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Tracking Adaptation and Measuring Development (TAMD) in Nepal

Quarter 1 Report -
Feasibility testing phase

Tracking Adaptation and Measuring Development (TAMD) Project Nepal: First Quarter Report

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Prepared by

Dr. Dinesh Chandra Devkota;

Ms. Prabha Pokhrel; Mr. Jhank Narayan Shrestha;

Mr. Narayan Joshi; Ms. Hannah Morrill

Submitted by:



Integrated
Development
Society Nepal

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This report is prepared based on the scoping interventions for TAMD feasibility study in Nepal done by IDS-Nepal and submitted to IIED.

It is based on meeting with key officials and a review of secondary information of the interventions.

Executive Summary

Nepal is the most climate vulnerable country in South Asia and is leading the Least Developed Countries (LDC) in the international arena. Nepal has been concentrating its efforts to address climate change issues at a national level, developed National Climate Change Policy, prepared the NAPA in 2010 and developed the Local Adaptation Plan for Action framework, which is currently being implemented.

In this context, tracking adaptation climate change and measuring development to evaluate the effectiveness of the interventions in the country is of great interest for both the Government of Nepal and development partners. The International Institute for Environment and Development (IIED) has completed a scoping study in March 2013. As a follow up to the previous study, the TAMD feasibility study has been started by IIED and Integrated Development Society (IDS) – Nepal in April 2013 and will run until Mar 2014.

Realizing the importance of a TAMD tool in the Nepalese context, the Government of Nepal, Ministry of Science Technology and Environment (MoSTE) has formed a ten member Coordination Committee (CC) headed by the Joint Secretary of Climate Change Division/MoSTE. Under advice and guidance from the Committee, IDS – Nepal and IIED will finalise appropriate interventions and sites to test the feasibility of the TAMD tool for which this works will be supportive.

Based on preliminary assessment of the various interventions, the First Quarterly Report has been produced to communicate the progress of the work. After an in-depth data analysis, LGCDP, LFP/ LAPA and CADP-N/NCCSP have been selected to form the short list of three interventions to take forward. The LFP, CADP-N/NCCSP and LGCDP are recommended as they meet the criteria set forth below. Two alternative shortlists have been generated for district selection based on the presence of interventions and vulnerability. The districts on this shortlist are Rukum, Achham, Mugu, Kalikot, Udaypur and Jajarkot.

Further analysis of historical data sets of the selected intervention will be done and field study tools will be developed and pre-tested. A proposal will be prepared and the Coordination Committee meeting will be called for the discussion and approval of the intervention and district selection. Selection of VDCs will also be completed in consultation with selected interventions, DDC and VDC and will be subject to further field verification.

Based on the chosen TAMD indicators, survey tools will be developed pre-tested and, finally, the refined TAMD tool will be tested in multiple locations to generate a cross-cutting baseline.

Based on the field study, the TAMD framework will be modified and shared among the key stakeholders for inputs. A national level workshop will be organized to discuss the findings and to enrich the framework. Finally, a final report will be produced and the TAMD framework will be finalised for submission to MoSTE.

Acronyms

ADB	Asian Development Bank
AP	Adaptation Plan
ANM	Assistant Nurse Midwife
CAPA	Community Adaptation Plan of Action
CADP-N	Climate change Adaptation Design and Pilot phase Nepal
CHAL	Chitwan Annapurna Arc Landscape
CBS	Central Bureau of Statistics
CC	Coordination Committee
CO	Community Organization
CBO	Community Based Organization
CCU	Central Coordination Unit
CDO	Chief District Officer
CFUG	Community Forest User Group
CF	Community Forest
CRM	Climate Risk Management
CRM	Community Resilience Management
CV	Climate Vulnerability
DAG	Disadvantaged Group
DDF	District Development Fund
DANIDA	Danish International Development Agency
DCCCC	District Climate Coordination Committee
DCU	District Coordination Unit
DDC	District Development Committee
DFCC	District Forest Coordination Committee
DFID	Department for International Development of UK government
DHM	Department of Hydrology and Meteorology
DIU	District Implementation Unit
EU	European Union
EFLG	Environment Friendly Local Governance
FY	Fiscal Year
GDP	Gross Domestic Product
GIS	Geographic Information Systems
GLOF	Glacial Lake Outburst Flood
HDI	Human Development Index
HH	House Hold
IIED	International Institute for Environment and Development
I/NGO	International Non-Government Organization
ICIMOD	International Centre for Integrated Mountain Development
IDS-Nepal	Integrated Development Society-Nepal
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IGA	Income Generating Activities
ISSET - N	Institute for Social and Environmental Transition – Nepal
JICA	Japan International Cooperation Agency
LAPA	Local Adaptation Plan of Action
LDC	Least Developed Country
LFP	Livelihoods and Forestry Programme
LGCDP	Local Governance and Community Development Programme
LSGA	Local Self Governance Act

MC	Minimum Conditions
MP	Management Plan
MoFALD	Ministry of Federal Affairs and Local Development
MoHA	Ministry of Home Affairs
MOAD	Ministry of Agricultural Development
MLD	Ministry of Local Development
MLV	Mountain-specific Livelihood Vulnerability
MoSTEM	Ministry of Science, Technology and Environment
MSFP	Multi Stakeholder Forestry Project
NAPA	National Adaptation Programme of Action
NCCSP	National Climate Change Support Programme
NGO	Non Government Organization
NLSS	Nepal Living Standard Survey
NUKCEF	Nepal UK Community Forestry Project
NeKSAP	Nepal Food Security Monitoring System
NPC	National Planning Commission
OP	Operation Plan
PAF	Poverty Alleviation Fund
PBGS	Performance Based Grant System
PM	Performance Measures
PPCR	Pilot Program for Climate Resilience
PRS	Poverty Reduction Strategy
PVAT	Poverty and Vulnerability Assessment Tool
REDD	Reduction of Emission from Deforestation and Forest Degradation
RWSSFDB	Rural Water Supply and Sanitation Fund Development Board
SPCR	Strategic Program for Climate Resilience
SDC	Swiss Development Committee
TAMD	Tracking Adaptation and Measuring Development
TWG	Thematic Work Group
TOC	Theory of Change
UC	User Committee
UG	User' Group
UN	United Nations
UNICEF	United Nations Children Fund
UNDP	United Nations Development Programme
UNV	United Nations Volunteer
VDC	Village Development Committee
WFP	World Food Programme

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TRACKING ADAPTATION AND MEASURING DEVELOPMENT (TAMD)
(A framework for assessing climate change adaptation and development efforts in Nepal)

I. INTRODUCTION AND OVERVIEW

Nepal is the most climate vulnerable country in South Asia largely due to its topography and climatic complexity. Temperatures have increased over recent decades and changes have also been observed in precipitation characteristics. Climate change has a direct effect on water resources, biodiversity, agriculture, human life and livestock because disasters, such as drought, floods, and landslides, have damaging effects. Effects of the climate-induced hazards are also challenging the development process and having disproportionate impacts on vulnerable people residing in hazard prone areas.

Across Nepal, a variety of interventions target different sectors and many both directly or indirectly target climate vulnerability even if they have a specific development focus. Moreover, investment in climate changes adaptation measures is increasing throughout the government, semi-government and NGOs/INGOs sectors. However, national level frameworks are missing to assess climate interventions and an evidence-based intervention approach is required to shape future investments, as the government needs to report on delivery to the development partner communities and make sure climate resilience as being achieved at a local level.

The Integrated Development Society Nepal (IDS-Nepal) and the International Institute for Environment and Development (IIED), U.K., are working to prepare a "Tracking Adaptation and Measuring Development (TAMD) framework" for Nepal. This work is under direct coordination and guidance from a Coordination Committee (CC), formed in the Ministry of Science Technology and Environment (MoSTE) and chaired by the Joint Secretary, Climate Change Division/MOSTE. It includes representatives from the National Planning Commission (NPC) and other concerned ministries (MoFALD, MoA, MoFSC, MoE) IDS-Nepal, ISET-Nepal and IIED (see Annex 1).

1.1 Methodological proposal

The main purpose of the TAMD feasibility study is to look at the impact of different interventions on development and resilience by going beyond the reported outputs and assessing how they have affected households and district resilience. It will help to see whether interventions are on track and compare their impacts on resilience at both the district and household levels. This will also contribute to a national framework for evaluating the climate change programme of the Government of Nepal.

Evaluation context: To understand the contributions and linkages of a set of interventions to climate resilience and climate risk management in Nepal through assessing matched communities and intervention-specific theories of change.

Main approach: Take sample communities from three adaptation/development interventions matched for climate risk, vulnerability and poverty and reconstruct a baseline from primary and secondary sources across Track 1/Track 2 (T1/T2) indicators. This historical picture will allow an assessment of climate risk

in development interventions that may lack climate-specific indicators and create a “before” data point for the TAMD analysis.

We then plan to collect data on this reconstructed baseline (the core indicators) and other supplementary T1/T2 indicators in matched communities that have experienced the implementation of an intervention. Local theories of change for attribution/contribution can then be explored.

We plan to use unit-less scores and categorical indicators to link the effectiveness of interventions in reducing vulnerability and attribution of local theories of change to the interventions, as well as exploring the link between institutional climate risk management and community resilience.

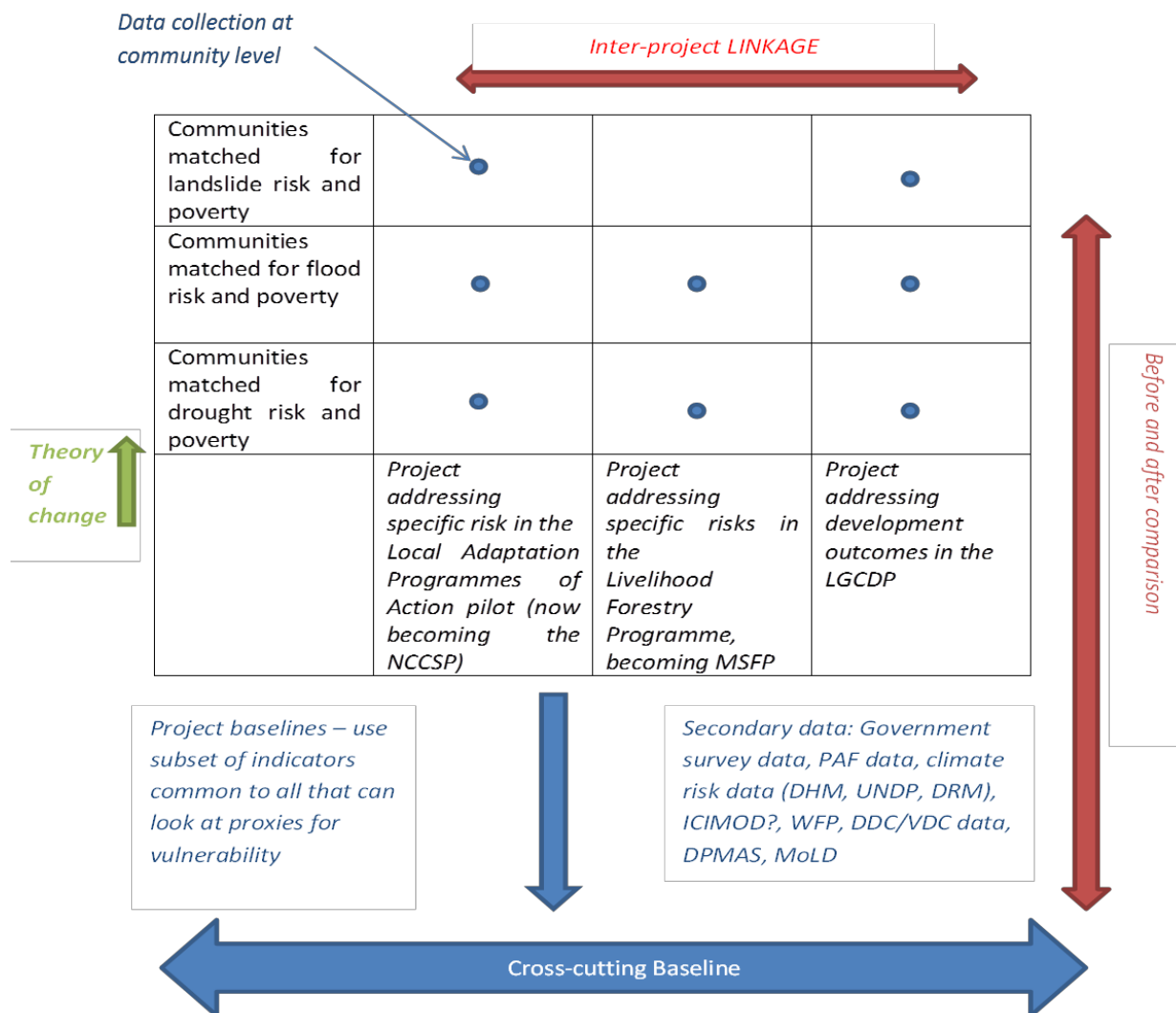
The key added value of this approach is that it will go beyond output (and some partially outcome based) approaches to understand changes in vulnerability in the target communities through a set of proxies. It will also add the element of linkage between interventions through a matching methodology and unit less scores, and will test the contextualizing baselines to add climate risk to development interventions.

In terms of testing the feasibility of the TAMD framework, this approach will offer an operationalization of T1 and T2 indicators and the theory of change between them. It will also offer a demonstration of the data collected and the provisional results from pre- and post-intervention points as well as comparisons between matched communities. It will align with national systems of data collection and M&E at appropriate levels, and use these as a starting point to consider what is possible and feasible within current systems.

Proposed research steps:

- 1) Attempt to create a T2 baseline across project areas through a sub-set of indicators common to all supplemented with other data sources to add climate risks. This may also be done through the conversion of different indicators to unit-less scores.
- 2) Assess possibility of T1 baseline through project baselines, DDC/VDC data etc.
- 3) Choose project locations that were selected for either the piloting or main phase of a project intervention.
- 4) Match communities or settlements for climate risk, socio-economic data etc. within intervention locations
- 5) Design and conduct HH survey/PWR/ToC assessments at a community level in different intervention locations both using the baseline components, T1 indicators and supplementary, intervention-specific T2 indicators. Convert this data to unit-less scores.
- 6) Analyse the attribution component, utility of T1/T2 approach, validity of matching
- 7) Analyse components that might dissolve into a national system (LAPA, local development, DPMAS)

Figure 1: Proposed Methodology

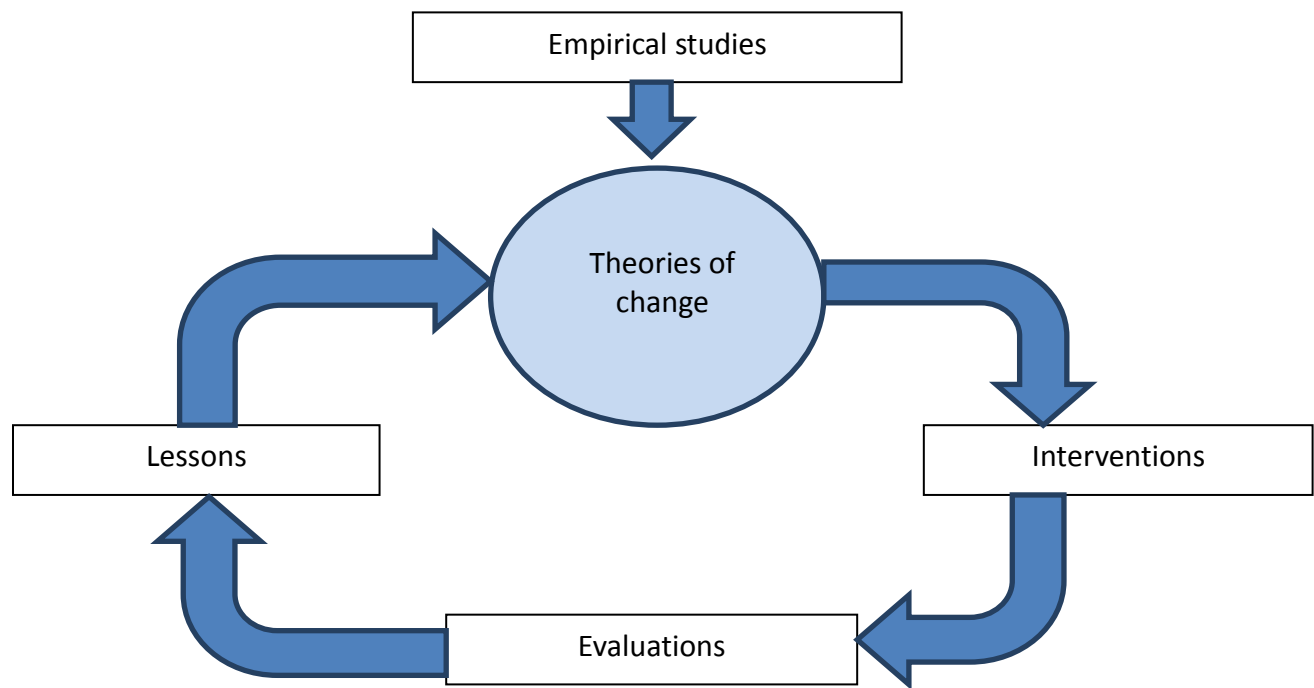


1.1.1 Theories of Changes

It is important to establish the "Theories of Changes (ToC)" in programming and evaluating an adaptation and development intervention (see Figure 1). It is useful to map the sequence of a development intervention from inputs to outcomes by examining assumptions (i.e. links between inputs, output, outcomes and impacts), reflection and dialogues among stakeholders. It links development and adaptation activities with better integration of climate change considerations into development planning and investment that in turns linked to reduced vulnerability, enhanced resilience and greater adaptive capacity in poor populations. It helps to identify indicators for evaluation and provide lessons for improvement.

