in Global Studies at Sophia University, a thesis work has to be completed. I have considered climate change issue for my research as it has been a serious global issue and its brunt will severely hit the economically weak countries. As one of the most vulnerable countries, Nepal has mainly focused on adapting to the impacts including erratic rainfall events leading to floods, severe droughts and water scarcity because of their influence on life of the people and economy of the country that depends mostly on agriculture. There are several questions raised in various arenas related to the success story of the adaptation programs. The field work conducted under The Graduate School of Global Studies research grant has been instrumental in observing effectiveness of the adaptation programs in mountainous communities of Nepal and study the barrier and opportunities in community participation.

Objective of the field visit

The main objectives of this field work were:

1. To collect information on various stakeholders in Nepal involved in climate change activities, their operation modalities, working areas/communities, and key resources involved.
2. To observe the activities in the communities, collect data and information on climate change adaption activities in water resource conservation, agriculture and food security, and disaster preparedness.

Schedule

The schedule of the meetings and field visit is as follows:

August 20 – Kathmandu arrival

August 21 – Rest

August 22 to August 27: Visits to various organizations in Kathmandu and interviews

August 28 to August 30: Lalitpur and Bhaktapur field visit

August 31 – Travel to Dolakha

September 1 – September 2: Dolakha field

September 3 – Return to Kathmandu

September 4 – Rest in Kathmandu

September 5 – Travel to Kaski

September 6 to September 7: Kaski field study

September 8 – Travel to Lamjung

September 9 to September 10 – Lamjung field work

September 11 – Return to Kathmandu

September 12 – Rest in Kathmandu

September 13 – Travel to Mugu by air

September 14 – Gamgadhi, Mugu field study

September 15 to September 16 – Rara Lake, Community forest, Mugu observation

September 17 – Return to Kathmandu

September 18 to September 19 – Rest in Kathmandu

September 20 – Travel to Japan

Interaction and Interviews with various key persons of climate activity related institutions (August 22 to August 27, 2019)

I conducted interviews with key persons of relevant national, governmental and international non-governmental organization working on climate change in Nepal. The organizations in Kathmandu included Ministry of Forest and Environment, Ministry of Finance, Singha Durbar, Climate and Carbon Unit at Alternative Energy Promotion Center, and WWF Nepal, all in Kathmandu and Local Initiatives for Biodiversity, Research and Development (LI-BIRD) in Pokhara. The details of the organizations and the interviews is provided in Annex. The main objectives of all the interview was to understand how is Nepal preparing itself for climate change adaptation, what are

the key organizations involved in climate change program, what are the major programs and projects directed to climate change adaptation and mitigation.

Field visits

Lalitpur and Bhaktapur (August 28 to August 30, 2019)

The indigenous people of Kathmandu Valley are known for their ingenuity in rain water conservation and efficient utilization by a system of water reservoir, aquifer and spout from ancient time. A field visit of several sites of Lalitpur and Bhaktapur was done to study the current methods of maintaining and restoring such systems, which can be a very good adaptation practice in case of water shortages due to climate change induced drought. Local municipal engineers, community (called GUTHI) leaders, and people who have been involved in restoration, were interviewed.

Dolakha visit (September 1 to September 2)

The Tamakoshi Valley in Dolakha and Ramechhap districts is prone to glacial lake outburst flood (GLOF) from Tsho Rolpa glacial lake which is drained into Tamakoshi river in an event of sudden outburst of the lake. Several villages at the banks of Tamakoshi river in the valley are in risk of high flooding. The whole river length was equipped with early warning system for making people aware of glacial lake outburst flood (GLOF). However, the system was put in place without proper participation of the public and without making the locals aware. As a result, the system is now out of order devoid of any ownership. The field visit was done in order to find the gaps in such approaches and what do the local people think about appropriate early warning system, which they could develop based on their culture and custom of disaster preparedness. In this, key informant interviews and focus group discussions were done to evaluate people's opinion about the failure of the current system and what could be a better solution.

Kaski Visit (September 6 to September 7)

This visit was to understand the effort in agricultural adaptation and food security by the indigenous communities of Kaski district, which is one of the most active districts in agricultural activities in mountainous areas of Nepal. An organization, known as LI-BIRD working in agriculture sector was visited to know about the farmers activities in the promotion of the local

rice that could be more drought resistant and also survive in heavy rain situation. These crops were farmed by the local indigenous Grung and Magar communities from many generations ago, which, however, has been neglected by the introduction of more productive imported cultivars. The field visit was focused on finding out how the old local crops are revived and how these are promoted amongst other farmers for better food security. Farmers and local agriculture technicians were interviewed and agricultural fields were observed.

