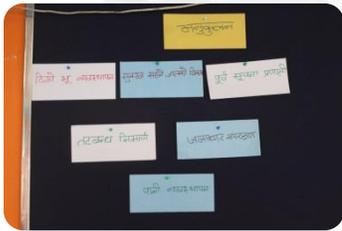




Training on Mainstreaming Climate Change in Project Planning and Development

31 October- 2 November 2018, Dhangadhi



Report prepared by



December 2018

Contents

1. Background	3
2. Objective	3
3. Participation	3
4. Structure of the training	4
5. Training Proceedings.....	5
5(A) Session I: Opening session.....	5
5(B) Session II: Understanding climate change and its impacts	5
5(C) Session III: Key concepts of climate change	7
5(D) Session IV: National and International Policies, Plans and Programmes on Climate Change	8
5(E) Session V: Climate Finance	10
5(F) Session VI: DanChurchAid Nepal’s Climate Change strategy.....	11
5(G) Session VII: Exercise 1: Each organization prepares a list of their CC activities.....	12
5(H) Session VIII: Understanding Value chain.....	12
5(I) Session IX: Vulnerability Risk Assessment (VRA)	13
5(J) Session X: Exercise 2: Revisiting project/activities from climate change lens-	14
5(K) Session XI: Mainstreaming climate change within project cycle.....	16
5(L) Session XII: Mainstreaming Climate change in Value chain Projects	17
5(M) Session XIII: Exercise 3: Adaptation interventions to minimize climate risks in the value chain...	17
5(N) Session XIV: Practical tips on Proposal writing:	20
5(O) Session XV: Feedback collection	20
5(P) Session XVI: Closing session.....	20
Annex	21
Annex 1: Participants List.....	21
Annex 2: Programme schedule	22

1. Background

Climate change is a global phenomenon that affects all countries' security, economic development and human rights. The detrimental effects of climate change (CC) is felt in short term such as landslides, flood, earthquakes, wildfires and avalanches; and in long term through increasing temperatures, glacial melting, land and forest degradation, sea level rise, loss of biodiversity and droughts and desertification. Such adverse effects of CC are felt in areas such as agriculture, food security, water resources, fuel and fodder availability, education, human health and migration pattern. As generally understood climate change is, however, not a scientific and technocratic issue alone. The degree to which people are affected by climate change impact depends on the social status, gender, poverty, power and access to and control over resources. Poor people and communities that are hugely dependent on natural resources for food, fodder and other livelihood options are the most affected by climate change.

The Government of Nepal (GoN) had allocated finance from its domestic sources and international aid money to implement adaptation and mitigation programmes and projects to address climate change impacts. Many of times the budgets allocated for climate change and environmental initiatives are used for infrastructural developments such as road construction. The engagements of CSOs during any planning process are limited at municipality level. Hence, mainstreaming climate change in development policies, plan and programmes is a key to sustain the gains of our development efforts.

2. Objective

The overall objective of the training was to strengthen the capacity of DCA Nepal partner organizations to integrate climate change perspective in their respective projects funded by DCA. In the training participants were familiarized with national and international initiatives made to reduce the impacts of climate change, climate vulnerability risk assessment and designing climate-smart projects. The specific objectives of the training include-

- To enhance DCA partner organizations' knowledge and understanding on key concepts of climate change
- To support DCA's partner organizations on developing climate smart project proposals

3. Participation

The target audiences for the training were DCA partner organizations representing from eleven districts of DCA working areas. A total of 29 participants (11 female and 18 male) attended the training. They included programme coordinators, board members and executive directors from DWO and MDO Accham, FEDO Banke, DWRP, Jagaran Nepal and INSEC Kailali , EDC Doti, SOSEC Dailekh, KVS Saptari, Action Nepal Dhading, Unification Nepal Gorkha, LIBIRD Pokhara, TWUC Bardiya and NNSWA Kanchanpur

A detailed list of training participants is given in **Annex 1** at the end of the report.

4. Structure of the training

This was a three day training programme particularly focused on DCA partner organizations to strengthen their capacity to integrate climate change perspective in projects funded by DCA Nepal was achieved through lectures, plenary discussions, brainstorming, group works and exercises. The three day training consisted a total of 15 sessions and are described in detail below-

Day 1

Session I: Opening session- The session is described in more detail in Section 5(A). The topics included welcoming participants, sharing of training objective, participants' introduction and expectation collection. **Session II: Understanding climate change and its impacts:** More details of Session II can be found in Section 5(B). The session focused on current trend of climate change in Nepal and the impacts of climate change in different sectors. **Session III: Key concepts of climate change-** This session covered three major areas of CC- adaptation, mitigation and loss and damage. The session also included a group work to identify adaptation and mitigation actions. This session is summarized in Section 5(C). **Session IV: National and International policies, plans and programmes on climate change** - Dealt with in more detail in Section 5(D), this session was dedicated to CC related international and national policies, plans, programmes, institutions and key actors, national budget and climate finance.