- Evidence from empirical studies
- ToC based on empirical studies
- Evaluation process (i.e. within TAMD)

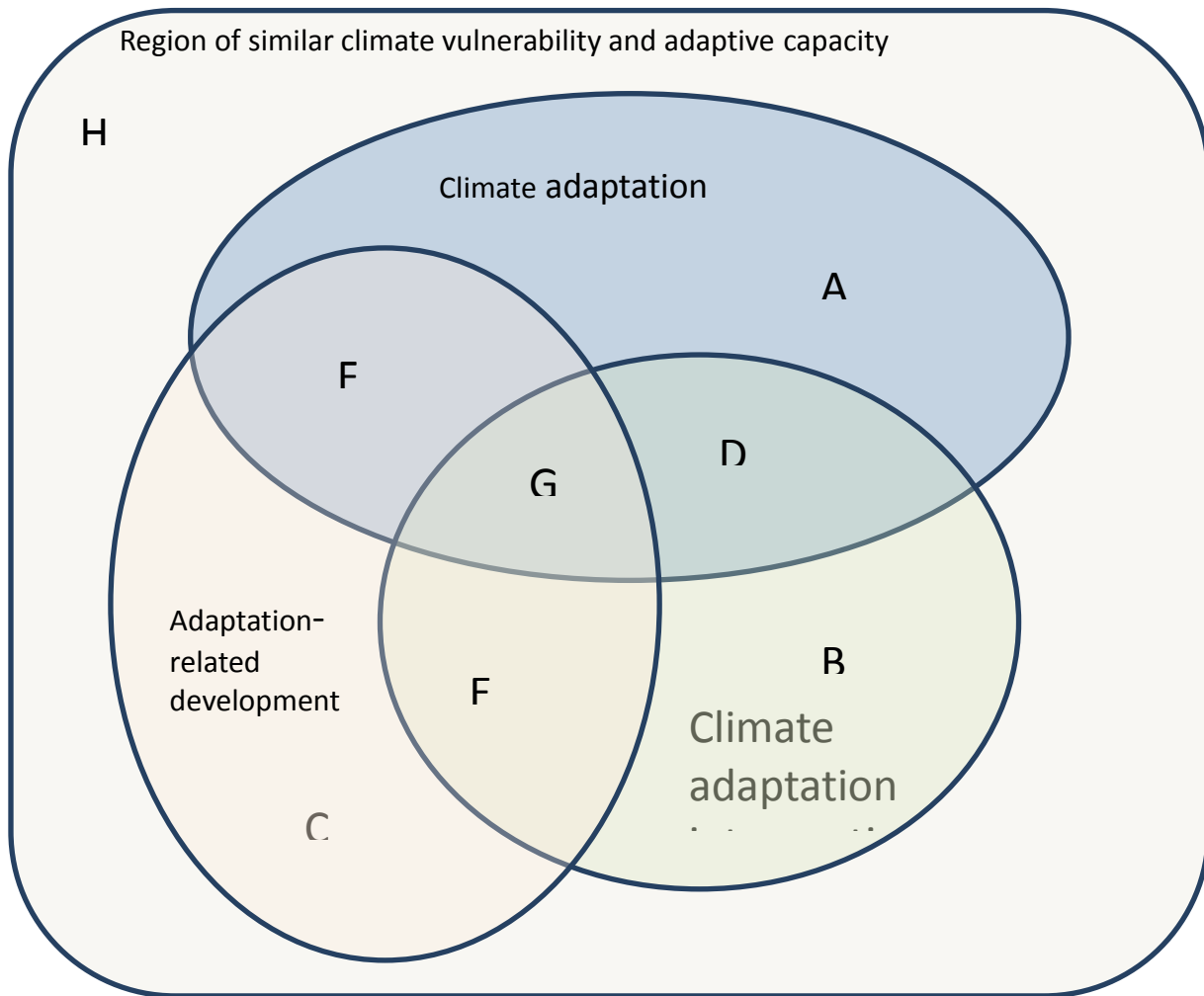
Figure 2: The role of theories of change in attributing outcomes and impacts



1.1.2 Hypothesis

The application of the TAMD framework in a quasi – experimental model will allow comparison across populations with the same climate vulnerability characteristics and a similar range of adaptive capacity both within and outside the adaptation areas, thus allowing intervention effectiveness to be assessed (Brooks et al, 2013).

Figure 3: Hypothetical scenario whereby effects on different interventions can be compared



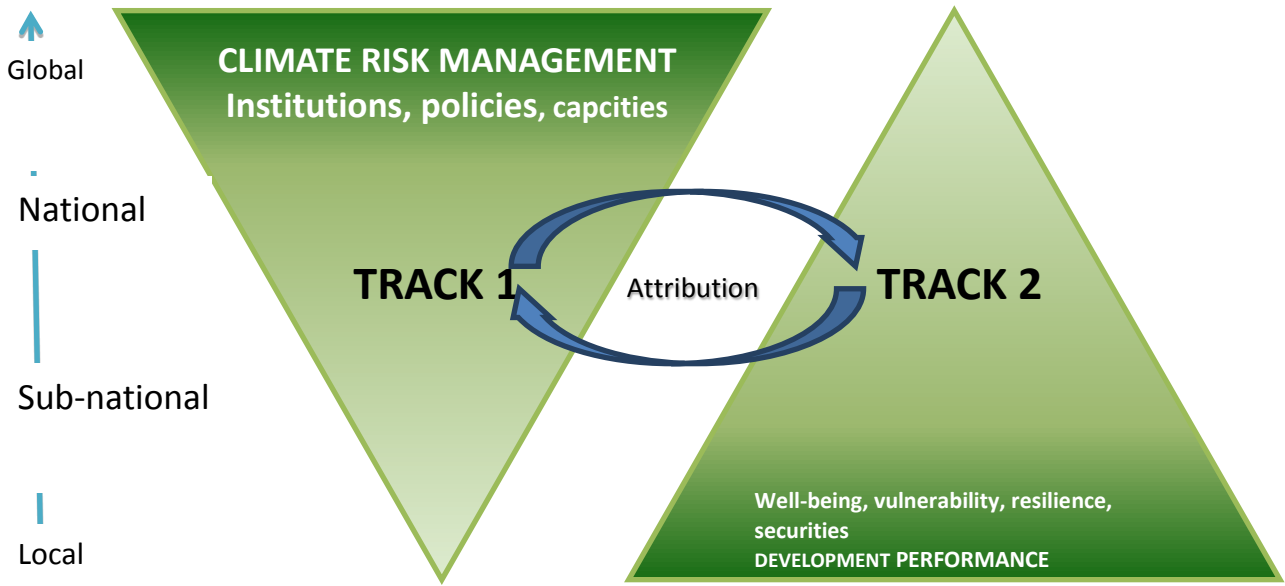
1.2 TAMD Framework

The TAMD framework offers a 'twin track' framework for use in a variety of contexts and at different scales to assess and highlight linkages and the effectiveness of interventions. It is a cutting edge initiative to help build national evaluative frameworks for climate adaptation that aims to focus on efficacy (IIED, 2013). It is based on the theory of change that (i) improved climate risk management decisions will lead to better development outcomes; and (ii) M&E of climate risk management and climate vulnerability proxies in beneficiary population will enable them for improved decision making (Brooks et al, 2013). Hence, it will help to achieve effective planning and implementation of climate interventions and documentation of evidence.

The M&E frameworks demonstrate the adaptation project impact on household or community vulnerability including their ability to cope with the adverse consequences of climate change. It reflects the global priorities and indicators based on local realities and concern. The framework allows for accurate and informative evaluation of outcomes, comparing baseline with final outcomes, vulnerability

and adaptive capacity indicators taking account of climate and development context. It facilitates learning around the climate change adaptation, measure vulnerability change effectively and addresses needs of the development partners to demonstrate results in fairly short periods of time.

Figure 4: Basic representation of the TAMD Framework, illustrating climate risk management Track 1, the development performance Track 2 and links between the attributes



In order to develop a TAMD-style framework, the team will consult appropriate organisations and officials and finally prepare a TAMD framework that will be tested through selected interventions, areas and sectors.

TAMD work has been delayed due to various required national processes, such as the formation of climate change and hiring of human resources. However, the formation of a CC in the MoSTE is the major breakthrough of the Quarter. Information on various data sources and interventions have been explored through research and meetings (see Annex 1) with different ministries, development partners and various programmes. This has helped identify potential interventions for the TAMD Feasibility Study.

1.4 Mainstreaming climate change into development planning

Planning for climate change and development is important and mainstreaming climate change into development planning has become a focus for the Government of Nepal in order to achieve more progress. For example, one focus of the LGCDP Phase II is to integrate a set of environment-friendly indicators into the established local governance framework under the LSGA. The goal of environment friendly local governance guideline (EFLG) is to use the existing framework of local governance and development and add in the climate change adaptation element. This coupling of the two areas is a concept that is being pursued through the NCCSP LAPAs and LFP LAPAs. Both programmes intend to provide development mechanisms as a means to adapt to climate change. This has implications for the future of climate change adaptation; allow more widespread implementation of projects under a development heading.

1.5 Policy Guidance and Implementation Mechanism of Study

The IDS-Nepal, with technical support from IIED is conducting the TAMD feasibility study with funding support from Department for International Development (DFID) preparing a TAMD framework for Nepal by assessing different interventions from different institutions to suit to the requirement and local context. The TAMD work is initiated with overall leadership of Dr. Dinesh Chandra Devkota among other team members Ms. Prabha Pokhrel, Dr. Susannah E. Fisher, IIED Researcher, Jhank Narayan Shrestha, technical lead, Narayan Joshi, research officer and a volunteer intern from Harvard University, Ms. Hannah Morrill.

1.6 Scoping of Interventions in Nepal

Different interventions have been re-examined and the availability of relevant information was explored. Information availability of particular interventions was assessed to analyse the possibility and suitability for the TAMD feasibility assessment. Review of relevant documents and project objectives was carried out. Further review of the status and scale of baseline data was carried out – such as whether it was collected or not, baseline survey reports, evaluation report, M&E framework/tools and indicators to select interventions. The following interventions have been subjected for scoping for the study.

Scoping considered the intervention objective, type, sector, scale and duration as well as baseline data, M&E system and availability for appraisal.

II. SELECTION OF INTERVENTIONS FOR FEASIBILITY STUDY

2.1 Criteria for short listing of interventions

The short-listing of interventions was completed based on the following criteria, in order of priority:

- 1 Objective of intervention;
- 2 Status of implementation;
- 3 Scale of intervention;

- 4 Wider significance of the intervention;
- 5 Availability of baseline data /tools indicators/report;
- 6 Availability of M&E framework/system – tools/indicators;
- 7 Location of intervention - climate vulnerability

TAMD will use existing baseline data complemented with climate data to test its feasibility and will integrate the existing M&E system from interventions with historical baseline data/report to see effects.

2.2 Details on Selection of Projects for TAMD Study

Based on the assessment of interventions undertaken in the appraisal phase and in preparation of the feasibility study LFP, NCCSP and LGCDP are the proposed interventions for the TAMD feasibility study. This is because they all have objectives that include institutional changes as well as household and community resilience and development. Therefore they offer the opportunity to look at attribution between the two tracks. In terms of the other selection criteria they are also in a fairly advanced status of implementation (with some projects completed) and are significant for the future of climate change in Nepal as they are pre-cursors to future projects. The three interventions also include both adaptation and development focuses and act at a similar scale (VDC/community).

We also hope to include some of the SPCR/global indicators and the 20 indicators to be tracked by the MoSTE to give the TAMD findings wider relevance and applicability. The LAPA Framework and three interventions will now be described in detail.

The Local Adaptation Plan of Action (LAPA) framework

The LAPA is a process of local adaptation planning adopted by the MoSTE as the prototype for local adaptation in the country. LAPAs support the implementation of the NAPA, and particularly respond to the NAPA priority for community-based adaptation. LAPAs are being used in a variety of adaptation interventions as the basis for identifying community concerns and priorities.

The LAPA uses a bottom-up planning process that is important to achieve common understanding within the communities as to the most significant climate risk and hazards, and those in need of urgent attention. It helps to harness rich local knowledge and perceptions and establish a vertical link between the national-scale from which top down assessments of current and future climate risks can be utilised¹.

LAPA preparation involves a multi-stakeholder team, including vulnerable communities, through a decentralized approach, and focuses on strengthening mechanisms for ensuring consolidated and coordinated adaptation responses. Climate resilience is built through the cross-sector coordination that develops. Mainstreaming climate change adaptation into existing local development planning particularly at the district and village levels ensures a bottom-up perspective to climate resilience development pathways (MoSTE, 2011). There are seven key steps in identifying and preparing the LAPA: (i) Climate change sensitization; (ii) Climate vulnerability and adaptation assessment; (iii) Prioritization of options;

¹http://www.napanepal.gov.np/pdf_reports/Local%20Adaptation%20Plan%20of%20Action_discussion%20paper.pdf

(iv) Development of LAPA; (v) Integration of LAPA into the planning process; (vi) Implementation of LAPA; and (vii) assessing progress.

External funding has been important for the piloting, design and consultation processes of the LAPA framework. In 2010, CADP-N LAPA piloting took place in ten districts, leading to the formulation of the LAPA framework, which has now been endorsed and adopted by the government of Nepal as the national framework for implementing NAPA at the local level. DFID and the EU have also committed significant funds to the development and implementation of LAPAs in 14 Mid and Far West Districts through the NCCSP.

2.2.1 Livelihood Forestry Programme (LFP)

Introduction

LFP was designed based on lessons learnt from the Nepal-UK Community Forestry Project (NUKCFP) and implemented in 15 districts of Nepal. It received £18.67 million from DFID-UK with the goal of reducing vulnerability and improving the livelihoods of the poor by focusing on forestry. It was implemented from April 2001 to March 2011, and used approaches such as enhancing the assets of rural communities through more efficient, equitable, and sustainable use of forest resources, to achieve sustainability (LFP, 2004). LFP was also designed to strengthen policy at the district and national level.

LFP promoted Community Forest User Groups (CFUGs) to manage forest resources and to assist the poor, marginalized and women to assert their rights and improve group equity. Its efforts were focussed on reducing poverty and vulnerability. It further facilitated the development of District Forest Plans and focused on increasing the forestry sector's contribution to poverty reduction (LFP, 2004).

During the LAPA process, two modalities were adopted: (i) CAPA that developed into a LAPA; and (ii) LAPAs were directly prepared at the VDC level.

Implementation

The LFP was implemented in 15 districts (Dang, Rolpa, Salyan, Rukum, Pyuthan, Banglung, Myagdi, Parbat, Nawalparasi, Kapilvastu, Rupandehi, Dhankuta, Terhathum, Sankhuwasabha and Bhojpur) and supported more than 5,000 CFUGs. These CFUGs covered more than 660,000 Households, lifting an estimated 1,326,000 people out of poverty (LFP, 2013). LFP's focus was on sustainable management of forest resources for livelihoods of rural poor including capacity building of forest users, such as forest managers and service providers. Adaptation plans included livelihood diversification, income-generating activities for poor and excluded households and small-scale infrastructure development.

Specific tools and techniques were used during the CAPA and LAPA process such as Participatory Well Being Rankings (PWBR) and a Forest User Groups (FUGs) categorization tool. These were reviewed and assessed in the context of climate change.

2.2.2 CADP-N/ LAPA Pilot/Nepal Climate Change Support Programme (NCCSP)

Introduction

CADP-N

"Support for Climate Change Adaptation in Nepal – Design and Piloting Phase (CADP) – Nepal was the project that tested the feasibility and effectiveness of conducting LAPAs to identify and address the

climate change adaptation needs of the climate vulnerability. CADP-N partnered with 7 different partners (i.e. BNMT, RIMS, NEWAH, Li-Bird, ISET, RSDC and Rupantaran-Nepal) and initiated LAPA process in 12 locations (Ilam, Achham, Udayapur, Kaski, Arghakhanchi, Mustang, Kapilvastu, Kalikot, Dhading, Pyuthan, Rukum and Nawalparasi) in Nepal (Simon et.al, 2011).

- i. RIM : Dhading;
- ii. NEWAH : Udayapur;
- iii. Rupanteran- Nepal: Pyuthan, Rukum and Nawalparasi
- iv. RSDC :Kapilvastu and Kalikot,
- v. Li-BIRD : Rupa Lake Watershad, Kaski
- vi. BNMT : Ilam and, Achchham
- vii. ISET : Arghakhanchi and Mustang

LAPA Piloting

The MoSTE took up the LAPA concept under the NAPA and designed and implemented LAPAs in 10 districts (Bimal et al, 2010). During the Nepal Climate Change Support Programme – Start up Phase (NCCSP) (April, 2012 – July 2012), Rupantaran with partnership of HTSPE and worked to implement LAPAs in 30 VDCs (Repantaran Nepal, website) of 5 districts (Dialekh, Jajarkot, Bardiya, Rukum and Dang).

2.2.3 Nepal Climate Change Support Programme (NCCSP)

The GoN is implementing NCCSP across a 4-year period (2011 – 2015) with a total of £14.6m of funding from DFID and EU, along with technical assistance from UNDP. NCCSP aims to implement 70 LAPAs in 14 districts for immediate support to climate vulnerable communities in the Mid and Far West of Nepal. This will be implemented in the spirit of the National Framework for Local Adaptation Plan for Action (LAPA), endorsed by the Government of Nepal in November 2011 (GoN, 2013).

Implementation

During the implementation of NCCSP, innovative mechanisms of adaptation were used to test the convergence of mitigation and adaptation options. Climate change-related measures are integrated into the LAPAs and will be piloted across all districts within the Karnali and Rapti river basins. It will also establish a mechanism for sharing and learning from adaptation interventions among different stakeholders at the district and national levels.

NCCSP is implementing LAPAs in 14 districts (Humla, Mugu, Dolpa, Bajura, Jumla, Jajarkot, Rukum, Achham, Dailekh, Rolpa, Kailali, Bardiya, Kalikot and Dang) endorsed by the Government of Nepal in November 2011.

2.2.4 Local Governance and Community Development Programme(LGCDP)

Introduction

The LGCDP aims to bring about improvements in the living standards of the population along with poverty reduction through better local governance with a democratic value system and inclusive development efforts. The Programme is run by the Ministry of Federal Affairs and Local Development (MOFALD) with multi-donors fund including the World Bank, DFID, UNDP/UN Agencies, has been implemented at national levels to DDC, VDC and municipality.