Lamjung Visit (September 8 to September 10)

The Lamjung site was done to understand how indigenous farming technology can provide disease resistant crops, how cyclic farming and permaculture could be beneficial for avoiding newer pests and diseases which could slowly be more abundant with the increase in temperature in the mountainous areas. Lamjung site showed a very good example in farmer cooperation in knowledge transfer, amalgamation of indigenous farming technology with modern life sciences. Several farms were observed which practice such adaptive agriculture and farmers were interviewed

Mugu Visit (September 13 to September 16)

Mugu, a remote district of Nepal, offers a very good example in managing community forestry and enterprise based on community forestry. Community forest of such area are claimed to aid local people's livelihood through conservation of forest and sustainable harnessing of timber, medicinal herbs and firewood and also through agro-forestry and tourism. Community forest user group leaders, local tradesmen and general public of the community were interviewed to understand the management practice, the difference in livelihood of the people before and after the REDD+ (Reducing Emissions from Deforestation and Forest Degradation PLUS) program, whether or not community forestry system and REDD+ are actually pro-poor and helpful for community.

ANNEX

Meetings and Interviews

Ministry of Forest and Environment, Singha Durbar, Kathmandu Nepal

Date: August 22, 2019. Time: 11. a.m.

Interviewed Person: Dr. Ram Prasad Lamsal, Joint Secretary and Information Officer, MOFE

Question: What is the climate change related activities of MOFE?

1. MOFE has dedicated unit for climate change: **Climate Change Management Unit** which is involved in formulating policies and programs related to climate change, climate change policy research, publications, following up of international protocols incl. Kyoto Protocol and Montreal Protocol, promotion and monitoring of carbon trading, preparation for climate change related international dialogue and negotiation, coordinate with donor agencies for technical and financial assistance, climate change mitigation related technology transfer, and promotion of green and sustainable development.
2. MOFE prepared National Adaptation Programme of Action (NAPA) in September 2010 for adapting climate change through detailed country wide consultation process. Nepal has also prepared a National Framework for Local Adaptation Plan for Action (LAPA). Objectives of LAPA: implementing adaptation actions, and integrating climate change into local development planning and implementation.
3. The Nepal Climate Change Support Programme (NCCSP), with support from DFID and EU, follows the LAPA (Local Adaptation Plan for Action) framework ***in most climate vulnerable 14 districts of mid- and far west Nepal.*** LAPAs have been implemented in 87 Village Development Committees and 9 municipalities in these 14 districts.
4. NAPA actually is first initiation of adaptation action in Nepal and Government of Nepal has designed LAPA for localizing climate change adaptation actions. The NAPA also aims to supports adaptation by local communities, particularly the climate vulnerable poor.
5. Basic funding from GEF/ UNDP, UK-DFID and DANIDA for the preparation of the NAPA, and from UK-DFID for the preparation of the National Framework for LAPA.

Question: How was climate vulnerability assessment done? Which are the vulnerable communities in Nepal?

As a part of NAPA, climate change vulnerability assessment was done. The assessment was based on sensitivity to climate change (flood, landslide, water scarcity, agricultural productivity), adaptation capacity and risk exposure and finding out the areas at the district level that needs immediate intervention in terms of adaptation measures. MOPE issued a document that elaborates vulnerability. The vulnerability assessment grouped several risks and the districts with high risks. For example, the most ecologically frazile districts in terms of climate change are: Mugu, Dolpa, Rukum, Achham, Rolpa, and Jajarkot, whereas highest risk bearing district in relation to flood are Mahottari, Rautahat, Chitwan, Parsa, Saptari and Siraha. Likewise grouping were done also for landslide and glacial lake outburst flood. The details can be seen in the report.

Question: What are the specific adaptation programs carried out by the ministry?

MOPE doesn't directly carry out program in adaptation, rather it works as focal point for programs, policies and coordinates various players involved in the activities including donor agencies, GOs and NGOs. It works as guiding and monitoring agency for such activities. On the basis of NAPA objectives developed by MOPE, the activities and programs are carried out by, for example: Nepal Climate Change Support Programme (NCCSP), which is under UNDP and funded by DFID works in the thematic areas of ***energy, environment, disaster risk management.*** The NCCSP program also helps government as well as non-governmental intuitions to implement Climate Change Policy of 2011. In summary, the ministry makes plans and policy and coordinate and monitor the implementation of that and does not directly take role in the implementation of the specific program.