Day 2

Session V: DanChurchAid Nepal's Climate Change strategy- More details of this session is given in Section 5(E), which describes climate resilience as a priority thematic area of DCA for which strategic guidance is prepared to support CC adaptation activities at local level. **Session VI: Exercise 1 Current activities on climate change-** This session was concerned with CC project or activities done by the partner organizations. More details are available in Section 5(F). **Session VII: Understanding value chain-** The session was more of an open discussion type and dealt with how and where CC impacts and disrupts the value chain process. More in Section 5(G). **Session VIII: Vulnerability Risk Assessment (VRA):** This session unpacks the understanding of VRA by answering what? why? when? where? how? to conduct vulnerability risk assessment. See details on VRA in Section 5(H) of the report. **Session IX: Exercise 2: Revisiting project/activities from CC lens:** This session was an analysis of the activities listed in exercise 1 to whether those activities are similar or changes when looked from CC lens and VRA. More details are given in Section 5(I).

Day3

Session X: Mainstreaming climate change within project cycle- This session describes on the vital role of mainstreaming climate change in project cycle management. The detail of this session is described in Section 5(J). **Session XI: Mainstreaming Climate change in Value chain Projects:** This session described different steps of value chain and importance of mainstreaming climate change indicators. See section 5(K) for details of this session. **Session XII: Exercise 3: Adaptation interventions to minimize climate risks in the value chain-** This session was a group work on identification of risks in different steps of value chain and interventions to mitigate those risks is shown in more details in section 5(L). **Session XIII: Practical tips on proposal writing:** See

section 5(M) for designing climate smart proposals. This session gives practical tips on writing climate change proposals. **Session XIV: Feedback collection** - Participants were asked to provide their honest feedback covering overall aspect of the orientation programme. Section 5(N) summarizes this session. **Session XV: Closing session**- The closing session marked the end of three days training thanking the participants by the facilitators and vice versa. See in details in section 5 (O).

The detailed agenda of the training is given in **Annex 2** at the end of the report.

5. Training Proceedings

Day 1

5(A) Session I: Opening session

a. Welcome and Introduction of participants

The training programme was opened by Raju Pandit Chhetri, Executive Director of PRC by formally welcoming the participants. He started by sharing the objective of the training (mentioned above in Section 2) and gave highlights of what more is coming in three-days. He facilitated the introduction of the participants by asking them to introduce themselves and their organization to all and give a brief about the work of their organization. This introductory session helped them to interact, engage and warm up for the next session.

b. Expectation collection

After the introduction, he asked participants to note down their expectations on meta-cards and similar expectations clubbed together. The expectations included:

- ✓ How to mainstream climate change in development projects and local level planning
- ✓ How could we become climate adaptive
- ✓ What is government's role in CC mitigation
- ✓ Climate finance
- ✓ Policies and Acts on climate change
- ✓ To have a common understanding on Climate change

5(B) Session II: Understanding climate change and its impacts



Limiting the global temperature rise below 1.5 degrees is now difficult to meet. PRC Programme Director Prabin Man Singh started this session with the above fact published in IPCC report 2018. Participants agreed that symptoms of increase temperature are becoming more apparent. In regard to the fact of temperature rise, one of the participants

shared, *“The flowering season of Rhododendron has moved earlier by two-three months. The blooming season is during spring from March- May but now it blooms early February to mid-march. Could this be because of climate change?”* to which the facilitator replied CC could be one of the factors out of many others. If the temperature it requires to bloom occurs ahead of time then it will flower before the usual season.

He then familiarized the participants with the difference between ‘weather’ and ‘climate’: weather is what conditions of the atmosphere are over a short period of time, and climate is how the atmosphere “behaves” over relatively long periods of time, usually 30 years. In most places, weather can change from minute-to-minute, hour-to-hour, day-to-day, and season-to-season. Climate, however, is the average of weather over time and space.

He briefly talked about natural and man-made sources of Greenhouse Gases (GHGs) and Greenhouse Effect and how earth’s average surface temperature is increasing and resulting to climate change impacts. Nepal is one of countries contributing the least (0.027%) to GHG emissions. However, it is experiencing increased impacts of CC. Using examples and illustrations, he highlighted some of the proven impacts including: **Glacial lake outburst floods (GLOFs)**- rising temperature triggered by CC has led to 24 GLOFs incidents causing considerable loss of life and property in the country (ICIMOD, 2011). Currently, Tsho-Rolpa is one of the most dangerous glacial lakes of Nepal. **Increase in climate-induced disasters:** Between 1997 and 2014, climate-induced disasters claimed 22,372 lives and caused huge loss of infrastructure (MoHA, 2017). **Lower crops yield:** CC impacts and inadequate adaptation practice have led to reduction in crops yield in Nepal by 10%. **Loss of bio-diversity:** change in climate has posed a serious threat to existence of various flora and fauna. **Possibility of energy crisis:** The greatest impacts of CC are likely to be increased climate-induced hazards, such as sediment load, extreme floods and geo-hazards to the detriment of hydropower production. **Effects on human health:** Nepal has experienced increased cases of diarrhea, typhoid, dysentery, skin diseases and vector-borne diseases. **Economic loss:** According to official data, CC has led to a loss of the country’s GDP by 1.5 % to 2 %. Regarding the impacts of CC one of the participants asked, *“How do we distinguish whether the impacts and losses are due to natural disaster or climate induced?”* to which the facilitators replied, *“any types of disaster that occurs cannot be guaranteed that it is due to CC but there is a guarantee that the impacts are increasing in intensity, frequency and magnitude due to CC, our intervention should be on the fact the impacts are increasing and we have to mitigate/reduce the problems rather than distinguishing the impacts are natural or climate induced.”*

He further stressed that environment, social and economic sectors are all affected by CC and are connected to each other so it is vital address CC in all these sectors for sustainable development Example- Drying up of water sources (environment) leaves no or limited water for drinking and irrigation resulting to drudgery to the women and communities (social) depending on the source which ultimately affects the agriculture and production (economic). He reminded the participants that the projects and activities should address CC as per the local scenario and for holistic development, including empowerment of women.