Phase I of LGCDP began in July 2008 and was completed in July 2012. Data collection occurred across three of the fiscal years 2008/9, 2009/10 and 2010/11. All 75 districts were covered by the LGCDP and the progress of each district was tracked across the Programme's lifetime providing unit-less scores that can be compared. The Programme was operated in 58 municipalities and 3,915 VDCs. Phase II of LGCDP is currently in the planning phase and is likely to incorporate MoFALD new Environmental-Friendly Local Governance (EFLG) framework. Climate change is the main part of the EFLG that adopts awarding approach with principle of devolution, making local people/local body responsible. I will create an enabling environment to participate in EFLG by DDC, VDC/Municipalities. This will result in direct environmental indicators being added to the current set of LGCDP indicators and EFLG has been endorsed across various ministries and is thus expected to be a cross-sector framework in the near future. The Programme focuses on outcomes and outputs, listed in Annex, to achieve its overall purpose of 'improved access to locally and inclusively prioritized public goods and services'.

Indicators and measures collected in the assessment phase of LGCDP were divided into Minimum Conditions (MCs) and Performance Measures (PMs) with the PMs being the more extensive metric. A detailed list of the MCs and PMs at VDC, municipality and DDC levels are described in Annex 2.3. The Programme implements a Performance-Based Grant System (PBGS) with the objectives of:

- Improving local governance/bodies performance through a penalty and incentives mechanism;
- Adapting the size of the grants to the expenditure and performance capacity in the key functional areas;
- Identifying the capacity gaps of Local Governances in different functional areas;
- Strengthening the general monitoring and evaluation (M/E) system through the annual assessment;

The PBGS is evaluated as being pivotal to productive and effective project implementation because it incentivises local competition across local bodies.

III. GEOGRAPHICAL LOCATION FOR STUDY

3.1 Geography and ecological zones

The geography and topography of Nepal means that the country can be split into three distinct ecological zones – the Terai, the Hills and the Mountain zones – and longitudinally into 5 regions – Far West, Mid West, Western, Central and Eastern regions. After scoping the major climate hazards in Nepal, locations with vulnerability to droughts, flooding and landslides were selected to be analysed in the TAMD framework. Their location and the frequency and magnitude of risk and damage were also considered.

Glacial lake outburst floods (GLOFs) were not included on the shortlist of climate risks because the greatest GLOF risk lies in Eastern Nepal and this region is inaccessible during the timeframe of TAMD.

3.2 Selection criteria

For the TAMD feasibility study the following criteria will be used for site selection:

- i. Climate vulnerability index – flood, drought or landslide risk index from the NAPA as well as the vulnerability maps included in the Annex 4
 - a. At least moderate or high as defined by the NAPA
- ii. Secondary data availability – baseline data, disaster data, WFP food insecurity data
- iii. Presence of intervention (s)
- iv. Multiple interventions in the same district
- v. Ecological zone – aim to provide meaningful conclusions that can be extrapolated to national scale, thus multiple zones need to be covered
- vi. Accessibility of region during the months August-December

Climate vulnerability (flood, drought or landslide risk index and secondary data availability are considered an important aspects to select district followed by intervention. Similarly, other aspects to be taken into account are multiple interventions, ecological zone and accessibility.

All of the interventions are, potentially inadvertently, tackling both development and climate vulnerability. The populations most in need of development interventions also happen to be the most climate vulnerable, and are concentrated in the Far Western and Mid-Western regions.

Due to the topography of the country, there is a strong correlation between climate risk and ecological zone in Nepal. It is therefore likely that VDCs that are selected because of a high flood risk will fall in the Terai and those selected for landslide risk will fall in the Hill region. The risk of drought occurs across the country and so those selected for this region may fall anywhere across Nepal.

3.3 Short listing of districts

Following the mapping of possible interventions as well as the consideration of the criteria (above), the following shortlist of 15 districts in Nepal are being considered as potential sites for the TAMD framework. These 15 districts have been shortlisted (see Table 1) based on either being in the top 3 for vulnerability ranking or the presence of two or more interventions.

Table 1: Districts by presence of selected interventions and vulnerabilities

District	LFP	NCCSP LAPA	LGCDP	CADP- N LAPA	Drought risk	Landslide risk	Flood risk	Region	Zone
Mugu	N	Y	Y	N	0.999	0.804	0.000	Mid West	Mountain
Achham	N	Y	Y	Y	0.797	0.743	0.000	Far West	Hill

Kalikot	N	Y	Y	Y	0.889	0.553	0.000	Mid West	Hill
Rukum	Y	Y	Y	Y	0.633	0.660	0.000	Mid West	Hill
Udaypur	N	N	Y	Y	0.382	1.000	0.000	East	Terai
Nawalparasi	Y	N	Y	Y	0.204	0.000	0.519	West	Terai
Pyuthan	Y	N	Y	Y	0.447	0.484	0.000	Mid West	Hill
Mahottari	N	N	Y	N	0.386	0.000	1.000	Central	Terai
Jajarkot	N	Y	Y	N	1.000	0.680	0.000	Mid West	Hill
Kathmandu	N	N	Y	N	0.717	0.898	0.000	Central	Hill
Rautahat	N	N	Y	N	0.368	0.000	0.786	Central	Terai
Chitwan	N	N	Y	N	0.251	0.000	0.768	Central	Terai
Dang	Y	Y	Y	N	0.305	0.535	0.000	Mid West	Terai
Rolpa	Y	Y	Y	N	0.615	0.755	0.000	Mid West	Hill
Kapilvastu	Y	N	Y	Y	0.381	0.000	0.333	West	Terai

NAPA Categorisation of ranking:

Very high = 1-0.56

High = 0.36-0.55

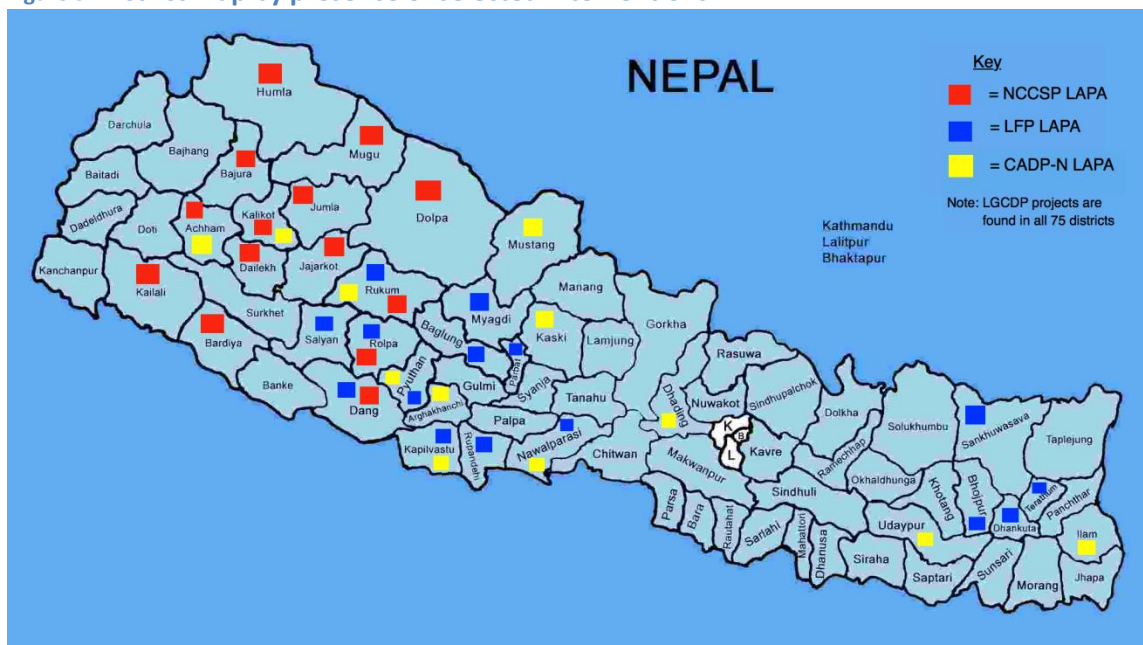
Moderate = 0.22-0.35

Low = <0.22

3.3.1 Mapping of interventions

For the reasons described in chapter 2, LFP, CADP-N LAPA Piloting, NCCSP LAPA and LGCDP have been shortlisted. Therefore, before site selection can be completed, the locations of these interventions need to be considered. These locations have been mapped below and highlight the discrepancy between the East and Western regions of Nepal in terms of the number of interventions. The map below shows that the district of Rukum contains all four of the interventions and there are seven districts that contain three interventions – Achham, Dang, Kalikot, Kapilvastu, Nawalparasi, Pyuthan and Rolpa.

Figure 5: District map by presence of selected interventions



3.4 Alternative District Shortlists

Having mapped the interventions by district, two alternative shortlists have been set out below based on the prioritisation of different factors.

A. High average across all criteria

This first alternative shortlist ranks districts by consistency across many of the criteria set out above, especially climate vulnerability.

1. Rukum
2. Achham
3. Mugu

1) Achham

The first district shortlisted is Achham, a hill district in the Far West region of Nepal with a very high vulnerability to drought and landslides as well. Although the vulnerability indices for Achham are not as high as for Mugu, the factors used in calculating these indices (exposure, sensitivity and adaptive capacity) may influence this. Achham ranks much higher than Mugu under the Human Development Index (HDI), however considering the Risk/Exposure Index also calculated in the NAPA Vulnerability Analysis, Achham is more vulnerable to drought and landslide than Mugu².

As well as a high vulnerability to both droughts and landslides, Achham also contains both the CADP-N LAPA and NCCSP LAPA interventions.

NCCSP LAPA

Five VDCs selected for LAPA preparation fell in the high vulnerability bracket (2.51-3.25)³. The five VDCs selected for LAPA preparation and implementation under the NCCSP framework were Nada, Turmakhad, Dhungachalla, Bhairabsthan and Ghodasain. These VDCs fall in the south-eastern corner of the district as shown in the Vulnerability Map. There were 29 LAPAs prepared in Nada and so the future site selection process could also focus on these communities.

CADP-N LAPA

² Drought Risk/Exposure Sub-Indices: Achham – 0.624 and Mugu – 0.611; Landslide Risk/Exposure Sub-Indices: Achham – 0.257 and Mugu – 0.044, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

³ Bhairabsthan – 3.26, Turmakhand – 3.75, Nada – 3.97, Dhungachalla – 3.32 and Ghodasain – 3.20, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

Under the CADP-N project, a LAPA was prepared in Ghodasain VDC in Achham. The LAPA preparation was carried out by the British Nepal Medical Trust and focussed on public health as the entry point.

The TAMD Feasibility Study could use the data and information collected during this LAPA preparation as Ghodasain is also one of the VDCs selected for preparation of the NCCSP LAPA. As the LAPA under CADP-N was completed and results have been produced, this may provide a useful complement to the NCCSP data as its LAPA has not been implemented.

LGCDP

Within Achham, phase I of the LGCDP had 6 projects at the ward level in three VDCS – Jarnalibandali, Oligau and Mangalsen, none of the VDCs selected under the NCCSP LAPA.

Rukum

According to the criteria set out above, the mid-Western, hill district Rukum was the second most promising district for consideration under the TAMD Feasibility Study. All four of the interventions have projects in Rukum and it is also at very high vulnerability to both drought and landslides.

NCCSP LAPA

Rukum contains 194 LAPAs under the NCCSP LAPA Programme and these are spread across 5 VDCs – Chaukhawang, Arma, Duli, Ghetma and Purtimkanda, in order of vulnerability. Household level assessments of vulnerability were carried out and Chaukhawang VDC contained the most highly vulnerable households.

Both short and long term adaptation options were implemented, varying from awareness raising, water harvesting and alternative energy to terrace improvement, micro hydro and the establishment of seed banks.

CADP-N LAPA

Under the CADP-N Programme, the NGO Rupantaran implemented a LAPA in Ransi VDC of Rukum. The entry point of this LAPA was forestry planning. Landslides due to irregular rainfall and increased infestation of disease and pests in livestock and agriculture were concluded as the major climatic threats. Livestock rearing is the main source of income in this VDC and thus the VDC is very vulnerable. A VDC level LAPA was prepared in coordination with the District Climate Change Coordination Committee (DCCCC). However, this LAPA was not implemented.

LFP

Unfortunately, the information on the LFP Projects in Rukum has not been attained and therefore it is unclear how many and in which VDCs were prepared and implemented.

LGCDP

There are two LGCDP projects in Rukum, and they fall in Duli and Musikot VDCs, wards number 9 and 5 respectively. Neither of these VDC contains the aforementioned interventions, which makes it harder to

analyse the linkages between the interventions as there is likely to be topographical, climatic and socio-economic differences between VDCs.

2) Mugu

Mugu was the third most promising district for the TAMD Feasibility Study. Mugu is a mountain district in the Mid West region of Nepal with a very high vulnerability to both drought and landslides. The agricultural sector of Mugu relies on a short period of the year when the climatic conditions allow the cultivation of crops and this makes it very vulnerable to future climate change projections – especially higher temperatures. The terrain of dry and arid lands and snow-covered mountains increase the district's sensitivity to landslides. The socio-economic status of Mugu means that its sensitivity and adaptive capacity to these climate risks is much higher than a more developed district. Various sensitivity and adaptive capacity indicators⁴ were used along with consideration of the exposure of VDCs and allowed a climate change vulnerability ranking of VDCs to be formed.

NCCSP LAPA

LAPAs have been prepared for the most vulnerable VDCs – Ruga, Rowa, Jima, Mangri and Sukadhik⁵. The five VDCs selected for LAPA preparation all fell in the very high vulnerability index (3.26->4) apart from Ruga and Sukadhik that were defined as high (2.51-3.25)⁶.

During the LAPA preparation process in Mugu, climate-induced vulnerability was assessed using specific indicators related to exposure, sensitivity and adaptive capacity – the same framework as used in the calculation of NAPA Vulnerability Indices by district. It was found that the communities had been exposed to drought, landslide and disease outbreaks in the last 30 years. The district also ranks as the 70th of 75 districts under the Human Development Index (HDI).

LGCDP

Within Mugu, phase I of the LGCDP had 2 projects at the ward level in the VDC Mugu, not selected under the NCCSP LAPA. There are only 2 projects, however, in ward 5 and ward 6 and the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

In conclusion, all three of these districts meet the majority of the criteria set out above and have strong arguments for VDC selection to fall in these districts in the TAMD Feasibility Study. All three of the districts fall in the Western half of Nepal and none of them fall in the Terai region, however the ecological zone and location are of lower importance according to the criteria for selection. Access to NCCSP, CADP-N and LFP baseline data and accessibility and the slight lack of breadth that these three regions together, all need to be considered before a final decision can be made.

⁴ Listed in Annex

⁵ DFID LAPA Highlights Summary Document, IIED and HTSPE Partnered, Unpublished Copy, see map in Annex

⁶ Ruga – 3.12, Sukadhik – 2.99, Mangri – 3.31, Jima -3.27 and Rowa – 3.5, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

B. Purely vulnerability index by hazard (using the NAPA District Vulnerability Indices)

Landslide

1. Udaypur – 1.000
2. Kathmandu – 0.898
3. Mugu – 0.804

Flood

1. Mahottari – 1.000
2. Rautahat – 0.786
3. Chitwan – 0.768

Drought

1. Jajarkot – 1.000
2. Mugu – 0.999
4. Kalikot – 0.898

The district of Mugu has already been explained and analysed above. Therefore, from the other 6 districts listed above, those that satisfy the next three criteria have been listed below:

- Kalikot – both CADP-N LAPA, LGCDP and NCCSP LAPA
- Udaypur – both LGCDP and LFP
- Jajarkot – both LGCDP and NCCSP LAPA

3) Kalikot

Kalikot is a hill district in the Mid West region with a very high vulnerability to drought and a high vulnerability to landslides. Kalikot falls under the same Hub of the NCCSP LAPA Programme as Mugu and both regions are characterised by similar socio-economic statistics and climatic hazards. Difficult terrain, a short growing period and lower food production due to these conditions mean that as a district, Kalikot has low adaptive capacity and high sensitivity to climate change.

CADP-N LAPA

Under the CADP-N Programme, two LAPAs were prepared in Kalikot by the NGO Rural Self-Reliance Development Centre, Kathmandu. The LAPAs were prepared under the entry point of finance and service delivery and were located in Shivagadi and Kumalgaun. RSDC were piloting the LAPAs to see poverty through the climate adaptation lens with regard to financial delivery mechanisms and local level planning. Kalikot was selected because of its high poverty levels, inequality and a highly vulnerable economy to climate change.

Vulnerability assessments were carried out using the Gateway System Analysis tool and the proportion of vulnerable people were mapped within the VDCs. If a sector-specific approach is used in TAMD and the financial delivery sector is selected, the data collected and analysis of these VDCs may be useful.

NCCSP LAPA

Of the 30 VDCs in Kalikot, the NCCSP LAPA Programme selected Manma, Daha, Kalika (Mugraha), Lalu and Rakku as the VDCs for LAPA implementation. Vulnerability indices were calculated by VDC across the district using the same indicators and methodology as in Achham and Mugu. The most

vulnerable of these VDCs to climate change is Rakku and all of them except Manma were ranked as very high in the spectrum of vulnerability⁷. In total, 210 LAPAs were prepared under this Programme in Kalikot, with 48 of these falling in Rakku and thus providing many options for site selection at a community level for the TAMD Feasibility Study.

As with the LAPA preparation process in Mugu and Achham, many different entry points were used across the LAPAs, especially focussing on improving access to basic facilities such as water, energy and daily livelihood resources. Off-farm income and market linkage were also strongly promoted to diversify income generation and reduce the economic vulnerability of the district to climate change.