Apart from the Climate Change Support Programme (NCCSP) – implementing LAPAs (DFID/ EU/UNDP), the ministry is aware of the following programs:

- Least Developed Countries Fund (LDCF), A community based GLOF and flood risk reduction project (UNDP)
- LDCF, reducing vulnerability and increasing adaptive capacity to respond to impacts of Climate Change – (UNEP)
- LDCF, Agriculture and food security (FAO)
- SPCR, Climate Resilience (ADB/WB/ IFC)
- GIZ, Ecosystem Based Adaptation (EBA) in Mountain- UNEP, IUCN

• USAID, Hariyo Ban project, WWF, CARE, NTNC, FECOFUN

Ministry of Finance, Singha Durbar, Kathmandu Nepal

Date: August 23, 2019. Time: 2. p.m.

Interviewed Person: Uttar Kumar Khatri, Spokes person

Question: How is the MOF related to climate change activities in Nepal?

There had been a big problem in Nepal in getting the resources to tackle climate change impacts. If there had been some funding in the adaptation, the problem was that there was no any mechanism in past to make sure that the really vulnerable communities could obtain the climate fund as the various ministries and other agencies were carrying out the climate related activities. This made things difficulties for policy makers to know about the effectiveness of the fund flow and the impact created.

So, in 2017, MOF issued a document called 'Climate Change Financing Framework (CCCF)' expecting that the document will be a guideline to plan and manage climate finance based on real estimation of funds required from national and international sources, to monitor the expenses vs. the impacts on the lives and livelihood of the vulnerable population, and to ensure responsibility and accountability.

As per the CCCF the MOF ensures the climate change is brought into mainstream and institutionalized into national planning and budgeting and make whole society resilient to climate related risks and achieve Sustainable Development Goals.

Question: How does Nepal receive external climate finance?

1. There are various channels by which Nepal receives climate finance: national budget, official development assistance (ODA) by various countries, additional public finance from developed countries (ANNEX-1 countries), carbon market, private sector investment. Over the last few years Nepal has applied for access to finance from different funds established under the UNFCCC and Kyoto Protocol mainly through Global Environment Facility accredited institutions including ADB, UNDP, UNEP, FAO, WFP, and IUCN and also from Climate Investment Funds. At present, six different projects with a total grant of

around 42 million USD are being implemented in Nepal from the Adaption Fund and LDCF.

2. Nepal is implementing two projects with funding from the Climate Investment Fund and soon will get finance for the Forest Investment Programme.
3. Since 2013, the Government of Nepal has adopted a separate budget code on climate change to track expenditure in climate change mitigation and adaptation. Over the years, there has been a significant increase in the allocation of the budget under this heading, and it has increased from Rs. 28.0 billion in 2012/13 to Rs. 69.00 billion in 2016/17, by almost two and a half times.
4. The detail budget is given in the Situation Analysis for Nepal on Climate Finance

Climate and Carbon Unit, Alternative Energy Promotion Center, Khumaltar, Lalitpur, Nepal

Date: August 25, 2019. Time: 12. p.m.

Interviewed Person: Prem Pokharel, Senior Program Officer, AEPC

Question: What is the function of Carbon and Climate Unit, AEPC?

AEPC's Climate and Carbon Unit (CCU) was established in March 2010 and has been working to integrate climate change into Nepal's renewable energy sector. With financial support from UK AID and technical assistance from SNV Netherlands Development Organisation, AEPC analysed the global trends and experience of climate change and energy integration and established a specialised unit within AEPC. The main objectives are:

- To develop AEPC as knowledge centre of climate change mitigation and adaptation,
- To provide support to Ministry of Environment on climate change negotiations, policy/strategy and CDM
- Enhance the carbon mitigation and climate change adaptation potential in future AEPC programs/technologies,
- To institutionalize and mainstream climate change mitigation and adaptation in the renewable energy sector.

Question: What are the activities so far?

In order to help people, adapt to climate change, and providing people with new options for better livelihood, low carbon energy access is very crucial. If energy supplies are not low carbon we risk making the impacts of climate change worse, so renewable energy is part of the solution for equitable and sustainable development of Nepal. CCU follows this 'mantra' and works with local level planning for climate and energy, and CDM programs and attracting additional funding for renewable energy technologies.

CCU has progressed significantly with the registration of two biogas projects under the CDM and many other projects in renewable energy sector are in registration process. Activities including the implementation of District Climate Change and Energy Plans (DCEPs) in three districts and have been recognized as a key energy planning tool in Nepal that contributes to increasing climate change resilience in Nepal. The CCU has also contributed to designing and implementing climate change compatible development processes.