5(C) Session III: Key concepts of climate change



This session dealt with three major concepts of climate change- Mitigation, Adaptation and Loss and Damage. PRC, ED Raju P. Chhetri started the session with a discussion on whether ***destruction is necessary for development*** to which some responded- 'Yes, it is necessary' while others said 'Yes, but to a limited level.' He then gave a brief history of developed countries and industrialization. Gradually, the massive industrialization and urbanization started to add to the GHGs which are now accumulated resulting global

warming and climate change.

There are two ways to reduce climate change impacts; one is to implement Climate Change Adaptation (CCA) measures to cope with the CC impacts and other is to reduce or sink the source of greenhouse gases (GHGs). He introduced the word '*mitigation*' to the participants which means any human intervention to reduce the sources or enhance the sinks of greenhouse gases (IPCC, 2014). Developed countries have already started to take renewable energy path which is checked by UNFCCC every year. Thus, human induced GHGs like- vehicular emissions, energy sources (electricity, petroleum and coal), forest, agriculture, livestock should be reduced. He reminded the participants that mitigation efforts should not be met by challenging the basic necessities.

The other area is '*adaptation*' which means any process of adjustment to the changing climate and its effects. He further stressed that, "*Adaptation is not our want but is our need.*" He highlighted some adaptation measures such as- embankments for flood and landslide control, bioengineering, drip irrigation (in drought), water source protection, public awareness and preparedness, life Insurance, livestock insurance, pond construction, crop variety and so on. With example from a case of Nawalparasi on how the farmers started using the local variety paddy (kalo nunia) which was more resilient to harsh climatic conditions compared to the hybrid. Such CC adaptation activities help communities to cope with changing climate and the impacts.

Following mitigation and adaptation is another area of climate change known as '*Loss and Damage*' (L&D) the concept which came from small island countries. L&D is impacts of climate change that occur despite efforts to adapt to climatic impacts. It is beyond adaptation where one has to leave his/place in case of irreversible or permanent loss and damage. L&D may occur due to both reasons- sudden-onset events such as floods, hurricanes and slow-onset processes such as sea, glacier melting and sea level rise. Thus, resilience of communities, livelihoods and ecosystems is necessary to withstand the impacts of loss and damage.

Coming to the end of this session, he stressed on few points such as- development can be sustainable only if it is in balance with environment so development activities should prioritize CC lens and resilience should be built from individual to community level to cope with CC impacts.

Activity 1: In order to give a clear understanding on *adaptation* and *mitigation* and as a part of



Session III, the activity was facilitated by Prabin M. Singh. Participants were divided into four groups. Meta cards were given to each group with mitigation and adaptation activities written on it. The participants were then asked to separate each activity and identify whether it is adaptation or mitigation. The groups discussed among themselves and separated the activities. Later, each group chose one activity in mitigation and one in adaptation and gave reasons on why the activities they chose are

mitigation or adaptation. This sort of activity helped to build up participant's confidence on the concept of mitigation and adaptation. Few examples from all four groups are given in table as-

Group	Mitigation	Reason	Adaptation	Reason
1	Tree plantation	forests helps in carbon sink	livestock insurance	minimize the effect caused by CC impacts
2	Electric vehicle	reduces the release of GHGs	drought resistant crops	Help farmers to adapt during drought
3	solar energy use	helps to reduce GHGs	early warning system	alert the downstream communities and save their lives in flood prone areas
4	improved cooking stoves	less firewood is used and helps to reduce GHGs	water conservation and management	Can help in in irrigation during drought

5(D) Session IV: National and International Policies, Plans and Programmes on Climate Change

PRC Raju Pandit Chhetri started this session with examples and reasons on why Nepal is vulnerable to CC. He stressed on reasons such as: Nepal's topography and geographical structure; agriculture and tourism based economy which are directly affected by CC; highly dependent on natural resources; low resilience to disasters like flood, landslide, drought; and lack of awareness on climate change and its impacts.

He also made the participants realize that CC is not only problem of Nepal but is global phenomenon with example from Bangladesh on how the government produced a new variety of rice resistant to salt after the sea water entered the agricultural lands of the farmers, this type of CC adaption activities gave them hopes and encouragement necessary to fight against the impacts of CC ultimately fighting against poverty and forced migration. He then showed the participants what

international initiatives are being done to take care of climate change impacts starting from United Nations Framework Convention on Climate Change (UNFCCC) in 1992 to reduce GHGs emission in the atmosphere. As per this pact the developed countries have to provide financial support to developing country. An annual meet of all countries who have signed UNFCCC have conference of parties (COP) to assess the progress in dealing with commitments made in the pact. Kyoto protocol in 1997 have legally binding obligations for developed countries to reduce their GHG emissions and Paris agreement in 2015 agreed to limit the global temperature to 1.5 degree Celsius.