LGCDP

Within Kalikot, phase I of the LGCDP had projects at the ward level in the VDC Manma, one of the VDCs selected under the NCCSP LAPA. This is useful because it will allow linkages between the different interventions to be highlighted by analysing data from different communities within Manma, which will likely have similar climate vulnerabilities. There are only 2 projects, however, in ward 5 and ward 9 and the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

4) Udaypur

The district of Udaypur lies in the Terai region of Eastern Nepal. It has the highest vulnerability to landslide out of all 75 districts according to the NAPA and contains LAPAs under the CADP-N project and LGCDP projects.

CADP-N LAPA

The NGO Nepal Water for Sanitation prepared a LAPA for Rauta VDC in Udaypur. Water for Sanitation was the entry point of the LAPA preparation and the pilot took place from September to December 2010. Detailed adaptation capacity development work was carried out in the village of Guranse and involved a wide range of stakeholders to produce a LAPA.

This pilot provided a wide range of lessons for future LAPA projects and studied in depth the responses – both positive and negative – to the LAPA in Rauta VDC. This information, such as the indicators used, could always be useful in the design of the TAMD framework.

LGCDP

Within Udaypur, phase I of the LGCDP had 4 projects at the ward level in the VDCs of Saune and Khanbu as well as 2 projects in the municipality of Triyuga. The projects are all identified by ward number, however, the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

5) Jajarkot

⁷ Dahha – 3.35, Lalu – 3.34, Manma – 2.70, Kalika (Mugaraha) – 2.92 and Rakku – 3.52, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

The district of Jajarkot is a mid-Western district in the Hill ecological zone of Nepal that has the highest vulnerability to drought out of all the 75 districts. Jajarkot was selected as one of the districts for NCCSP LAPA implementation based off of this vulnerability.

LAPA Piloting/ NCCSP

Of the 30 VDCs within the district, 4 of them were designated highly vulnerable to climate change. 5 VDCs were selected for LAPA preparation and implementation – Arcchani, Dhime, Laha, Pajaru and Suwanauli. The vulnerability assessment in Jajarkot used the Gateway Systems Analysis – using exposure, sensitivity and adaptive capacity characteristics to calculate vulnerability. Of the 5 VDCs, Pajaru contained the most highly vulnerable household, followed by Dhime and then Arcchani, so these three VDCs should be considered first if Jajarkot is selected as one of the districts for implementation.

LGCDP

Within Jajarkot, phase I of the LGCDP had 2 projects at the ward level in the VDC Khalanga, not one of the VDCs selected under the NCCSP LAPA. This may provide problems in analysing the linkages between the interventions because it is likely that there are topographical, climatic and socio-economic differences between the VDCs. Thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

In summary, the 6 districts described above are the most promising districts in Nepal to fit the criteria for site selection under the TAMD Feasibility Study. A final decision can only be made on the districts to be selected once the selection of interventions has been finalised.

3.5 Village Development Committee (VDC) Selection

In order to move forward with the site selection process, a final decision is needed on which interventions are going to be analysed under the TAMD Feasibility Study. Once this decision has been made, the districts to select will become more clear-cut and from there, VDCs and the communities will need to be selected.

The TAMD feasibility study is likely to be carried out at the community level because all selected interventions implemented at community level. Ascertaining linkages between the interventions will therefore depend on the selected VDCs having very similar contextual elements – socioeconomic status, climate vulnerability and demographics. By matching VDCs based on these elements, any differences between the unit-less scores generated can be attributed to the intervention itself. This matching process will be a key, determining factor in the process of VDC selection.

Steps for VDC and community selection:

- Map the VDCs within each selected district and highlight those that are implementation locations from selected interventions
- Analyse any climate vulnerability ranking of these VDCs, either from interventions' data or publicly available meteorological data
- Create a shortlist of VDCs based on climate vulnerability risk and intervention presence

- Consult with VDC and DDC representatives to discuss TAMD Feasibility Study and permission
- Carry out a ranking of communities within VDC, either through Community Well-Being Rankings or HH survey data
- Narrow down to a shortlist of communities and consult with community representatives
- Present final list of communities to the Steering Committee for approval

IV. BASELINE OF INTERVENTIONS

Baseline of selected interventions (i.e. LFP, CDP-N/LAA Pilot/NCCSP, LGCDP) will be considered as the historical data set for the TAMD feasibility study. However, in the case of data gap, some of the cross cutting baseline will be created at the possible extend on vulnerability while conducting the study.

4.1 Scale of interventions

LGCDP is implemented from the DDC to VDC and municipalities reaching the lowest possible administrative level. A Ward Citizen Forum is formed in each ward of the VDC and municipalities. LFP is implemented at CFUG level within a cluster of VDCs and baseline data is collected through household sampling from households that belong to CGUGs (LFP, 2003). Similarly, in the case of NCCSP, VDCs were selected through stratified sampling form intervention district and household sample taken from the sampled VDCs (NCCSP Baseline Report 2012) (see Table 2).

Table 2: Intervention and Baseline Collection Scale

Intervention	Implementation scale	Baseline scale	Data collection scale
LGCDP	VDC, municipality, DDC	DDC	VDC sampling, municipality sampling and DDC
LFP	CFUG Household	DDC	VDC clustering
NCCSP	VDC	DDC	VDC sampling

4.2 Data of Selected Interventions

4.2.1 Livelihood Forestry Programme (LFP)

LFP has collected data through different 15 indicators main indicators (see Table 2) using a VDC sampling method and then aggregated baseline data to a district level. It captured socio-economic and

energy related indicators only. Baseline data collected by the LFP intervention contains mostly track 2 related indicators.

4.2.2 NCCSP

NCCSP has collected baseline data through VDC sampling and then aggregated data to a district level. The NCCSP baseline captures 21 main indicators on both socio-economic and climate related data as well (see Table 2). Before, CADP-N initiated LAPA process across 12 locations in Nepal involving local stakeholders for identification of the most climate vulnerable and endorsed by local bodies. CADP-N was able to test and compile components of an effective LAPA methodology (Anderson et al, 2011)

4.2.3 LGCDP

LGCDP has collected baseline data by sampling at the VDC and municipality level and then aggregated data to a district level. The LGCDP baseline captured 14 socio-economic indicators (see Table 2). The information was collected by using the Key Informant Survey (KIS) technique in 5,873 sample households, 199 sample VDCs, 58 Municipalities, 75 DDCs and the MLD. The information from 553 sampled COs was, however, collected by using the Focus Group Discussion (FGD) approach (Table 1). Some of the baseline indicators are cited in the Mid-term Evaluation Report (see Annex 2.3) and a complete version of the questionnaire has been requested.

4.3 Appraisal of climate Data Set

4.3.1 DHM Data

The DHM collect data on mean and maximum rainfall, temperature maximums and minimums and real time regional flood data on a daily and monthly basis. Meteorological stations throughout Nepal are used and upon request the TAMD feasibility study will be able to use this for contextual basis and to complement the baseline data collected by the interventions. The list of locations of these stations is sporadic across Nepal and can be found online. The regional flood data is only available at the Hindu Kush-Himalayan regional level, which is comprised of the mountain regions of Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan.

4.3.2 DesInventar

DesInventar is a collection of disaster reported information that uses media coverage and the disaster review series from 1993-2002 from MoHA. The database covers VDC and DDC level disaster information and allows searches by type of event, such as flood, drought and landslide, as well as village or district. The data is much more extensive for floods and landslides than for drought and the metrics used differ on an event-by-event basis. Some examples of the metrics used include, loss of life, injured or missing people, loss of livestock, loss of crops, \$ losses and the number of evacuated people. The use of this database will depend on the availability of data for the selected VDCs and therefore cannot be concluded on until the VDCs have been chosen.

4.3.3 NAPA Vulnerability Index Mapping and district rankings

The NAPA for Nepal, produced in 2010, has provided vulnerability maps and district rankings (see Annex 4) that will be used in the selection of location for the TAMD feasibility testing. Data sets collected by selected interventions need to be linked as the data form secondary sources such as government agencies, UN agencies and other related organisations were inputted into GIS and produced the maps. Vulnerability was defined as a function of exposure, sensitivity and adaptive capacity⁸ and the scale used is district level.

4.3.4 ICIMOD PVAT 2010 and 2011 Survey

ICIMOD has developed a Poverty and Vulnerability Assessment Tool that collects data through VDC sampling and aggregates it to a DDC level. From the 2011 survey, a list of indicators from the following sub-headings deemed potential indicators for the TAMD study to use can be found in Annex 13. The PVAT baseline questionnaire has been attained and provides useful information on the indicators and format that were used.

4.3.5 ICIMOD MLV Assessment

ICIMOD carried out the MLV Assessment across the following 6 districts – Siraha, Udaypur, Khotang, Dolakha, Sunsari and Kavre. The data was collected in 2012 and it was determined that the following indicators could be useful under these 8 sub-headings (See Annex 13).

4.3.6 NeKSAP

The WFP's NeKSAP has collected data at the VDC and DDC levels in term of food security but are currently carrying out a survey including the following indicators that consider the climate change element (see Annex 13). Although this data is not yet available it may be useful to consider these indicators as potential indicators for the TAMD feasibility study. The WFP data set on food security is available from 2006 to 2013, although the majority of these data sets do not include the climate change related indicators above.

4.3.7 CBS Census 2011

The CBS carried out a Census in 2011 and although data was collected at the VDC level, it was then aggregated to a district level. The Census data provides data for all the indicators that could possibly be used in the TAMD feasibility study and therefore, the actual indicators will be decided once the VDCs and climate change indicators have been selected. The process of VDC profiling is carried out by the

⁸ Exposure – 'the nature and degree to which a system is exposed to significant climatic variations'; Sensitivity – 'the degree to which a system is affected either adversely or beneficially, by climate-related stimuli'; Adaptive capacity – 'the ability of a system to adjust to climate change, to take advantage of opportunities and to cope'

CBS, but whether the communities eventually selected have current and recently updated VDC profiles will depend.

4.4 M&E systems to which TAMD could be aligned

TAMD framework will be aligned with the M&E system of the selected interventions to capture effectiveness of the interventions.

4.4.1 NLSS/CBS (indicators)

All 75 districts are ranked based on composite indices of 28 development indicators (see Annex 13) that are transferred into zero-to-one (value of 0 represents worst and 1 represents excellent) scoring, which form the unit of measurement.

4.4.2 National Planning Commission

The National Planning Commission (NPC) of Nepal has developed Results Based Monitoring and Evaluation Guidelines Indicators (2010) to put into place to monitor outcome/impact/effect of development interventions in country. The Guidelines cover 28 different sectors/subjects in detail, including governance, access, drinking water and sanitation, agriculture, environment, forest and soil conservation with outcome indicators. Some indicators of the forest, soil conservation, environment and social inclusion and targeted programme could be useful for TAMD feasibility study (see Annex 13).

4.4.3 PPCR Indicators

The key indicators of PPCR (Fisher, 2013) are as follows:

- Number of people supported by the PPCR to cope with effects of climate change;
- Degree of integration of climate change in national, including sector planning;
- Extent to which vulnerable households, communities businesses an public sector services use improved PPCR supported tools , instruments, strategies, activities to respond to CV & CC.
- Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience;
- Quality and extent to which climate responsive instruments/investment models are developed and tested.

4.4.4 M&E System of Selected Interventions

1. LFP Monitoring System

LFP established a monitoring system defined by the following indicators at national, district, use groups and community levels. Indicator covers policy, operational environment, use of forest resources, assets, poverty incidence/food security, access and agriculture productivities.

- i. Identify and develop a broader understanding of livelihood status and its linkage with the forest use of forestry user groups;
- ii. Characterise the livelihoods status of the FUG members; identify the poorest;
- iii. Understand current trends in assets acquisition and depletion;
- iv. Characterize vulnerability;
- v. Institutional issues;

2. CADP-N/ NCCSP Monitoring System

The NCCSP monitoring system consists of the following indicators covering both policy, regulation and gender and social inclusion, including household income, and climate change vulnerability aspects.

- i. % HH adopting CC adaptive actions implemented on time and on budget in ways that deliver effective adaptation services to the satisfaction of the most vulnerable;
- ii. Enhance capacity of GO and NGO institutions to implement CC policy and most urgent an immediate adaptation actions to increase the resilience of the climate vulnerable poor

3. LGCDP/EFLG/ MCPM (mechanisms)

The M&E framework for LGCDP is simple in nature, comprised only of a mid-term evaluation and final evaluation and internal reviews because there are many indicators and measures built into the MCs and PMs that are relevant to M&E. There are also many other frameworks, such as the National Living Standard Survey Report and the Democratic Survey Report, that provide adequate information.

Indicators and measures collected in the assessment phase of LGCDP were divided into Minimum Conditions (MCs) and Performance Measures (PMs) with the PMs being the more extensive metric. LGCDP indicators covers:

- i. % of DDCs that meet all 15 minimum Conditions per fiscal year;
- ii. % of DDCs that meet all 15 minimum Conditions per fiscal year;
- iii. % of all DDCs that spend more than 80% of planned capital development budget per year;
- iv. % of DDCs that spend more than 10% of internal income explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year;
- v. % of DDCs that have less than 2% irregular expenditure (Beruju);
- vi. % of all Municipalities that meet the Minimum Conditions per year;
- vii. % of Municipalities that score above 50 point in all performance measurements and meet minimum score in all functional areas per fiscal year;
- viii. % of municipalities that spend more than 80% of planned capital development budget per year;
- ix. % of Municipalities that spend more than 10% of internal income explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year;
- x. Access to public goods – roads and drinking water;
- xi. Access to public services – school; Engagement with local government.

4.5 Appraisal of data sets and information systems

Baseline data is collected at household level using sampling method in these 3 interventions and covers both socio-economic and climate-specific aspects in all but the LGCDP baseline. They used different sampling methods to collect baseline data.

Table 3: Sampling Methods Used in Baseline Survey

NCCSP	LFP	LGCDP
Simple random sampling (district & VDC)	Stratified & probability sampling (VDC & HHs)	Probability & stratified sampling

4.6 Developing linkages between the selected interventions

While analysing baseline data collected by the programme/project, 25 different indicators were highlighted as either frequent or important for TAMD consideration. LGCDP has captured food security/assets but did not collect climate change specific indicators whereas LFP and NCCSP both missed the food security/assets. Similarly, climatic-related indicators were not collected by any of the interventions. Baseline indicators used by selected interventions (i.e. LFP, NCCSP and LGCDP) in their baseline questionnaire used to collect baseline data are given in the table 4 below.

Table 4: Baseline Data Indicators

Baseline Questionnaires/ Parameters	NCCSP(Baseline report)	LFP (Baseline report)	LGCDP (M&E framework)
1. Land ownership	*	*	*
2. Main occupation	*	*	*
3. Sources of income	*	*	*
4. Types of house	*	*	*
5. Land affected by climate hazards	*	*	
6. Govt. agencies functioning in the community	*	*	*
7. Types crops cultivated	*	*	*
8. Species of livestock reared	*	*	*
9. Financing facilities/financial services	*	*	*
10. Climate change adaptation practices	*	*	*
11. Changes in cropping practices	*		
12. Changes in land use over years	*		
13. Noticed changes of the state plants herbs & others edible wild species	*		
14. Noticed changes of the state livestock, poultry & fishery			
15. House structure	*	*	*
16. Irrigation facility in total cultivable land (seasonal/permanent)	*	*	
17. Awareness about climate change	*		
18. Changes noticed due to climate change/disasters			
19. Extent food security /assets			*

20. Extent of change in income due to agriculture production			
21. Member of civil society organization	*	*	*
22. People's perception on climatic hazards			
23. Sources of energy used	*	*	*
24. Infrastructural facilities-road, school, health, drinking water, irrigation etc.	*	*	*
25. Hazards coping strategies			

4.7 Driving narratives of selected interventions

Based on the assessment of interventions, LFP, NCCSP and LGCDP are the most relevant intervention for TAMD feasibility study.

LFP was implemented successfully during 2003 to 2011 and has collected historical data. Based on the lesson of LFP, MSFP is developed and planned for a 10-year programme that is currently being implemented. It has funding support from SDC and will continue for a decade. Both these modalities of the LAPA process were tested in LFP and MSFP is going to replicate them in Nepal in the next ten years. Therefore, LFP would be one of the most relevant interventions for the purpose of TAMD Feasibility Study.

NC CSP is developed based on the lesson of CADP-N that piloted 30 LAPAs in 5 districts and was specially devised to address climate change issues. Moreover, NCCSP is being implemented by MoSTE in 14 districts with the funding support of DFID and EU with technical support from UNDP. It is going to replicate LAPA process and implement 70 LAPAs, aiming to improve climate resilience and adaptation. Hence NCCSP would be the second most relevant intervention for TAMD Feasibility Study.

LGCDP is one of the largest programmes implemented by MoFALD and is funded by multiple development partners. It has significant resources and is specially focused on promoting local governance, inclusive development and participation at all levels of governance in DDC, VDC/municipality and wards with wider coverage forming Ward Citizen Forums that will have significant role in local development planning, climate adaptation and resilience. Implementation of LGCDP Phase I is complete and based on the lessons drawn from this, Phase II has been designed and is being implemented. Moreover, LGCDP has baseline data, monitoring framework/indicators and further developed EFLG that will be integrated into the LGCDP II to streamline climate into local development planning. Hence, would be the third most relevant intervention for TAMD feasibility study to see the development impact and its linkages on climate change adaptation.

V. THEORY OF CHANGE

Theory of change (ToC) specifies how climate risk management activities (Track 1) and development outcomes (Track 2) can be attributed to each other. In this case the theory of change will seek to identify the mechanisms through which better district, VDC and community level climate risk management and impacts on system resilience at the household level. ToC also needs to be empirically tested.

5.1 Theory of change of each intervention

The TAMD feasibility study rests on the theory of change that better linked district, VDC, and village or community level climate risk management and system resilience will impact on household resilience through various mechanisms. The TAMD pilot and feasibility test will explore what mechanisms these are, and how different system resilience approaches may lead to changes in household resilience. Some development interventions do not have CRM component thus need to consider different scales for different intervention like DLGSP. The LFP and NCCSP /LAPA have CRM functions at district levels. Hence, different intervention with different focus may generate resilience at community level. Hence, in order to capture the resilience generated by different project may require different questionnaire based on type of intervention and scale.