Besides the aforementioned programs, CCU provides technical support to MoFE on following two areas:

- Manage the work of formulating Low Carbon Economic Development Strategy for Nepal
- Coordinate with DEECCS/DDC to implement Nepal Climate Change Support Program (NCCSP) in 14 districts.

<u>WWF, Nepal, Baluwatar, Kathmandu, Nepal</u>

Date: August 26, 2019. Time: 11. a.m.

Interviewed Person: Bijan Gurung, Senior Manager, WWF Nepal

Question: What is the climate related activities of WWF?

WWF Nepal is considering both the adaptation and mitigation strategies to build the resilience of climate vulnerable ecosystems and communities with major focus on energy and food security for conservation and sustainable development. In order to do this WWF is carrying out studies and research to increase the understanding of climate change, building organizational capacity as well as community capacity, carrying out campaigns for increased awareness and strengthening existing policies. WWF Nepal is training and working with local community not only to build

local capacity but also in understanding the effect of climate change in community level and find the ways to build resilience.

WWF Nepal is assessing global climate finance from renewable project, mainly biogas, for sustainable financing and at the same time reducing deforestation. It is also involved in REDD+ program.

Question: What is the specific program of WWF that are related to climate change and where are they located?

Most of the programs of WWF are located in around national parks and conservation area. So they are spread all over Nepal, from Terai to Himalayas. There are various types of programs ranging from biogas project to reducing vulnerability of the communities and capacity building of the local communities.

The biogas project provides alternate energy to rural households to reduce dependence on firewood and at the same time involves carbon financing from the sale of carbon credits. Such projects have been handed over to Biogas Sector Partnership (BSP) Nepal. In total, more than 15,500 plants installed have been under process of verification for obtaining carbon credit.

As local adaptation plan, WWF Nepal identified several vulnerabilities including floods, landslides, and depleting water resources. For the mitigation, the locally adaptation actions which are prioritized and demanded by the local communities are: bioengineering to mitigate flooding; and watershed conservation, spring source protection, conservation ponds and small-scale irrigation to mitigate depleting water resources.

WWF Nepal also works to enhance local level capacity on climate change, students, local communities, local government staffs for monitoring of climate impacts, identification and selection of adaptation and disaster risk reduction.

Local Initiatives for Biodiversity, Research and Development (LI-BIRD), Pokhara, Nepal

Date: September 6, 2019. Time: 11 a.m.

Interviewed Person: Niranjan Pudasaini, Senior Program Officer, LI-BIRD

Question: What is LI-BIRD and what is it doing in the communities?

LI-BIRD, as a nongovernmental organization, started with program is biodiversity, ecosystem and sustainable livelihoods. Later on, it expanded with a program called Agricultural Innovations for Food and Nutrition Security which was aimed to improve the food and nutrition security of the marginalized remote communities of mid and far west Nepal through investment in knowledge, innovations, and solutions. The program included activities in enhance knowledge, skills, and develop and deliver tailored solutions to improve food and nutrition security by employing participatory approaches to innovative development.

Question: What is the climate related activities of LI-BIRD?

Farmers living in the hills, mountains and Terai are vulnerable to the impact of climate change and disaster risks. LI-BIRD intends to build the adaptive capacity of climate vulnerable and disaster-prone communities for resilient livelihoods. More specifically, LI-BIRD is working with these communities and national and international partners, to reduce risk to the production system, integrate climate resilient technologies and genetic diversity to build their adaptive capacity. LI-BIRD will strengthen the capacity of communities and local institutions to integrate climate change adaptation and disaster risk management plans into local planning process for accessing and obtaining justified resources for effective implementation of plans.

There are various programs of LI-BIRD, which, although are not directly climate change programs, but are kind of autonomous adaptation, particularly in agriculture sector.

Question: What are these programs?

In most of our programs we have focused on sustainable agriculture and livelihood in harmony with nature. Specifically, both the programs including Biodiversity and Ecosystem Services for Sustainable Livelihoods, and Agricultural Innovations for Food and Nutrition Security are targeted for sustainable agriculture using indigenous farming technology such as multi-crop farming, cyclic farming, permaculture, etc. These are basically climate adaptive agriculture.

Question: Can you suggest specific site for this program that we can visit?

The Beshisahar site in Lamjung District has a very good example in farmer cooperation in knowledge transfer, amalgamation of indigenous farming technology with modern life science. You can visit the village and interact with the people and farmers to know more.