He also talked about **Nationally Determined Contribution (NDC)** in brief and Nepal's pledge to climate actions and climate resilience by government in policies, strategies and programmes. Nepal submitted NDC in 2016 and it paved path for National Adaptation Plan (NAP) preparation. Some of the major commitments in NDC are scaling-up production of renewable energy technologies by 2030; energy generation from waste; introduction of fuel tax for air quality improvement in Kathmandu valley; environment friendly sustainable transport system; Widen carbon storage through sustainable forest management and so on. He then familiarized the participants with the policies and programmes at **national level: (1.) National Climate Change Policy**- This policy has put adaptation on the top of the priority list because adaptation activities are directly related to development in order to make it sustainable, adaptation is crucial. It focuses on capacity to cope with disasters and conservation of natural resources. It intends to channelize large chunk of climate finance to the community level, ambitiously announcing '80% of total climate finance will go to the community.' CSOs have the opportunity to cite this in their advocacy work. The policy also emphasizes that women's interests be taken into account in all climate actions. However, it is silent on HOW. **(2.) National Adaptation Programme of Action (NAPA)** - NAPA has identified **six priority thematic areas** in view of their vulnerability to CC: agriculture and food security, water resources and energy, forests and biodiversity, public health, urban settlements and infrastructure and climate-induced disasters. As women are largely engaged in climate sensitive sectors (water, firewood, agriculture etc) any degree of adverse CC effect increases their vulnerability. NAPA, therefore, emphasizes that gender related issues need to be taken into account while developing adaptation strategies. **(3) Local Adaptation Plans for Action (LAPA)** - aims to integrate CC resilience into local-to-national development planning processes and outcomes. It describes the key steps involved in integrating CC into development planning and provides a list of tools that can be used to facilitate this process. The LAPA programme was under implementation in 14 districts of far and mid- western regions of Nepal. **(4) National Adaptation Plan:** The NAP has two key objectives: (i) reducing vulnerability to the impacts of CC by building adaptive capacity and resilience; and (ii) facilitating the integration of climate change adaptation, in a coherent manner, into relevant new and existing policies, programmes and activities. The thematic areas of NAPs include-

1. Agriculture and food security (nutrition) Agricultural Development
2. Climate induced disasters Home Affairs
3. Forests and biodiversity Forests and Soil Conservation
4. Public Health (WASH) Health
5. Tourism, natural and cultural heritage Culture, Tourism and Civil Aviation
6. Urban settlements and infrastructure Urban Development

7. Water resources and energy

Cross-cutting Working Groups

8. Gender and Marginalized Groups (social inclusion) Women, Children and Social Welfare

9. Livelihood and governance Federal Affairs and Local Development

He asked the participants if they are involved in any policy and plan making process of local government, to which the participants responded that they have never been involved in such activity. So, he encouraged the participants to actively contribute in any form of decision making or discussions during the planning and policy making process. He also stressed that any activities related to CC have to align with the NAP process. Majority of the participants had an issue on how to/on which areas to intervene in the municipality to which the facilitator advised the following areas of intervention in Nepal from the perspective of CC - adaptation/ resilience, low carbon development, capacity building and research/scientific information. In addition to this, Nepal's national priorities include: National development policies and sectoral policies which are guided by climate change policies such as- NAPA, LAPA, NDC, NAP and low carbon development strategy.

Towards the end of the session he stressed that there should be a link between the policy and local level for successful implementation of policies and civil society organizations could play an important role to bridge this link from the local level as they can work in close relation with the communities.

Day 2

5(E) Session V: Climate Finance

The second day kicked off with the session on climate finance where the facilitator asked on the types of support Nepal gets through foreign aid to which the participants responded- in-kind support (goods and services), investment, donations and loan. Raju Pandit Chhetri grabbed the participants' attention to a point that any projects in Nepal can be tracked through various financial mechanisms. The international sources for climate change and development budgets in Nepal are loans by multilateral development banks (example- for electric buses); bilateral-USAID, EU; UN agencies-UNDP, FAO, I/NGOs. Under UNFCCC there are three mechanisms of climate funds which includes-Global Environment Facility (GEF), Adaptation fund and Green Climate Fund (GCF).

Narrowing down to national level, the facilitator informed the participants that the government has set a climate finance unit under the Ministry of Finance (MoF), started climate budget coding practice and is working to bring in resources for adaptation and mitigation actions, such as the NPR 100 million- adaptation programme covering five districts in the Karnali region. He informed the participants about the **major sources of finance**: federal government (national budget), local government (local revenue), international agencies (World Bank, the United Nations and various climate funds), I/NGOs and the private sector (banks, industries etc.). He also touched upon the programmes the government is designing together with bilateral and multilateral agencies seeking **Green Climate Fund: (1) IUCN-proposed NPR 330 million- adaptation programme** covering the Gandaki river basin (Tanahu, Nawalparasi, Chitwan, Dhading, Gorkha, Palpa, Makwanpur, Lamjung, Manang, Mustang, Parbat, Baglung, Myagdi, Rasuwa, Gulmi, Syangja, Arghakhanchi, Nuwakot and

Kaski districts). **(2) FAO-proposed NPR 400 million adaptation and mitigation programme** for central and eastern Churiya region.

He advised the participants that if they know about any adaptation programme is to be implemented in their villages or districts, they should seek to know what kind of programme it is, demand separate meeting with the programme responsible people and put across their specific interests and concerns, and even seek a role as executing agency, influencer or watch dog.