5.1.1 Theory of Change of LFP

Strengthening policy and building the capacity of forest users, forest managers and service providers to manage natural resources equitably and sustainably (including forest management, public land management, soil conservation, watershed management, private forestry, and alternative energy technologies) will lead to livelihoods diversification and income generating activities for poor and excluded households, developing enterprise and small-scale infrastructure that lead to enhanced assets of the rural communities, reduced poverty, increased adoptive capacity and greater resilience (Upreti, 2004).

5.1.2 Theory of Change of NCCSP/LAPA

Theory of change that better district and village level climate risk management and system resilience impacts on household resilience through various mechanisms. The development and implementation of locally inclusive and responsive LAPAs that are integrated into village, municipality, district and sectorial planning processes, coupled with capacity building of these institutions, will result in the delivery of adaptation services that improve the adaptive capacity of the climate-vulnerable poor.

5.1.3 Theory of Change of LGCDP

LGCDP phase I promoted inclusive responsive and accountable local governance and participatory community-led development at all levels across the country that will ensure increased involvement of women, Dalit, Adibasi, Janajati, Muslim Madhesi, disadvantaged groups in the local governance process and this will contribute towards better resilience and better adoption and reduced poverty.

5.2 Baseline reconstruction and follow up survey

The two pronged approach is adopted – use historical data for the cross cutting baseline, and generate new data conducting survey. Interventions are will be compared based on their historical data set and reconstructing a baseline on climate related data with other local data sources (ICIMOD / WFP /

government data) to develop a crosscutting baseline for the projects on secondary sources. A cross cutting baseline is created by collecting climate related information such as flood, drought, landslide hazards and losses occurred in the past (within certain period – 3 or 5 years) at the VDC or community level and supplemented by hazard data available in CDO office or DDC. This baseline is converted to unit less scores for comparison as outlined by Brooks et al (2013). T1 indicators are scaled down and developed for each intervention and T2 are developed for the contextual vulnerability and project intervention objectives. As far as possible these are applied retrospectively.

- Communities or VDCs are then selectively sampled for similar vulnerability, hazards etc., and a small number are chosen to be matched from each intervention.
- Data collection then takes place to provide a follow up and participatory theories of change to contribute to understanding attribution.
- The baseline can be used to see any potential changes in quintiles of vulnerability in the matched communities / VDCs.

5.2.1 Data collection in matched communities / VDCs

Communities or VDCs from different interventions are matched according to vulnerability profile, hazards faced etc. Data is collected as a baseline and for theories of change (perhaps predictive) for T1 and T2 indicators based on the programme objectives. This tests the feasibility of TAMD as an approach. As far as possible some elements of the data collection phase could be compared with other data sets in the area / project baselines. If baseline is done after programme has been done recorded theories of change may help indicate potential attribution.

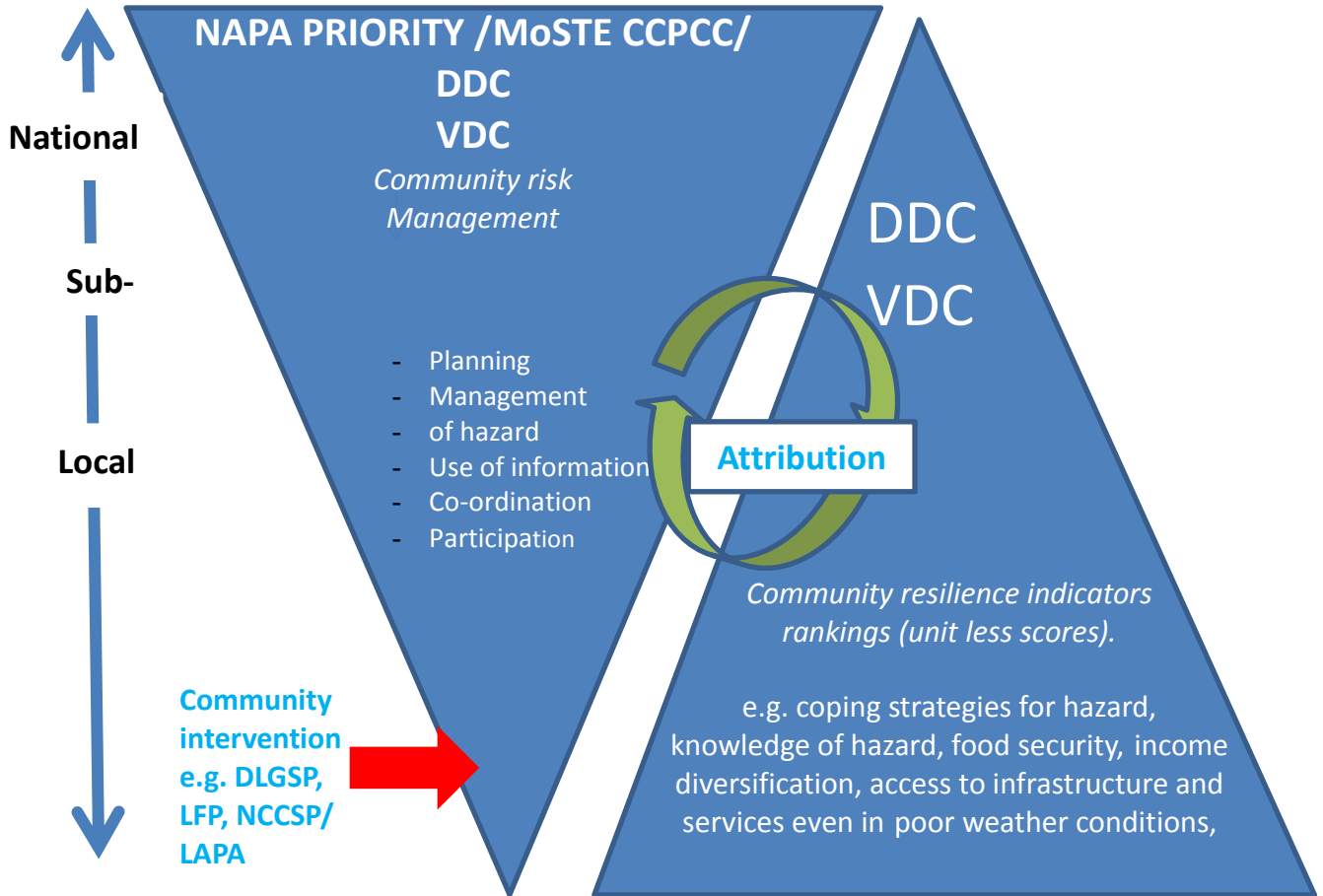
5.3 Indicator Development (Track 1 and Track2)

The TAMD framework will consist a number of indicators (Track 1 and Track 2) relevant to adaptation and development intervention defining them in different levels (i.e. global, national, regional/municipality and local).

5.3.1 Type of indicators

Livelihoods of most of the Nepalese people are depends on climate sensitive activities such as agriculture, which accounts about one third of GDP. TAMD indicators need to be developed considering location and output of the selected interventions to match with the baseline data and information availability. Outcome based indicators are needed particularly to monitor progress in adaptation and development interventions at different levels (see Figure 6).

Figure 6: Community Risk Management and Resilience Indicators



5.3.2 Indicators captured in Baseline by selected interventions

The baseline questionnaire of selected interventions (i.e. LFP, NCCSP, LGCDP) have captured various indicators that may be linked with TAMD indicators (see Annex 3)

5.3.3 Provisional Indicator for TMD Feasibility Study

Following provisional indicators on Track 1 and Track 2 could be considered for TAMD derived from the indicator of interventions (see Annex 5).

Table 5: Provisional Track 1 indicators:

Indicator	Sub-indicators
-----------	----------------

i. Degree of climate change integration into planning – climate plans, strategies and mainstreaming mechanism/system;	Improved integration of climate change aspects in planning and decision making for adaptation. (national, ministries, sectorial, institutional, DDC, VDC and community levels) – National strategy, PRSP, Core sector strategies, Annual development plans and budget, NAPAs
ii. Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience	Coordination mechanism, Human Resources Capacity building (training, workshop/seminar, exposure visit)
iii. Change in budget allocations of all levels) of government to take into account effects of CV & CC	Central level, DDC and VDC
iv. Climate change exposure risk	Mean annual temperature trend and Annual rainfall trend
v. Socio-economic national indicators	Human development index, Gender development index, Human poverty index
vi. Awareness among stakeholders	Level of awareness on climate change issues, risk and responses
vii. Community institution	- % HHs organized into CBO

Table 6: Provisional Track 2 indicators:

Indicator	Sub-indicators
i. Awareness on climate change	- flood, drought, high rainfall, high temperature, GLOF, landslide
ii. Vulnerability of livelihood/welfare to existing climate change and or climate variability	- Change in % HH (intervention/pilot/in area of risk) whose livelihoods have improved - Wellbeing perceived by the HHs (%) - Acquisition of productive assets - % HH acquisition of productive assets - % HH diversification of the income sources - % HHs Safe from the threats of natural disaster among the dependents of the intervention areas
iii. Ability of the community to respond to developing climate change risks.	
iv. Change in agriculture productivity (increase/decrease/no change)	
v. Change in cropping pattern	

vi. Crop diversification	- different type of crops grown
vii. Crop production	
viii. Change in % HHs means of livelihood (intervention/pilot area of risk) whose livelihoods improved	
ix. Damage / losses from extreme climatic events	- Lives - livestock - infrastructure - crops
x. Number of people supported by the Climate Change intervention to cope with effects of climate change	- % HHs aware - Number of people received capacity building training
xi. % of people with year round access to reliable water supply	- for consumptions - for livestock - for irrigation - for enterprises
xii. Community Participation	- % HHs involved in development/climate intervention - % HHs (at least one member) elected/representation in local governance - % HHs involved in Natural resource management
xiii. Access	- road, school/collage, hospital/health post, market, electricity, communication, financial services.
xiv. Migration(for education, employment)	- seasonal migration, longer, permanent

5.3.4 Vulnerability Indicators

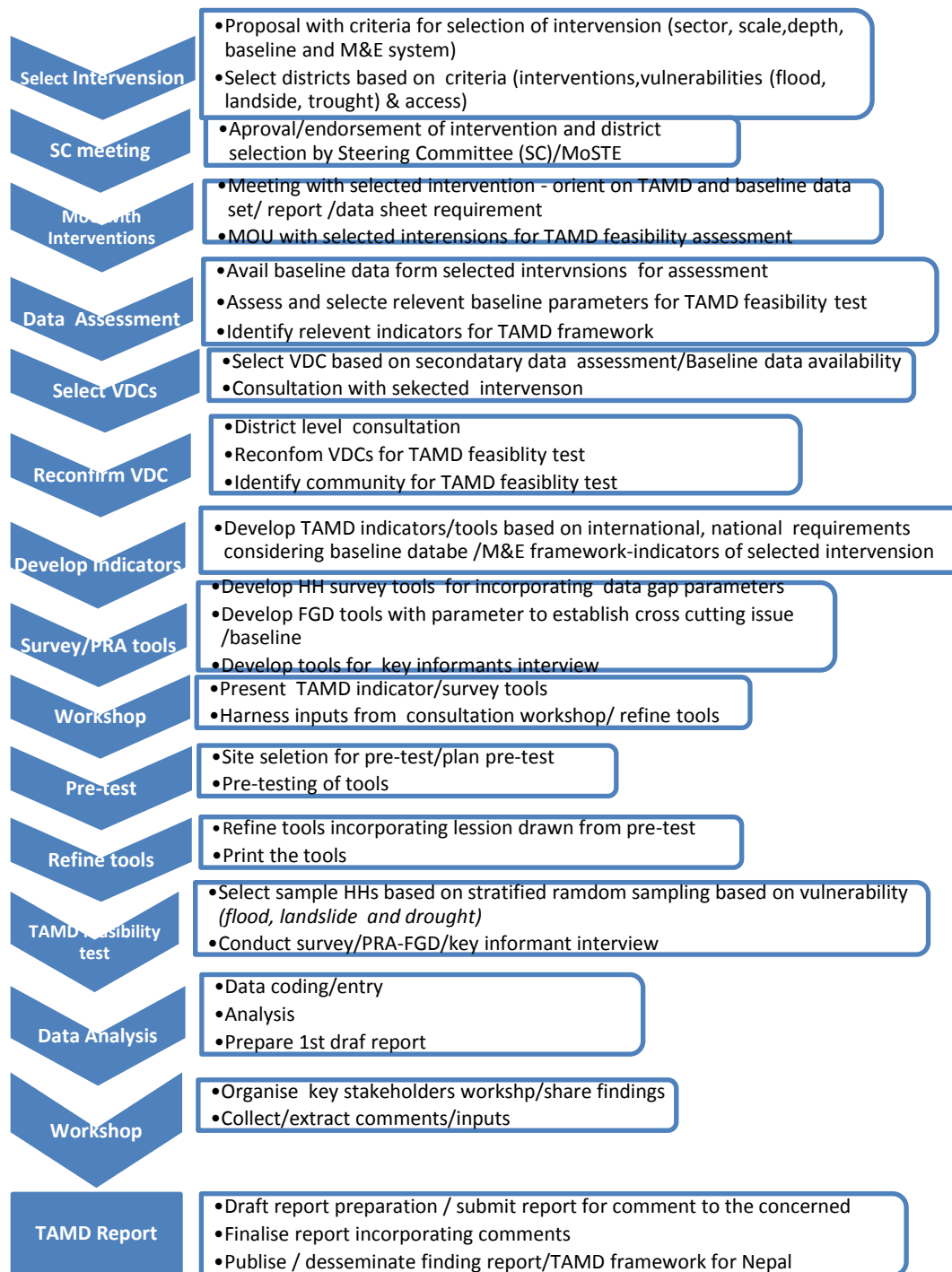
TAMD framework with appropriate indicators should able to see effectiveness of the intervention by tracking adaptation and measuring developmental impact. Moreover, water sector, agriculture and food security are key areas of climate change impacts and vulnerability including industry, energy sectors, education, and drinking water and sanitation. Hence, some of the vulnerable indicators could be considered for TAMD framework (see Annex 13). These indicators need to be linked both in climate change adaptation and development.

5.3.5 Indicator Selection and choice of methodology

Selection of indicators will be done based on the information available in the baseline of the selected interventions to measure changes including some important vulnerability indicators. Methodology for the TAMD feasibility test is based on the context and location Communities or VDCs from different interventions are matched according to vulnerability profile, hazards faced etc. Data will be collected as a baseline and for theories of change (perhaps predictive) for T1 and T2 indicators based on the programme objectives.

This tests the feasibility of TAMD as an approach and some elements of the data collection phase could be compared with other data sets in the area / project baselines. If baseline is done after programme has been done recorded theories of change may help indicate potential attribution. TAMD feasibility study process includes various activities such as workshop stakeholders consultation, exploration, survey /PRA at

Figure 7: TAMD Feasibility Study Process



5.3.6 Data gaps / additional data requirements

There are climate related data gaps in development interventions and also the meteorological data is only available where meteorological stations are located, not at VDC level across the whole country.

Depending on the selected approach the secondary data requirements will differ. For example, the approach involving the reconstruction of a baseline will require much more specific available data at a VDC level.

5.3.7 Potential challenges/limitations

The data set collected by selected interventions are not currently available but could be shared after developing certain level of understanding with selected intervention most probably by signing an Memorandum of Understanding (MoU). This may provide problems in analysing the linkages between the interventions because it is likely that there are topographical, climatic and socio-economic differences between the interventions' VDCs. The details of these projects are currently unknown and thus further consultation with projects is needed to ascertain if these interventions can be analysed in TAMD. The practical application of TAMD particularly for feasibility test can anticipate following practical challenges and limitations:

- Data limitations of established baseline by potential intervention may limit TAMD feasibility test to the limited historical data set only;
- Challenge to collect data in mountain area may not be feasible in winter may limit data collection to *Teraí* and hill areas only.
- NCCSP is in the preparatory phase for implementation. LAPA are so far not implemented by NCCSP thus data may not be available.
- Interventions may or may not be reached in the most vulnerable area or community of the selected district/VDC.

5.4 TAMD Feasibility Study Work Plan

TAMD feasibility study in Nepal is a challenging task particularly to assess data/information and conducting field study and buy-in by the various stakeholders. In spite of these challenges, to achieve the project objective, tentative work plan is developed over the period of one year starting from April 2013 to March 2014 has been developed (see Figure 8).

Table 7: TAMD work plan

Activities		FY 2013									FY 2014			Remarks
		Qtr-2			Qtr-3			Qtr-4			Qtr-1			
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
1	Establish Govt. Coordination Committee/meeting													Minimum once in a quarter/as required
2	Develop/finalize IDS/IIED work plan													
3	Coordination committee meeting													If required, more meeting will be held.
4	Scoping of potential intervention, Project monitoring tools, (understand and study M&E existing framework-monitoring (NPC-PMAS/DMAS, PAF, RWSSFDB, Hariyo Ban, PPCR, NCSSP, LFP, LAPA piloting- Rupantaran, MSFP). Identify climate change interventions likely to be near completion													MSF and similar interventions (Govt., semi government and NGOs/INGOs)
5	Select adaptation intervention for assessment													Consultation with MoSTE & IIED
6	Assessment of baseline comparability of intervention for TAMD													NCCSP/ PPRC/ Hariyo Ban/MSF, LAPA, PAF, RWSSFBD, LGCDP
7	Asses conversion to unit-less to allow comparison													
8	Assess/understand contextual vulnerability(geographical/sectoral)													Assess participatory wellbeing ranking (PWR) in potential area (secondary data)
9	Select pilot areas (district/ VDC)													For comparison
10	Appraisal of local level data set /design report (contents) based on appraisal													ICIMOD, WFP, Community level Govt. data
11	Create theory of change(ToC) through PWR													
12	Data gap analysis													
13	Develop vulnerability indicators based on PWR													
14	Design HH survey/ monitoring tools (Track I & Track II)													
15	Pre-test the survey tools (HH survey, FGD, Key informant)													
16	Project flyer/inception report preparation and printing													
17	National workshop to finalize vulnerability indicators (Track 1 and Track 2)													Workshop report to IIED
18	Select sample area for pilot (VDC matching)													
29	HH survey/participatory process (1 VDC/community)													
20	Identify national priorities to identify aggregate indicators for Track 2													

21	Look at mechanisms for replicability (VDC/DDC data collection mechanism)												
22	Look at method for considering climate hazards and narrative of areas (external factors)												
23	Design survey (HH survey, FGD, Key informant)												
24	HH survey/participatory process in selected areas												Pre-winter time
25	Establish ToC through the data collection												
26	Interaction with CC/ DDC/VDC for survey/participatory process												Make CC/DDC/VDC on board
27	Track 1 analysis at DD/VDC level												
28	National level Track 1 analysis												
29	Analysis and write up of report												
30	National workshop - discussion/dissemination of findings												Key stakeholders - national/DDC/VDC - Workshop report to IIED
31	Final technical report to IIED												
32	Quarterly progress report												
33	Final report publication												

5.4.1 Work Plan for Next Quarter (July-September, 2013)

TAMD work will be further expedited in the next quarter and following activities will be carried out.