5(F) Session VI: DanChurchAid Nepal's Climate Change strategy



Before starting the session on DCA's climate change strategy Raju Pandit chhetri invited forward DCA Regional Programme Officer (RPO) Rajendra Khanal to give a brief on the strategy paper. *"DCA was involved in all types of work but did not have a focus area, so we started off by making a theory of change on resilient livelihood, sustainable food and nutrition security"* said RPO Rajendra Khanal. He further highlighted the three major thematic areas of DCA- **Value chain and market development, Climate resilient agriculture technology and Humanitarian support/DRR**. On realization that climate dimension is necessary, PRC one of a strategic partner of DCA designed a strategic paper for DCA Nepal to implement climate change friendly activities and help DCA partners strengthen knowledge on CC and mainstream CC in their planning and projects.

Raju Pandit Chhetri then took over the session by showing the presentation on Nepal's national priorities which includes National development policies and sectoral policies guided by climate policies such as NAPA, LAPA, and CCP. Therefore, in order to work with communities at local level it also equally important to know the national policies and make sure our activities align with the national policies. He stressed on the point that, any strategic paper on climate change should be built guided by few documents such as- **Paris agreement (2015)** - efforts to limit the global temperature to 1.5 degree Celsius; **DRR Sendai framework (2015-2030)** - understanding disaster risk, strengthen disaster governance, invest in DRR and enhance preparedness; **Sustainable development goals (2015-2030)** - end poverty, protect planet, climate change, education, gender equality and so on. Since, DCA is a member of ACT Alliance the strategic paper was prepared without diverting from the CC advocacy framework of Act Alliance which includes- advocate for climate justice, poor and marginalized, right based approach, equity, human rights and gender justice, transparency and accountability and so on. DCA has internalized all the issues related to Paris agreement and ACT Alliance and has moved forward in Nepal with three major thematic areas- **Active citizenship**-women, dalit, marginalized groups; **Building resilient livelihood**- poor and vulnerable, ethnic minorities, farmers and landless; **Humanitarian response and DRR**- early warning systems.

He further highlighted that the strategic paper for DCA Nepal is the first and also new to many thus some broad areas are chosen in the strategy. Some the major DCA programmes with strong climate dimension include resilient livelihood and DRR; inclusive citizenship for accountable governance; and CC vulnerability and climate assessment. Gender smart policy supports women groups directly through empowerment, gender justice and ensuring climate resources. Capacity building is needed for both at partner level and community to ensure a shared understanding on CCA work and these works can be vibrant through information sharing and alliance and partnership can be built at national and local level. He focused on two major works that can be done by the participants in their municipalities-

1. At programme level- implement CC programme, help communities to be resilient and adaptive to CC impacts
2. Advocacy level- help during planning and policy making process of local government

What can we do?

He encouraged the participants, to hold on and follow the either the service or the advocacy approach or both for CC actions. Gender specific activities and programmes can be made through CC perspective as per the nature of the organization. One of the participants commented, *'Programmes on gender or CC or advocacy or anything such as trainings, awareness programme, workshops are neglected by local government officials and they are only focused on construction. Difficulty lies there.'* The facilitator advised him to take upon activities such as income generation activities, education programmes, saving programmes which are also CC adaptation programmes.

5(G) Session VII: Exercise 1: Each organization prepares a list of their CC activities



The first day of the training was more on building the conceptual clarity of CC to the participants while this session engaged the participants' through group works for better understanding. Prabin Man Singh requested the participants to form groups of their respective organization and list down climate change activities that they have done in through their organization in a flip chart. The aim of this activity was to include the identified CC activities in a value chain. Groups

were asked to fill three columns of *hazard, problems and activities*. The participants after they finished listing the activities kept their work on side to further work on it in exercise 2 in the next session.



5(H) Session VIII: Understanding Value chain

Prabin Man Singh facilitated this session on Understanding value chain in a more engaging way through an open discussion utilizing the knowledge of the participants. Through discussion among themselves and the facilitator the major stages in the chain were identified starting with-

For better understanding, he explained these four terms to the participants by showing a demonstration as shown in the above picture. The table represents a community and all different items such as marker, bowl, glass, masking tape, glue, cups represent different types of people in the community. He asked one of the participants to voluntarily push the table after which some items fell down while some remained as it is. He then further explained the push represents hazard (flood, landslide); the items which fell easily have low adaptive capacity and the ones which remained undisturbed are resilient. If any item is near to the edge of the table it is more exposed to hazard compared (example- communities living near river more exposed to hazard). The sensitivity was explained with the glass (more sensitive) comparing it with the board marker (less sensitive) that same intensity of hazard will affect the glass more than the board marker. Participants responded to have a clear understanding of the terminology after this demonstration. He also showed two theoretical basis of VRA-

Vulnerability=Exposure X Sensitivity/ Adaptive Capacity

Risk= Vulnerability X Exposure X Hazard

VRA is an integration of top-down (science based CC modelling, impact projections and adaptation strategies) and bottom- up (people based local stakeholders and communities involvement) approaches. The facilitator introduced Participatory Capacity Vulnerability Assessment (PCVA) to the participant which is one of a risk analysis toolkit to assess climate change and disaster risks through participatory approach. Nine major stages of PCVA are-