- In depth analysis of the secondary and baseline data of the recommended intervention(s) and analyse data gaps;
- Organise Coordination Committee (CC)/MoSTE meeting and get approval of selected intervention, district of intervention TAMD feasibility study form;
- Organise meeting with the selected intervention (s), sign MOU for TAMD feasibility study and sharing of baseline data and reports including M&E tools;
- Establish theory of change (ToC) for each selected interventions and develop TAMD indicators for feasibility study;
- Develop survey indicators/ tools and FGD tools based on TAMD indicators;
- Thematic group inputs on TAMD indicators/tools
- Organize key stakeholders workshop and finalise indicators/tools
- Decide on VDC/location in consultation with selected interventions, DDC and field verification;
- Pre-test the tool;
- Conduct TAMD feasibility study;
- Initiate Data entry.

5.4.2 Activities details for next quarter

Key Activities	Next steps	Time-Frame
1. Finalize 1 st quarter report	i. Incorporate inputs	July 12
2. Review of information available/Data assessment of interventions (LFP, NCSSP/LAPA, DLGSP)	i. NCCSP, ii.LFP, iii LGCDP	July 17
3. Assess secondary data (ICIMOD, WFP, CBS/NLSS, DMH) including risk and hazard information	i. ICIMOD, ii WFP, iii DHM, iv. CBS/NLSS	July 20
4. Assess baseline comparability of potential interventions	i. Prepare a comparison table	July 22
5. Prepare draft tools	i. Prepare questionnaires	July 26
6. Prepare draft proposal for SC	i. Draft Proposal	July 29
7. Thematic group discussion	i. Harness inputs to refine tools	July 26
8. Prepare draft proposal for SC	i. Identify 3 potential interventions (forest/livelihood, governance, water/energy); ii. Propose intervention sites	July 30 July 30
9. Coordination Committee meeting	i. Consult with MoSTE/CC and fix date ii. Inform committee members/book time iii. Prepare/dispatch meeting agenda iv. CC meeting	July 22 July 25 July 26 July 31/ Aug. 2
10. Selection of intervention and intervention area	i. Prepare document on intervention and district selection	Aug. 5
11. Meeting with selected intervention	i. Discuss in detail about the TAMD feasibility test ii. Identify tentative VDC/area for test in identified district	Aug. 6

12. MoU with selected intervention for TAMD feasibility text	i. Discuss in detail about the TAMD feasibility test for baseline data use and other required partnership/coordination at the field level	August 12
13. Field verification of selected VDCs	i. Interaction with DDC ii. Interaction with VDC	August 20
14. Finalize tools for pre-test	i. Incorporate inputs of SC and selected interventions	August 25
15. Pre test the tools/finalise tools		August 31
16. Field study		Sep. 2 onwards
17. Initiate data entry		Sep. 25 onwards

VI CONCLUSIONS

Scoping of interventions has been done and further appraisal of potential interventions and selection of potential districts has been completed based on the mapping of the interventions, database, baselines, M&E system, institutional arrangement and alignment of intervention including vulnerability context of the areas. The LFP, CADP-N/NCCSP and LGCDP are recommended.

LFP and LGCDP have already been implemented whereas NCCSP has just started its implementation, but has had some pilots implemented. LFP and NCCSP are climate change related interventions whereas LGCDP is much more focused on local governance. LGCDP works in all districts, VDCs and Wards, with Ward Citizen Forums for local development planning and is further going to integrate EFLG to mainstream climate change in its second phase. Detailed assessment of the selected interventions will be done by further assessing the data set availability and any data gaps will be recognised or filled with contextual data.

Delineation of geographic areas particularly recommendation of districts for TAMD feasibility study is mainly based on the mapping of climate vulnerability and intervention locations. Selection of VDC could be done based on intervention, baseline data availability, vulnerability of areas in consultation with the DDC and VDC to identify the most vulnerable area and community. Baseline data of the intervention could be supplemented by climate data to create a cross-cutting baseline either by participatory/Focus Group Discussion (FDG) or household survey depending upon data gaps identified. However, there is a challenge to access the historical data sets of LFP and CADP-N/LAPA pilot.

As a way forward, approval of intervention and district selection from the Coordination Committee/MoSTE needs to be secured. Data sets and M&E systems need to be analysed and the survey tools prepared before pre-testing can be completed. Selection of the VDC/community with consultation of selected interventions, the DDC and the VDC needs to be finalised and lastly, the TAMD feasibility study needs to be conducted at the field level.

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Annex 1 Composition of Coordination Committee

Organization	
1. Coordinator	Division Chief, Climate Change Management Division, MoSTE
2. Member	Representative, National Planning Commission
3. Member	Representative, Ministry of Federal Affairs and Local Development
4. Member	Representative, Ministry of Agriculture
5. Member	Representative, Ministry of Forest and Soil Conservation
6. Member	Representative, Ministry of Energy
7. Member	Representative, Integrated Development Service - Nepal
8. Member	Representative, ISET - Nepal
9. Member	Representative, International Institute of Environment and Development
10. Member	Secretary Chief, Climate Change Unit, MoSTE

Annex 2 Basic Information on Various Interventions

S R	Project/Programme	Type	Sector	Fund	Objective	Started	End	District coverage	Related info.	Baseline/PWR	Report	M & E Framework	Remarks
1	Nepal Climate Change Support Programme (NCCSP)	Government/DFI D/EU and TA from UNDP	Climate change adaptation		(i) Identify climate vulnerable VDCs, Municipalities, wards and vulnerable communities, households and individuals within these wards; (ii) Identify adaptation practices and actions that will reduce vulnerability to current and future climate change; (iii) Support identification and efficient mobilization of resources.	Sep. 2011	Mar. 2015	14	NAPA/LAPA/CAPA	a. Baseline sample survey	1. Baseline survey report	LAPA M&E Framework	Baseline collection work on progress
2	Poverty Alleviation Fund (PAF)	Semi-gov.(WB, IFAD, Gvt.)	Income generation and community infrastructure		Poverty alleviation	2004	Expecting 3rd phase	49	Infrastructure & Income generation projects # & beneficiaries	a. Baseline sample survey b. Follow up survey c. PWR of HH at CO	1. Baseline survey report	a. Result framework	Demand driven targeted on poverty targeted inclusion
3	Rural Water Supply and Sanitation Fund Board (RWSSFDB)	Semi-govt. (WB, Govt.)	Water & sanitation						Drinking water schemes	a. Baseline of water scheme beneficiaries	1. Baseline survey report	a. Performance indicators	Focus on drinking water & sanitation

4	Strategic Programme for Climate Resilience (SPCR) /Pilot Project on Climate Resilience (PPCR)	Development partner (ADB,IFC,WB) Budget \$ 110 Millions	Climate resilience development		To enable communities in mountainous ecosystems significantly vulnerable to Climate Change impacts to have improved access to and reliability of watershed and water resources.				SPCR project document		1. Work plan for monitoring and reporting on core indicators	a. Monitoring framework	Not implemented in the field
6	Hariyo Ban	Development partner /USAID	Forest/ livelihoods			Aug. 2011	Aug. 2016		Climate change	1.Base line HH survey report	<i>Work plan for monitoring and</i>	1. M&E indicators	Forest and livelihood focussed
7	Multi-sector Forestry Programme (MSFP)	Development partner	Ecological resilience and sustainable management of forest	\$ 150 M for 10 year	Outcome: 1. Govt. non-state actors jointly and effectively implementing inclusive forest sector strategies, policy and plan. 2. Private sector (farmers, entrepreneurs and FIs) increase investment and jobs in forestry sector. 3. Rural communities specially poor, disadvantaged and climate vulnerable people and households -			23	Forestry	1. HH survey questionnaire 2. FUG 3.Checklist	1.Data collection work on progress	M&E Framework framework so far not designed	Implementation just started

					benefits form local forest management and other investments. 4. Forest and trees sustainably managed and monitored by government, communities and private sector and climate resilient.								
8	Livelihood Forestry Programme (LFP)	DFID	Forest based livelihood	£26.2 million	Goal : Reduce the vulnerability and improve the livelihoods of the rural poor, Purpose: Enhance the assets of rural communities through the more equitable, efficient and sustainable use of forest resources.	2001	2011	15	LAPA pilot	1. Livelihood Baseline Study questionnaire attached annex in report	1. Hill Livelihood Baseline Study report		Implementation completed and evolve as MSFP
9	LGCDP -I (expected 2nd phase)							75					Reach to alldistricts and VDCs
10	PVAT	ICIMOD								1. HH survey questionnaire			Information available for reference
11	World Food Program (WFP)	UN agency	Asset creation & livelihood							1. HH survey questionnaire	1. Survey report		Information available for reference

Annex 2a Livelihoods and Forestry Programme (LFP)

Introduction

The Livelihoods and Forestry Programme (LFP) was the programme of the Government of Nepal, Ministry of Forest and Soil Conservation which was funded by DFID-Nepal as a bilateral aid. LFP was designed based on lessons learnt from the Nepal-UK Community Forestry Project (NUKCFP). It carried out its programme in fifteen districts of Nepal—seven hill districts of the Eastern and Western Regions, three districts in the Terai, and five districts in the Mid-western Region.

LFP was implemented from April 2001 to 2011 as per the experience and lessons learnt from the Nepal UK Community Forestry Programme (NUKCFP). LFP used approaches for sustainable livelihoods while designing its programme.

LFP focussed on forestry for development by reducing vulnerability and improving the livelihoods of the poor to enhance the assets of rural communities through various approaches such as efficient, equitable, and sustainable use of forest resources. LFP also expected to strengthen policy at the district and national levels and the operational environment for the forestry sector.

LFP had the concept that Community Forest User Groups should be active for their forest resources management at the district level. So it encouraged and supported the people with poverty, marginalized, and women CFUG members so that they will exercise their rights and improve group equity.

LFP developed District Forest Plans in the Terai and focused on how to increase the forest sector's contribution for poverty reduction within the districts. Local people were both the beneficiaries and the main implementers of the programmes, so LFP's attention was to mainstream equity issues into every programme by the process of social mobilization and participation. LFP worked for the conservation of environment which was the key concept for the management of the forest and encourage the people take its ownership. In spite its more advantages for the poor and other marginalized people, the greater areas of national forests got reduced in the Terai.

LFP worked for the poor and excluded people to reduce poverty and vulnerability, focusing on developing household and community assets by the process of the use of the forests and other natural resources with its sustainability so as to make the lives of the rural people comfortable. LFP also focused on climate change and its adaptation which address the poor, by increasing forest-based enterprise.

Implementation Locations poor and excluded

LFP covered 60% of the population in its programme districts. LFP operated its programme in 15 districts of Nepal which are as follow:

- Eastern Koshi Hills: Dhankuta, Terhathum, Sankhuwasabha, and Bhojpur
- Western Dhaulagiri hills: Baglung, Parbat, Myagdi
- Terai Lumbini zone: Nawalparasi, Kapilvastu, and Rupandehi
- Mid-Western Rapti zone: Rukum, Rolpa, Salyan, Pyuthan, and Dang.

The activities LFP-supported were to build capacity of forest users, forest managers and service providers to manage natural resources equitably and sustainably (including forest, watershed and public land management, soil conservation, , private forestry, and alternative energy technologies); encouraging

livelihoods and income generating activities for poor and excluded households; and developing enterprise and small-scale infrastructure.

Annex 2b CADP-N/LAPA Pilot/ National Climate Change Support Programme (NCCSP)

The Government of Nepal has recently approved the framework document for the Nepal Climate Change Support Programme (NCCSP) to implement the NAPA Project Profile 1 (Promoting community-based adaptation through integrated management of agriculture, water, forests and biodiversity) for immediate support to climate vulnerable communities in the Mid and Far West of Nepal. This will be implemented in the spirit of the National Framework for Local Adaptation Plan for Action (LAPA), approved by the Government of Nepal in November 2011. The programme will be supported by the Government of Nepal, the UK Department for International Development and the European Union.

Implementation

Project is implemented by Ministry of Science, Technology and Environment (MoSTE) in coordinated with Ministry of Federal Affairs and Local Development (MoFALD). Financial support will be provided to civil society and local and national governments to pilot innovative mechanisms of adaptation, and to test the convergence of mitigation and adaptation options. To this effect, a call for proposals will be organized. The integration of climate change-related measures into local level adaptation plans will be piloted in villages across all districts within the Karnali and Rapti river basins. A mechanism for sharing and learning from adaptation interventions among different stakeholders at the district and national levels will be established.

The programme will have important cross-cutting impacts and aspects, such as a strong commitment to women's empowerment; inclusion of the poor and disadvantaged groups; enhancement of good governance; mainstreaming climate change in local, regional and national level planning; as well as the use of ecosystem and livelihood perspectives incorporating an understanding of watershed dynamics. The programme covers 14 districts of mid- and far-Western Nepal, and will benefit a population of approximately 3 million people.

Implementation partners

- Rupantaran Nepal is partnering with HTSPE/ NCCSP
- Local Adaptation Plan for Action (LAPA)
- Alternative Energy Promotion Centre (AEPC)
- District Development Committee (DDC)
- District Environment and Energy Sections/Units (DEES/U)
- Village Development Committees (VDCs) and Municipalities

Implementation locations

The Government of Nepal has recently approved the framework document for the Nepal Climate Change Support Programme (NCCSP) to implement the NAPA Project Profile 1 (Promoting community-based adaptation through integrated management of agriculture, water, forests and biodiversity) for immediate support to climate vulnerable communities in the Mid and Far West of Nepal. This will be implemented in the spirit of the National Framework for Local Adaptation Plan for Action (LAPA), approved by the

Government of Nepal in November 2011. The programme will be supported by the Government of Nepal, the UK Department for International Development and the European Union.

The programme will be implemented in the following districts:

High hill : 1. Bajura 2. Dolpa 3. Humla 4. Jumla 5. Kalikot 6. Mugu

Mid hill : 7. Achham 8. Dailekh 9. Jajarkot 10. Rolpa 11. Rukum

Tarai : 12. Bardiya 13. Dang 14. Kailali

Annex 2c Local Governance and Community Development Programme (LGCDP)

1. Introduction

The Local Governance and Community Development Programme (LGCDP) aims to bring about improvements in the living standards of the population along with poverty reduction through better local governance with a democratic value system and inclusive development efforts. The Programme is run by the Ministry of Local Development (MLD) and has been implemented at VDC, municipality, DDC and national levels.

The following key principles and approaches were cited in the Programme's description:

- Align with National Three Year Interim Plan and MLD Concept Paper on Local Governance and Self Governance
- Inclusiveness and gender equality – affirmative action policies for women, poor and DAGs with focus of DAG mapping and tracking with the intention to scale-up and mainstream to a national level
- Community-led development – community users' committees will set out needs
- Rights-based approach – participation planning and demand-driven approaches (social mobilisation)
- Flexible and process-oriented approach – translation of national governance policies to local/district level with updates and changes to be carried out to make sure that the priority of responsive, accountable and inclusive local governance

Phase I of LGCDP began in July 2008 and was completed in July 2012. Data collection occurred across three of the fiscal years 2008/9, 2009/10 and 2010/11. All 75 districts were covered by the LGCDP and the progress of each district was tracked across the Programme's lifetime providing unit-less scores that can be compared. The Programme was operated in 58 municipalities and 3,915 VDCs. Phase II of LGCDP is currently in the planning phase and is likely to incorporate the Ministry of Federal Affairs and Local Development's (MoFALD) new Environmental-Friendly Local Governance (EFLG) goal. This will result in direct environmental indicators being added to the current set of LGCDP indicators and EFLG has been endorsed across various ministries and is thus expected to be a cross-sector framework in the near future.

The Programme is supported by many development partners, including ADB, DANIDA, CIDA, DFID, the UN System (UNDP, UNICEF, UNFPA, UNV, UNIFEM), Government of Norway, SDC, GTZ, JICA and the World Bank.

2. Purpose and Outcomes

The Programme focuses on the following outcomes and outputs to achieve its overall purpose of ‘improved access to locally and inclusively prioritised public goods and services’:

Outcome 1: Citizens and communities engage more actively with local governments and hold them accountable

Output 1: Communities and community organisations are empowered to participate in local governance processes

Output 2: Increased capacity of citizens, communities and marginalised groups to assert their rights and hold local governments accountable

Outcome 2: Increased capacity of local governments to provide basic services in an inclusive and equitable manner

Output 3: Local governments gain access to greater fiscal resources in equitable and appropriate ways

Output 4: Appropriate capacity building services passed on to all levels of the local government service delivery system

Output 5: Local government infrastructure and service delivery mechanisms and processes are fine-tuned

Outcome 3: Strengthened policy and national institutional framework for decentralisation, devolution and community development

Output 6: Policy framework for decentralisation promoted a more enabling environment for effective, transparent and accountable local governance

Output 7: Capacity of central government and national non-government institutions to provide appropriate support to local governments is enhanced

Output 8: Support provided for programme implementation

3. Indicators and measures

Indicators and measures collected in the assessment phase of LGCDP were divided into Minimum Conditions (MCs) and Performance Measures (PMs) with the PMs being the more extensive metric.

Implemented Indicators of MCs (Assessment Report, 2011)

DDC Level:

1. Planning and Management

- 1.1 Approved annual plan and budget for the current fiscal year by district council in previous fiscal Year
- 1.2 Annual budget ceiling and planning guidelines provided to Municipalities and VDCs by DDC. In case central government did not provide such guidelines and ceilings to DDCs, even then the DDC should have provided them from its internal resources
- 1.3 DDC has publicly informed the Municipalities, VDCs and relevant stakeholders about the approved annual budget and programs
- 1.4 Annual progress review of the previous year conducted by the DDC
- 1.5 DDC has submitted its reports as per the provision mentioned in grant guideline

2. Financial Management

- 2.1 Accounts and financial details of the previous of the previous FY should be completed and submitted for the final audit
- 2.2 DDC has prepared the annual statement of income and expenditures of District Development Fund (DDF) and financial statements for the previous FY
- 2.3 DDC must release the budget or grant from DDF (non-operating account) to VDCs, Municipalities, sectors and other organizations as per approved work plans and budgets. No transfer should be made in the operating account prior to council approval
- 2.4 Internal Audit Section established (LSGA art. 232) and functioning
- 2.5 Due and timely response have been made upon comments and reactions made in the Office of the Auditor's General Report within 35 days
- 2.6 Cumulative Records of unsettled irregularities documented and updated
- 2.7 DDC appointed auditors for the final audit of last FY of the last FY of VDCs final accounts.

3. Formation and Functioning of Committees

- 3.1 Formulation and functioning of supervision and monitoring committees (this indicator is not active)
- 3.2 Formulation and functioning of account committees (this indicator is not active)

4. Transparency

- 4.1 Information and documentation centre established and need to keep all information and records as specified

Municipality Level:

1. Local Self-Governance

1. Planning and Budget : MC-1
2. Progress Assessment: MC-2

2. Financial Management

1. Municipality Fund: MC-3
2. Detail Record of Tax and Income Sources: MC-4
3. Auditing System: MC-5
4. Procurement Planning: MC-6
5. Inventory Management: MC-7
6. Financial Irregularities and Action for Clearance: MC-8

3. Service Delivery and Transparency

1. Citizen Charter: MC-9
2. Provision of Building Permit : MC-10
3. Publicizing the Income-Expenditure and Rates of Tax and Duties : MC-11

. Formation and Function of Committees

1. Formation and Function of Accounts Committee: MC-12 (Inactive)
2. Formation and Function of Municipal level Revenue Advisory Committee: MC-13
3. Formation and Function of Supervision and Monitoring Committee: MC-14 (Inactive)
4. Formation and Function of Staff Recruitment Committee: MC-15

1st year (2007/8) = 8 indicators applied

2nd year (2008/9) = 10 indicators applied

3rd year (2009/10) = 15 indicators applied

VDC Level:

1. The Village council must approve previous year's VDC plan, programme and budget
2. VDC must conduct annual review of previous year's programmes and projects
3. VDC must get released 90% of the total VDC Grant (capital) allocated by GoN of last FY
4. VDC must plan and budget for a certain amount of VDC grant to the targeted groups as required by the VDC Grant Guideline
5. VDC publicise last year's income and expenditure statement
6. Final audit of VDC account of the previous of the previous FY should be completed and the audit report should be disseminated publicly by the auditor
7. VDC must document its all income –expenditure information in the given format
8. VDC must maintain account of its cash receipts, expenditure and revenue ledger books, and advance ledger book, movable, immovable and other assets
9. VDC should have update list of people getting social security allowances to the last fiscal year
10. VDC must keep an account of Vital Registration and submitted a report of it to DDC

11. VDC should prepare Village Profile (Postponed)

4. Selection of Projects

The Programme implements a Performance-Based Grant System (PBGS) with the objectives of:

- Improving local governance/bodies performance through a penalty and incentives mechanism
- Adapting the size of the grants to the expenditure and performance capacity in the key functional areas
- Identifying the capacity gaps of Local Governances in different functional areas
- Strengthening the general monitoring and evaluation (M/E) system through the annual assessment

The Performance Based Grant System was evaluated as being pivotal to productive and effective project implementation because it incentivises local competition across local bodies.

5. Baseline

The baseline was collected in 2009 by a university-based statistics specialist but was conducted later than expected and thus was still under review at the mid-term evaluation. Surveys were carried out at the household, community organisations, local bodies and MLD levels. The Programme's leaders have not yet provided the questionnaire for LGCDP but the mid-term review provided information on the overlap between the baseline and the M&E framework. The follow-up to the baseline survey is a two stage assignment combined with the end of program evaluation.

From the Outputs and Abstracts document that the LGCDP produced in 2010, the following indicators were described as being used in the baseline survey:

- % of households have access to dirt road (vehicle passable) within 30 minutes
- % of households have access to electricity
- % of households use public health facilities
- % of households have access to piped water
- Boys/girls school enrolment ratio
- Average time required to reach a primary school
- Average time required to reach a health post
- Average time required to reach a market centre
- Average time required to reach a commercial bank
- Average time required to reach a dirt road
- Average time required to reach an agriculture service centre
- % of participants in the planning process of local bodies that are women
- % of citizens know about development activities of local bodies
- % of citizens know about the budget of local bodies
- % of DDCs allocated internal revenue explicitly targets women

- % of the total staff in DDCs, municipalities, VDCs are women

6. DDC Level:

1. Planning and Management

- 1.1 Approved annual plan and budget for the current fiscal year by district council in previous fiscal Year
- 1.2 Annual budget ceiling and planning guidelines provided to Municipalities and VDCs by DDC. In case central government did not provide such guidelines and ceilings to DDCs, even then the DDC should have provided them from its internal resources
- 1.3 DDC has publicly informed the Municipalities, VDCs and relevant stakeholders about the approved annual budget and programs
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4. Transparency

- 4.1 Information and documentation centre established and need to keep all information and records as specified

4.4.2 Municipality Level:

1. Local Self-Governance

3. Planning and Budget : MC-1
4. Progress Assessment: MC-2

2. Financial Management

7. Municipality Fund: MC-3
8. Detail Record of Tax and Income Sources: MC-4
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10. Procurement Planning: MC-6
11. Inventory Management: MC-7
12. Financial Irregularities and Action for Clearance: MC-8

3. Service Delivery and Transparency

4. Citizen Charter: MC-9
5. Provision of Building Permit : MC-10
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3rd year (2009/10) = 15 indicators applied

4.4.3 VDC Level:

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5. VDC publicise last year's income and expenditure statement
6. Final audit of VDC account of the previous of the previous FY should be completed and the audit report should be disseminated publicly by the auditor
7. VDC must document its all income –expenditure information in the given format
8. VDC must maintain account of its cash receipts, expenditure and revenue ledger books, and advance ledger book, movable, immovable and other assets
9. VDC should have update list of people getting social security allowances to the last fiscal year
10. VDC must keep an account of Vital Registration and submitted a report of it to DDC

11. VDC should prepare Village Profile (Postponed)

7. Monitoring and Evaluation Framework

The public, the VDC/municipality, the DDC and the MLD carried out the monitoring process through the participation in review meetings and social audits. Data regarding social mobilisation was collected through a disaggregation process (by gender, ethnicity etc.). Each district has a social mobilisation sub-committee and the following system of monitoring was set up:

- Local level:
 - Monthly, trimesterly and annual programme reviews by PICs at the local bodies level,
 - Public audit will be conducted at community level once a year,
 - Social audit will be conducted at institutional level (i.e. local bodies) once a year, and
 - Public hearing will be conducted by local bodies once a year.
- MLD level:
 - Monthly/trimesterly and annual review by MLD,
 - Mid-term review after eighteen months of implementation, and
 - External review in the beginning of the fourth year of programme implementation.

The M&E framework was designed to be as simple as possible and will use the National Living Standard Survey Report, Democratic Survey Report, Nepal Human Development Report and Millennium Development Report to monitor the overall goal.

The following performance monitoring systems were used:

- MC/PM Assessments of DDCs, municipalities and VDCs (annual)
- MLD Administrative data – only financial and physical progress so far, building in other key administrative data in VDCs, municipalities and DDCs (ongoing)
- Sample surveys – direct information from citizens, useful before MLD data collection systems set up (every 2 years)

Evaluation of the Programme involved 2 external evaluations and an internal review. The following timeline was followed:

1. Mid-term evaluation (2010) – focus on activities, delivery of outputs, initial progress indications
2. Internal review (2011) – Government of Nepal and development partner focussing on additions/changes to modalities
3. Final evaluation (2013) – results driven, changes on purpose level, lessons learned

The M&E framework has detailed outcomes and outputs with indicators under each heading and sub-heading mainly focussed on participation, governance and inclusion.

The Outcomes are as follows:

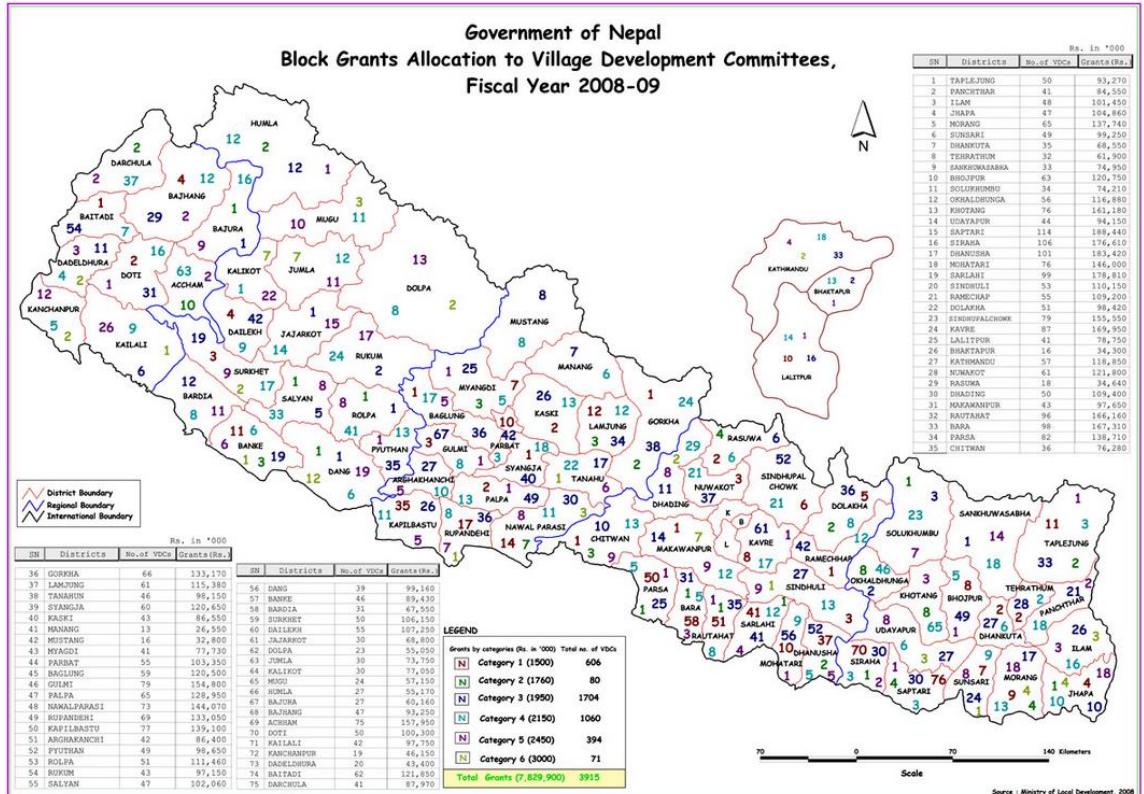
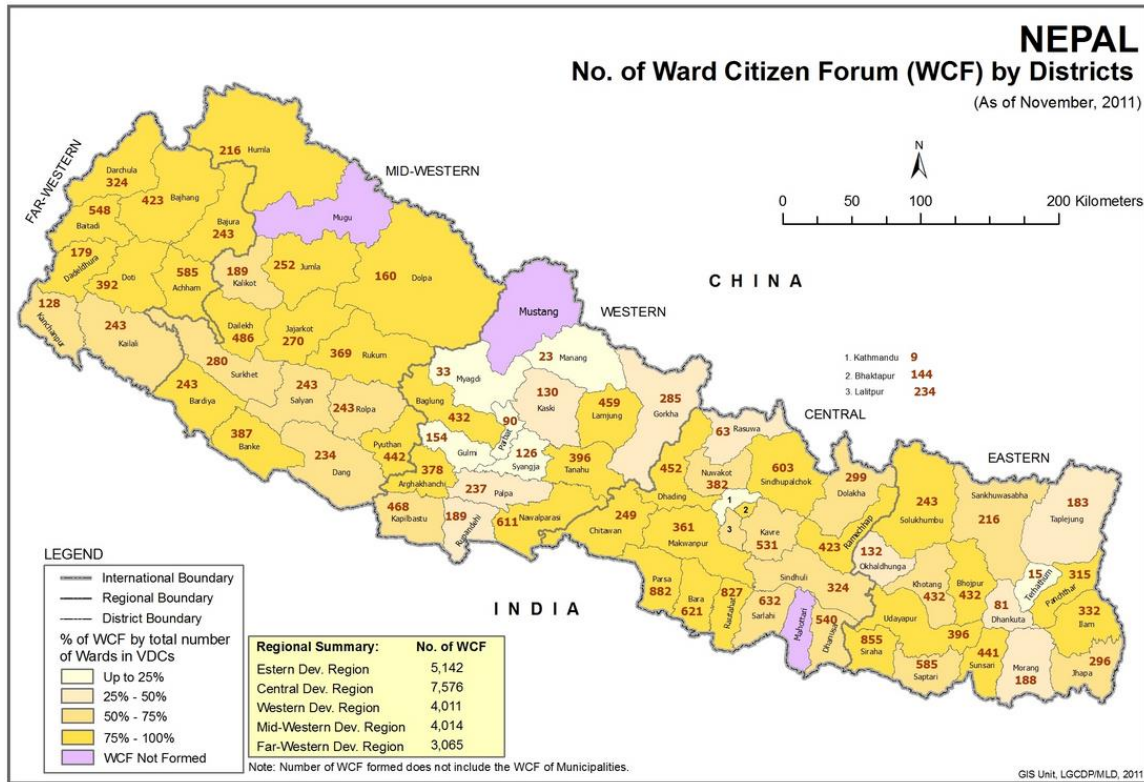
1. Citizens and communities actively engaged with local governments and holding them accountable

2. Increased capacity of local governments to manage resources and deliver basic services in an inclusive and equitable manner
3. Strengthened policy and national institutional framework for devolution and local self-governance

The development of monitoring and evaluation frameworks is cited as part of the capacity building process between the LGCDP and partner organisations. Hence, some indicators being measured in the PMs at the DDC Level fall under the monitoring and evaluation heading:

- 7.1 Implementation status of Monitoring and Evaluation System.
- 7.2 Reporting: Submission of monthly and annual statement of income and expenditure within the time limit and specified format.
- 7.3 Final inspections and clearance by DDC of projects within one month after completion report is received.
- 7.4 Impact studies/analysis of the DDC level projects about their implications on the poor.
- 7.5 DDC has carried out annual review about the status and budget of programs/projects implemented with development partner support within first trimester of the FY.
- 7.6 Functioning of DDC supervision and monitoring sub-committee.

Useful information from MLD:



Monitoring and Reporting in the Social Mobilisation Programme

Who and when?	Social mobiliser and Community facilitator	Ward citizens forum	IPC	VDC/Municipality ward	Local Service Providers	DDC & DSMC	MILD and LGCDP Community development coordination unit
Monthly	CF reports to to ward citizens forum and SM SM to: <ul style="list-style-type: none"> • VDC/municipality • IPC • Service provider 	Progress monitoring of group & citizen participation: <ul style="list-style-type: none"> • Access to service • Issues of discrimination • Monthly meetings of CF 	Monitoring of subcommittee members <ul style="list-style-type: none"> • Regular meetings • Monitor citizen mobilisation programme implementation 	Monitoring sub-committee: <ul style="list-style-type: none"> • Hold regular meetings • Monitoring citizen mobilisation programme implementation 	<ul style="list-style-type: none"> • Regular supervision of SMs • Meetings with SMs 	<ul style="list-style-type: none"> • Regular monitoring 	<ul style="list-style-type: none"> • Regular monitoring
Quarterly	SM and CF participation in REFLECT learning and learning reporting and other meetings	Monitoring meeting covering the following: : <ul style="list-style-type: none"> • Assets • Service • Voice • Impact • Rules of the game 	Information (disaggregated) to SMs, LSPs and programme implementation meeting with monitoring subcommittee	Reflection and learning about the three areas/aspects of change	Reflection and learning about the three areas/aspects of change	Reflection and learning about the three areas/aspects of change	Reflection and learning about the three areas/aspects of change
Biannually	Participation in district-level meeting	Public hearing of SM and completed programme	Public hearing and public audit	Public hearing and public audit report	Reporting based on the three areas of change		
Annually	Annual report	Annual report	Annual report	Annual report	Annual report	Annual report	Annual report

Annex 2dPoverty Alleviation Fund (PAF) Programme

1. Introduction:

PAF was established in 2004 as a special and targeted Programme aligned to Poverty Reduction Strategy (PRS) to extreme form of poverty in country by bring the excluded communities in the mainstream of development, by involving the poor and disadvantaged groups themselves in the driving seat of development efforts. It help the poor find their way on a sustainably way out of poverty with its 4 pillars (i) social mobilization; (ii) Capacity building; (iii) Income generation; and (iv) Community infrastructure development.

It is a Government Programme governed by PAF ordinance 2060 governed by twelve members governing board chaired by the Prime Minister, funded by the World Bank and IFAD. It envisages developing and implementing projects that address the issues and problems of the lower rung of the society, by involving the poor and the disadvantaged groups themselves, implementing demand driven targeted Programme for poverty alleviation and inclusion.