1. Stage 1- Preparing for PCVA which includes developing TOR
2. Stage 2- Collecting secondary information such as environment, demographic, disaster
3. Stage 3- Generating a community overview by organizing community meetings to introduce purpose, process, involvement and expectations of the community
4. Stage 4- Analysis of hazard and stress, and vulnerability and capacity
5. Stage 5- Analysis of livelihood by collecting information on alternative livelihood options, coping strategies, opportunities and constraints
6. Stage 6- Analysis of future uncertainty takes into account the information like trends of CC, affect to men and women, resources for adaptation
7. Stage 7- Governance analysis by identifying responsible governance structure, constraints and opportunities to improve governance
8. Stage 8- Prioritization and Action Plan to address immediate risk
9. Stage 9- Finalization of PCVA process, preparing and sharing the report

He stressed that VRA can be a useful tool to identify possible climate risk in value chain in order make project climate smart. After the risks are identified, various measures (strategic or physical) should be taken to minimize such risks known as Climate Change Adaptation measures/activities.

5(J) Session X: Exercise 2: Revisiting project/activities from climate change lens-

This session exercise was the continuation of exercise 1. In exercise 1 the groups identified various *hazards* in their working areas, *problems* faced due to such hazard and *activities* to minimize the CC



impacts. Raju Pandit Chhetri asked the participants to revisit the previous activities listed in exercise 1 and change to CC adaptation activities in this exercise. He then asked the participants to draw a rough map of the village (their working area) including location, water sources, roads, agriculture based on exposure and sensitivity with one hazard like drought or flood. The aim of this exercise was to analyze the same activity after looking through CC perspective. All the seven groups of seven different organizations

took into account one hazard each from their respective municipalities and drew a rough sketch of their village/municipalities and came up with good ideas through climate change lens shown in table below:

Group s	Village/municipality	Hazard	Exposure	Proposed activity
1	Timilsen	Drought	community, livestock, forest and fodder, agricultural land and water source	solar irrigation, deep boring, drought tolerant seeds, water recycle and reuse, rain water harvest
2	Laprak, Gorkha	Landslide and flood	community, forest, agricultural land	embankments near the river and sloppy areas, tree plantation in barren land
3	Bara bardiya	Flood	community, temples, forests, roads, agricultural land	Dam construction by government, water pump for irrigation during drought Use of plastic tunnel for farming
4	Belauri kanchanpur	Flood	Community, agricultural land, road, schools	alternate livelihood options like fish fam, embankments, deep boring, river bed farming, drift irrigation, tunnel farming
5	Aali community	Flood and drought	settlements near the riverbank, agricultural land, schools	solar or monsoon water lifting to the community, Pond construction, drip irrigation, gabion walls for flood control, afforestation programmes, poly house vegetable farming, irrigation canal, livestock rearing/poultry farming, early warning system, preparedness
6	Pipal danda village, Dhading	Flood and landslide ; disease and	settlements near the river banks and landslide prone areas, agricultural land	for flood and landslide- afforestation, gabion walls construction, contour and terrain farming For disease and epidemics- tap water, filtration and boiling water

		epidemic ; insects and pests infestation		For insects and pest infestation- nets, resistant variety, SMART agriculture
7	Sayubani Saptatri	flood	community, agricultural lands, roads	for livelihood- SRI, modern technology, insurance, cooperative promotion, plantation, riverbed farming

Day 3

5(K) Session XI: Mainstreaming climate change within project cycle



The third day of the training kicked off through photo gallery review of second day by Sneha Rai followed by the session of Raju Pandit Chhetri. He started by recalling the group presentation of proposed CC activities made by the participants at the end of the second day. He started his presentation on the necessity of CC mainstreaming at project level because projects are vulnerable to CC directly or indirectly. For example if any hazard like flood occurs and results to siltation of the

agricultural land, CC lens searches for opportunities to adapt to such impacts like farming of crops that can grow in sand. Thus, mainstreaming climate change in the project cycle seeks for opportunities to adapt or cope with the CC impacts. He further talked about six steps to mainstream climate change in project cycle and these include:

Step 1: Assessing potential climate risks and effects on vulnerability

-is measured during project identification stage

Step 2: Undertake in-depth climate risk assessments

Step 3: Identify adaptation options

Step 4: Priorities and select adaptation options

-step 2, 3 and 4 falls under the project formulation and preparation cycle

Step 5: Implement projects

- implement selected adaptation options

Step 6: Evaluate Adaptation measures in project monitoring and evaluation phase

One of the participants asked a very interesting question giving a scenario, *‘Let us assume we distributed drought resistant seeds to farmers to adapt to drought, but what if flood happens to occur and washes away all the production. What are we supposed to do in such type of situation?’* to which the facilitator replied that is the exact reason why vulnerability risk assessment is done before initiation of any projects/programmes. VRA approaches shows the actual picture of community level risks as it is based on the information gathered from the community level (people’s

perception) integrating with available scientific data. He further added that uncertainty is always possible and one has to be prepared but designing projects by analyzing both data and implementation in correct way minimize the future impacts.

He also stressed that there are various opportunities for CSOs to intervene during the policy making and planning process to mainstream climate change through advocacy and information sharing.

5(L) Session XII: Mainstreaming Climate change in Value chain Projects



After mainstreaming CC in project cycle, another challenge is to mainstream CC in Value chain. Since, understanding of value chain was already given to the participants on the second day. This session dealt with mainstreaming of CC in value chain. Prabin Man Singh, started by showing various steps of IFAF-CGIAR process in his presentation which includes:

- Step 1: Selection of Value Chain
- Step 2: Identification of key climate risks in value chains
- Step 3: Choice of most effective climate actions
- Step 4: Targeting the most vulnerable to climate risks
- Step 5: Reaching Scale

He pointed out that Step 2 and 3 are crucial steps to mainstream CC in value chain because only after identification of climatic risks, the necessary climatic actions can be implemented to address those risks. One of the participants asked, *'Isn't it necessary to find the vulnerable group first?'* to which Prabin Man Singh replied, *'yes it is and the vulnerable groups have to be identified during VRA process.'* He further added that in value chain process, economic angle is given more priority but it is also equally important to consider climate angle for sustainable future of the projects.

He showed more examples of climate risks and adaptation interventions in the value chain process such as - Seeds during the supplier stage may have climatic risks like high temperature, humidity and salinity. Adaptation intervention such as heat tolerant varieties, diverse seeds and tested seeds may cope with such climate risks. During production stage, declining pasture land, heat stress, and soil erosion may affect the value chain which can be addressed by adaptation measures such as livestock farming, improved rangeland, mixed crops and so on.

5(M) Session XIII: Exercise 3: Adaptation interventions to minimize climate risks in the value chain



Facilitated by Prabin Man Singh this session was a group work to find the value chain of various products allocated to them. Based on the above session to mainstream CC in value chain, 4 groups were formed for this exercise. The

products given were- dairy, fish, vegetables and gender. Their job was to make a value chain intervention on the products its climatic risks and adaptation intervention to minimize the climatic risk. All four groups came up with interesting ideas listed in the table below-

Group 1- Team dairy

	Value chain intervention	Climate risk	Adaptation Intervention
	<u>Input level:</u> Farmer orientation Shed improvement Grass seed support Chilling Vat installation	Cold wave, heat wave, flood lack of nutritious feed incidence of disease lack of climate risk tolerant breed Lightning, Voltage shortage, irregular electric supply	Knowledge transfer Flood and drought tolerant seed support Improved type of breed support Backup electricity supply (inverter)
	<u>Processing level</u> Milk collection Curd/ghee/paneer production	Heat stress Vehicle use	Plantation around industries Minimal use of vehicles

Group 2- Team vegetables

	Value chain intervention	Climate risk	Adaptation Intervention
	<u>Production-</u> Land preparing Sowing tending	Soil characteristics Irrigation access Fertilizers farm yard manure Climate information Lack of labour/technology Lack of proper tools Climate information	Soil test and crop selection Crop insurance Climatic information access (CIA) Capacity building training Climate resistance technology (drip, pond) Disease and pest management knowledge
	<u>Harvest:</u>	Climate information Technology Storage knowledge	Access of climatic information Access to technology (solar dryer) Capacity building

Group 3- Team Fishery

	Value chain intervention	Climate risk	Adaptation Intervention
	Fish pond management	Flood and risk of being swept away Source contamination Drought/heating/cold Snakes and other animals that feed on fish	Net/ high dam Riverside gabion wall Water source conservation Deep solar boring Alternate water source management
	Fish species	Low production Supply problem	Trial production of alternative species Locally produce fish fry
	Feed	Scarcity Quality	Local production of feed (training) Keeping multi species in pond Keeping duck or pigs
	Disease	Water source contamination	Water source management Prevention measure of diseases Training to farmers
Supply	Transportation disturbances Market blockage due to external factors	Cold storage Alternative market management processing	

Group 4- Team Gender

	Gender specific areas	Climate risk	Adaptation Intervention
	Health and sanitation Agriculture and food security Education Animal husbandry Drinking water	Flood can affect health and sanitation Pregnant and lactating women under high risk Malnutrition' drinking water scarcity problem during menstruation water borne diseases	Identification of place with less prone to flood risk Safe house construction Nutritious food Water purifier and clean water toilet construction sanitary napkins management helpline

5(N) Session XIV: Practical tips on Proposal writing:



One of the most important parts of this training was to make the DCA partners conceptually clear about climate change and then utilize that knowledge to build up the proposal on climate change projects or mainstream CC angle in any projects or programmes. Prabin Man Singh gave some practical tips on writing climate proposals. He shared key elements of project proposal based on which DCA partners can submit the proposals, it included-

- Background
- Theory of change
- Objectives
- Outcomes
- Outputs
- Activities
- Budget

He further explained in detail the above key elements: **Background** – to show the climatic conditions of project areas – temperature and rainfall, disaster profile and need to do VRA; **Theory of change**- how CC is connected to your work; **Objective** setting- should be climate smart and identify problems; **Outcomes**- should contribute to desired impact; **Outputs**- should provide tangible deliverables.

Coming to the end of the session he added that at activity level the climate risk can be minimized through added adaptation interventions as shown in the group work. These types of activities and interventions can be built in with the proposal based on the priority of your organization.

5(O) Session XV: Feedback collection

The participants gave their feedback in writing as well as verbally. They appreciated the organizers and trainers for the methods, the use of simple language and a lot of examples, and the art of the trainers to engage the participants, helped them to learn more than they had expected. They also expressed their confidence to share the learning with their peers and fellow colleagues in their respective organizations. Some of the participants suggested that more time should have been given in the proposal writing tips session with more technical examples, and such training should also be provided to local government officials for proper implementation of plans and policies.

5(P) Session XVI: Closing session



The closing of the three days training was facilitated by Prabin Man Singh, thanking the participants for their active participation and the way they were very inquisitive about the subject matter and enthusiastic to learn more made the programme fun and fruitful. He also encouraged them to make the best use of the

knowledge they gained and also integrate climate and environment protection activities in their regular programmes.

Raju Pandit Chhetri urged the participants to use the knowledge they have gained in their organization and municipalities and contact PRC for any type of support they need to initiate CC and environment related activities. He also added if they wish to submit climate smart proposals, they can seek help from PRC for technical support and information.

Rajendra Khanal from DCA concluded the training by emphasizing a point that nature is vital and we need it so we have to protect it. He further informed the participants that for 2019 proposal or any climate related proposal the tips given at the end are very helpful and it should include value chain, climate change and theory of change which is a critical pathway for successful proposal writing. Lastly, he thanked the organizers and participants for such engaging and fruitful training session.

Annex

Annex 1: Participants List

S.N	NAME	ORGANIZATION	GENDER	DESIGNATION	CONTACT
1	Karuna Bishwakarma	DWO, Accham	F	PC	9844407888
2	Tila Bishwokarma	FEDO, Banke	F	Co-President	9825533063
3	Sabitra Ghimire	DWRF, Kailali	F	ED	9848424273
4	Rosha Thapa		F	PC	9843229505
5	Nirmala B.K		F	BM	9868585451
6	Purnakala Rai	Jagaran Nepal, Kailali	F	PC	9851068623
7	Prabin Man Singh	Prakriti Resources Centre	M	PD	9851150074
8	Sarita Puri	INSEC, Kailai	F	PC	9856024210
9	Sneha Rai	Prakriti Resources Centre	F	PO	9860040938
10	Udit Aryal	MDO, Accham	M	PC	9867761986
11	Keshav Rawal		M	ED	9759000972
12	Ramesh Bhul	EDC, Doti	M	PC	9848604772
13	Krishna Thapa		M	EC member	9848434760
14	Madhav Bhattarai	SOSEC, Dailekh	M	PC	9841927211
15	Kalpana Thapa		F	BM	9848097259
16	Sarwan Chaudhary	KVS, Saptari	M	PC	9854038452
17	Parwin kumarsaniya		M	BM	9804730070
18	Umesh Shrestha	Action Nepal, Dhading	M	PC	9845244814
19	Kamal raj Dhungana		M	BM	9851180933
20	Chandra Bahadur Devkota	Unification Nepal, Gorkha	M	PC	9856040421
21	Tulasi Raj Dhital		M	BM	9846029460
22	Indeshwar Mandal	LIBIRD, Pokhara	M	PC	9849095560
23	Khem Chowi Subedi		M	TO	9846033295
24	Kabita Chaudhary	TWUC, Bardiya	F	BM	9822557189

25	Santosh Parajuli		M	PC	9841157760
26	Rajkumar sunar	NNSWA, Kanchanpur	M	PC	9848759328
27	Gauri Sarki		F	BM	9848996074
28	Raju Pandit chhetri	Prakriti Resources Centre	M	ED	9841184488
29	Rajendra Khanal	DCA	M	RPO	9851248026

Annex 2: Programme schedule

S.N	Time	Sessions	Responsibility	Remarks
Day 1				
	8:00-9:00	Breakfast		
	9:00-9:30	Welcome and Introduction		
	9:30- 10:00	Objective Sharing and Expectation Collection		
	10:00- 10:30	Break		
	10:30 – 12:30	What is Climate Change? Impacts	Prabin Man Singh	
	12:30 – 13:30	Lunch		
	13:30 – 15:00	Adaptation? Mitigation? Loss and Damage?	Raju Chhetri	
	15:00- 15:30	Break		
	15:30 – 17:00	National and International Policies, Plans and Programmes on Climate Change	Raju Chhetri	
		Exercise 1: Each partner organization prepare a list of project/ activities they had done on climate change.		
Day 2				
	8:00- 9:00	Breakfast		
	9:00- 9:30	Review of Day 1		
	9:30 – 11:00	Presentation: Sharing by Partner Organizations of Exercise 1	Prabin Man Singh	
	11:00 -11:30	Break		
	11:30 – 12:30	DanChurch Aid's Climate Change strategy	Raju Chhetri	
	12:30 – 13:30	Lunch		
	13:30 – 15:00	Understanding vulnerability risk assessment: What? Why? When? Where? How?	Prabin Man Singh	
	15:00 – 15:30	Break		
	15:30 – 17:00	Vulnerability and Risk Assessment Framework : National Adaptation Plan's model	Prabin Man Singh	

		End of Day 2		
	Day 3			
	8:00 – 9:00	Breakfast		
	9:00- 9:30	Review of Day 2		
	9:30 -11:00	Revisiting Project Cycle Management from Climate change lens	Raju Chhetri	
	11:00-11:30	Break		
	11:30 – 12:30	Designing climate smart objectives, results and activities	Prabin Man Singh	
	12:30 -13:30	Lunch		
	13:30 – 15:00	Group work: Designing climate smart objectives, results and activities		
	15:00- 15:30	Break		
	15:30 -16:00	Closing Session		