It's approach consists of six guiding principles: namely (a) Targeted to the poor (b) Social Inclusion (c) Demand Driven approach (d) Transparency, (e) Direct funding to community organizations of the poor, and (f) Community Institutional Development.

The target beneficiaries of PAF are the poor women, Dalit, Janajatis, and the vulnerable communities living below the poverty line.

PAF intervenes directly at the community level by organizing poor households into the Community Organization (CO) at settlement level through social mobilization process. Participatory well being ranking (PWR) of each households at settlement /community level is done based on food security and other socio-economic indicators. CO serve as a platform for the poor households, members come together to identify and share their problems which they are facing, prioritise and prepared CO plan both on community infrastructure development plan and income generation activities (IGAs) plan. CO needs to put at least 20 per cent cost either in the form of unskilled labour or cash in infrastructure sub-projects by the beneficiaries and minimum 20 per cent equity investment in cash by the participating member of CO in the IGAs sub-project. Infrastructure sub-projects can be on drinking water, road/culvert, irrigation, plantation etc. as per community needs where as in IGAs any activities that brings additional income to the poor households such as agriculture production enhancement, crop diversification, livestock rearing, trading and value additional. PAF provide fund support to implement CO's sub-project as an package including technology and skills required to the particular project and directly transfer fund to the CO account as a grand for infrastructure project and as a loan to the individual IGA beneficiaries. IGA member pay back the loan amount and interest to CO, which becomes later as a revolving fund of CO to finance such IGA activities in future.

PAF is currently working in 59 districts and reached to 1,686 VDCs, directly working with 21,407 COs with 560,717 household's members. Among the beneficiaries 29 per cent are Dalits communities. A recent social re-assessment study of 4,880 HHs in 175 COs of 11 districts revealed that more than 86 % HHs witnessed a rise in their real income by 15 % and incidence of food insecurity (food sufficiency for three months or less) has declined by 63.4 % among the CO member HHs.

2. Objectives :
 - i. As per the long term strategy of the GoN, help to bring down the level of poverty below 10 percent in 20 years time.
 - ii. To reduce poverty by half by the year 2015 as per the Millennium Development Goals (MDGs)

3. Components:

Social Mobilization, Income Generation, Small Community Infrastructure Development and Capacity Building are the four major programme components of PAF.

- iii. Small-Scale Village and Community Infrastructure
- iv. Income Generating Sub-projects
- v. Innovation and Special Programs
- vi. Capacity Building
 - a. Social Mobilization of Community Groups
 - b. Capacity Building for Local Bodies

4. Outcome

Reaching out to the most vulnerable groups especially disadvantaged due to gender, cast, ethnicity or physical isolation. Most of the resources given to community-led development initiatives can help many poor families get on a sustainable path out of poverty.

5. Baselines Indicator:

For the purpose of PAF Impact Evaluation (IE), baseline data established by two rounds of surveys of 3,000 households from 200 villages. The first baseline was carried out in late 2007 and the follow-up of the same households in early 2010.

The survey questionnaire is adapted from the Nepal Living Standards Survey (NLSS) and includes detailed information on consumption and income, socio-economic and demographic issues, including education, health and nutrition, housing conditions and physical assets, migration and remittances, employment, social environment, community relationship, voice and participation. For comparability with the national household survey based welfare measures, PAF survey includes a very similar consumption module and follows the same consumption aggregation method.

- land ownership
- main occupation
- sources of income
- types of house / house structure
- types crops cultivated
- species of livestock reared
- financing facilities
- Extent of food security assets
- membership of civil society organization
- Sources of energy used
- Infrastructural facilities-road, school, health, drinking water, irrigation etc.

The IE analysis uses panel households (2774 out of 3,000), half of which are PAF beneficiaries (treatment) the rest non-beneficiaries (control) households. Outcome indicators on PAF beneficiary

households and carefully matched non-beneficiary households are compared for the periods before and after the initiation of the PAF program. This method is known as difference-in-difference combined with propensity score matching.

6. M & E Indicators:

PAF has its result framework with following indicators as follows:

PDO indicators:

- Number of households benefitting from increased access to community infrastructure
- Percentage of beneficiary households have increased their incomes by at least 15% against base year (2007), by the EOP
- Percentage of key positions in Project community organization that come from targeted households
- *Number of CO members *(households)*
- *Number of non CO members *(households)*
- *Percentage* of CO members that are female

Intermediate Results Indicators:

A. Infrastructure

- Number of infrastructure sub-projects that are completed with target community participation, according to agreed design and quality standards
- Percentage infrastructure subprojects operating with an O&M system

B. Income Generating Activities

- Percentage of IGA community organization members who belong to targeted HHs
- *Percentage* of CO members (from a sample survey) with IGA investment Economic Rate of Return (ERR) of at least 10% in a year
- *Percentage* increase in the number of CO members accessing funds from the revolving fund more than one time for IGAs.
- *Percentage* of CO subprojects with no more than 50% of investment funds in any one IGA category
- *Percentage* of CO members with improved levels of food availability

C. Innovation

- *Percentage* of project-funded innovations that are completed and from which lessons learned have been disseminated.

D. Capacity building, Monitoring and Evaluation

- *Percentage* of DDCs/VDCs participating in monitoring PAF activities

- *Percentage* of VDCs/ COs Network with at least one Local Resource Person
- *Percentage* of POs that have been evaluated by COs

E. Administration of PAF

- *Percentage of CO agreements endorsed/ approved by TAC within a month*
- *Percentage* of POs that submit PO Progress and monitoring reports and Audit reports according to Project standards of timeliness to Project management
- *Percentage* of complaints received by PAF recorded, addressed satisfactorily and the actions documented through complaint handling mechanism.

PAF evaluates impact on:

- Direct and indirect beneficiaries based on the nature of community sub-projects such as change in education, food security, nutrition, house condition, drinking water, health and sanitation, vaccinated children number, % population using contra septic;
- Change in service access – primary health services (distance), primary school (distance);
- Reduction on economic dependency – change in HHs taking loan from money lenders, change in interest rate charge by money lenders;
- Social improvement – increase participation in community activities (women, vulnerable and underprivileged), reduction in antisocial activities (gabling and alcoholism);
- Improvement in household members status – increased HHs income, improved food intake, improvement in poverty situation of participating households;
- Impact on HHs not covered by the Programme implementation as per poverty ranking;
- Change in regional environment due to the implementation of project – change in water source and use of water due to subproject, change in solid waste and hygiene (air, water and land pollution);
- Change in biodiversity and impact on forest and grazing land;
- Change in physical balance (e.g. soil erosion, food and landslide, cultivable land, soil condition)

7. Partnership:

PAF is working with other development partners for supplement and compliment resources at community level forging partnership signing MoU with following institutions : MoFALD, WFP, GTZ, USAIS supported EIG, Helvetas, Hiefer-Nepal, Practical Action, LFP, FNCCI and AEPC.

8. Impact:

Social re-assessment report revealed that the households received PAF support for a period of 3 years or more recorded 86.25 % rise in average annual income adjusting inflation (i.e. real income). The real income raise at the household level is even higher for *Dalit* and *Janjatis*. The average real income of *Janajatis* grew by 83.95 % and that of Dalit by 79.25 %.

Annex 3 Baseline Parameters of Different Interventions

Baseline Questionnaires/ Parameters	PAF	MSFP	PVAT/ ICIM OD	WFP	CDK N/ ID S	NCCSP	LFP	LGCDP
1. Land ownership	*	*	*	*	*	*	*	*
2. Main occupation	*	*	*	*	*	*	*	*
3. Sources of income	*	*	*	*	*	*	*	*
4. Types of house	*	*	*	*	*	*	*	*
5. Land affected by climate hazards		*			*	*	*	
6. Govt. agencies functioning in the community		*			*	*	*	*
7. Types crops cultivated	*	*	*	*	*	*	*	*
8. Species of livestock reared	*	*	*	*	*	*	*	*
9. Financing facilities/financial services	*	*	*			*	*	*
10. Climate change adaptation practices		*	*	*		*	*	*
11. Changes in cropping practices		*	*		*	*		
12. Changes in land use over years		*				*		
13. Noticed changes of the state plants herbs & others edible wild species		*				*		
14. Noticed changes of the state livestock, poultry & fishery		*						
15. House structure	*	*	*	*	*	*	*	*
16. Irrigation facility in total cultivable land (seasonal/permanent)		*	*	*	*	*	*	
17. Awareness about climate change		*	*			*		
18. Changes noticed due to climate change/disasters		*	*	*	*			
19. Extent food security /assets	*	*	*	*	*			*
20. Extent of change in income due to agriculture production		*	*					
21. Member of civil society organization	*	*	*			*	*	*
22. People's perception on climatic hazards		*	*					
23. Sources of energy used	*	*	*		*	*	*	*
24. Infrastructural facilities-road, school, health, drinking water, irrigation etc.	*	*	*	*		*	*	*
25. Hazards coping strategies					*			

Sampling methods	Quasi, purposive & stratified (VDC & Community/HHs)			Simple random sampling (VDC & HHs)		Simple random sampling (district & VDC)	Stratified & probability sampling (VDC & HHs)	Probability & stratified sampling
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Annex 4 Climate Vulnerability Maps and District ranking (NAPA, 2010)

FLOOD VULNERABILITY MAP OF NEPAL - Terai Ecological Zone



District ranking-Flood Vulnerability Index

Flood Vulnerability	Districts
Very High (0.788-1.000)	Mahottari
High (0.534-0.787)	Rautahat, Chitwan, Parsa, Saptari, Siraha, Sunsari, Dhanusha, Bara
Moderate (0.337-0.533)	Sarlahi, Nawalparasi, Kailali, Jhapa, Morang, Kanchanpur, Bardiya
Low (0.001-0.336)	Banke, Kapilbastu, Rupandehi
Very Low (0.000)	Achham, Arghakhanchi, Baglung, Baitadi, Bajhang, Bajura, Bhaktapur, Bhojpur, Dadeldhura, Dailekh, Dang, Darchula, Dhading, Dhankuta, Dolakha, Dolpa, Doti, Gorkha, Gulmi, Humla, Ilam, Jajarkot, Jumla, Kalikot, Kaski, Kathmandu, Kavrepalanchowk, Khotang, Lalitpur, Lamjung, Makwanpur, Manang, Mugu, Mustang, Myagdi, Nuwakot, Okhaldhunga, Palpa, Panchthar, Parbat, Pyuthan, Ramechhap, Rasuwa, Rolpa, Rukum, Salyan, Sankhuwasabha, Sindhuli, Sindhupalchok, Solukhumbu, Surkhet, Syangja, Tanahu, Taplejung, Terhathum, Udayapur

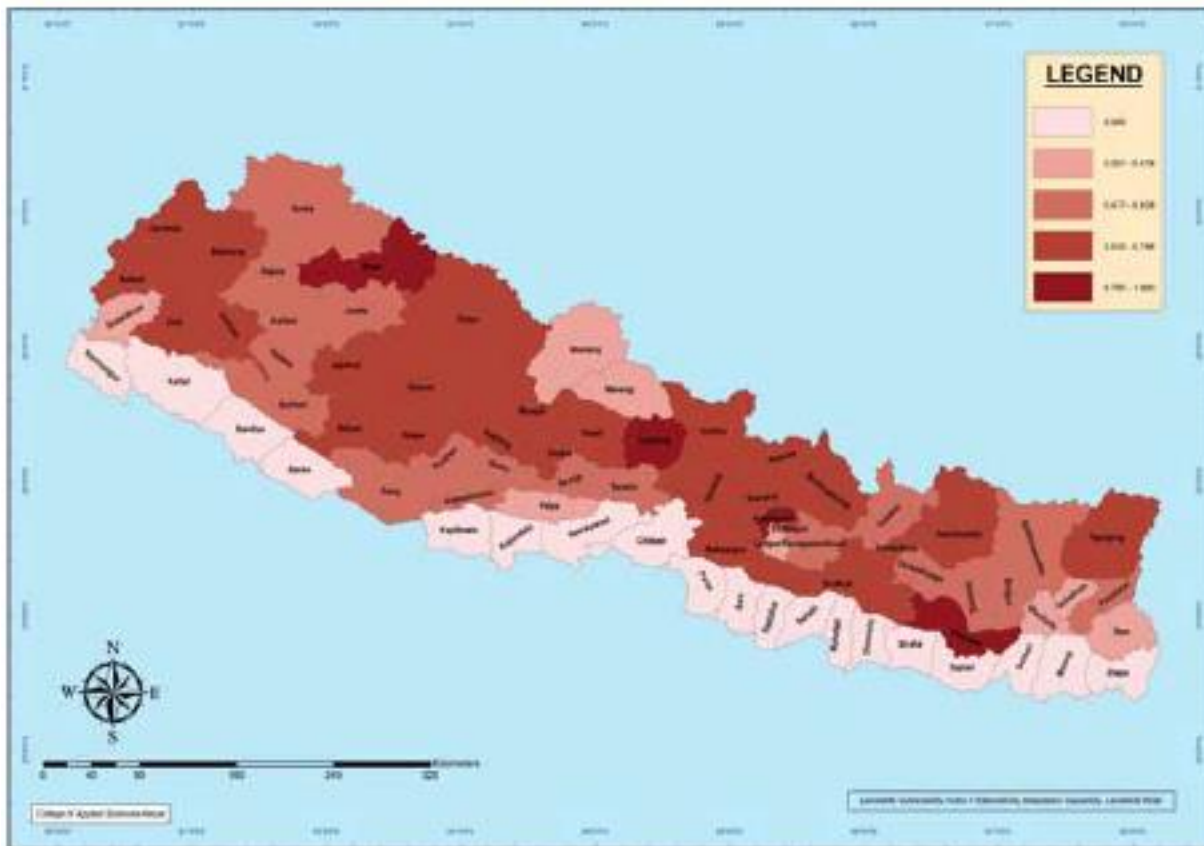
DROUGHT VULNERABILITY MAP OF NEPAL



District ranking-Drought Vulnerability Index

Flood Vulnerability	Districts
Very High (0.760-1.000)	Jajarkot, Mugu, Kalikot, Dailekh, Saptari, Achham, Siraha
High (0.515-0.759)	Dolpa, Humla, Kathmandu, Jumla, Dadekohura, Bajura, Bajhang, Rukum, Salyan, Dolakha, Rolpa, Ramechhap, Doti, Dhanusha, Dhading
Moderate (0.332-0.514)	Baitadi, Sarlahi, Bardiya, Pyuthan, Rasuwa, Manang, Kanchanpur, Mustang, Bhaktapur, Gorkha, Mahottari, Udayapur, Kapilbastu, Darchula, Rautahat, Bhojpur, Solukhumbu, Arghakhanchi
Low (0.181-0.331)	Sindhuli, Parsa, Dang, Banke, Kailali, Gulmi, Taplejung, Sindhupalchok, Lalitpur, Makwanpur, Panchthar, Nuwakot, Chitwan, Baglung, Surkhet, Sankhuwasabha, Kaski, Palpa, Khotang, Nawalparasi, Bara, Myagdi, Parbat, Okhaldhunga
Very Low (0.000-0.180)	Lamjung, Sunsari, Rupandehi, Tanahu, Kavrepalanchowk, Nam, Terhathum, Morang, Syangja, Dhankuta, Jhapa

LANDSLIDE VULNERABILITY MAP OF NEPAL - Hill and Mountain Ecological Zone



District ranking-Landslide Vulnerability Index

Landslide Vulnerability	Districts
Very High (0.787-1.000)	Udayapur, Kathmandu, Mugu, Lamjung
High (0.630-0.786)	Darchula, Baglung, Rolpa, Achham, Makwanpur, Dolpa, Parbat, Taplejung, Ramechhap, Gorkha, Salyan, Doti, Bajahang, Sindhuli, Bhaktapur, Solukhumbu, Baitadi, Kaski, Rasuwa, Sindhupalchok, Jajarkot, Rukum, Nuwakot, Dhading, Myagdi
Moderate (0.47-0.629)	Bajura, Bhojpur, Okhaldhunga, Sankhuwasabha, Syangja, Dailekh, Arghakhanchi, Tanahu, Kalikot, Kavrepalanchowk, Dolakha, Khotang, Dang, Surkhet, Humla, Gulmi, Jumla, Panchthar, Pyuthan
Low (0.001-0.476)	Ilam, Manang, Dadedhura, Mustang, Palpa, Terhathum, Lalitpur, Dhankuta
Very Low (0.000)	Saptari, Siraha, Chitwan, Mahottari, Sunsari, Dhanusha, Nawalparasi, Rautahat, Sarlahi, Bara, Kanchanpur, Parsa, Morang, Kailali, Jhapa, Banke, Kapilbastu, Rupandehi, Bardiya

Annex 5 M&E Indicators of Different Interventions

Intervention	T1 Indicators	T2 Indicators
1. PAF	Number of infrastructure sub-projects that are completed with target community participation, according to agreed design and quality standards	Number of households benefitting from increased access to community infrastructure
	<i>Percentage</i> of project-funded innovations that are completed and from which lessons learned have been disseminated.	Percentage infrastructure subprojects operating with an O&M system
	<i>Percentage</i> of DDCs/VDCs participating in monitoring PAF activities	Percentage of beneficiary households have increased their incomes by at least 15% against base year (2007), by the EOP
	<i>Percentage</i> of VDCs/ COs Network with at least one Local Resource Person	Percentage of IGA community organization members who belong to targeted HHs
	<i>Percentage</i> of POs that have been evaluated by COs	
	Percentage of key positions in Project community organization that come from targeted households	
	<i>Percentage of CO agreements endorsed/ approved by TAC within a month</i>	<i>Number of CO members *(households)</i>
	<i>Percentage</i> of POs that submit PO Progress and monitoring reports and Audit reports according to Project standards of timeliness to Project management	<i>Percentage</i> of CO members (from a sample survey) with IGA investment Economic Rate of Return (ERR) of at least 10% in a year
	<i>Percentage</i> of complaints received by PAF recorded, addressed satisfactorily and the actions documented through complaint handling mechanism.	<i>Number of non CO members *(households)</i>
		<i>Percentage</i> increase in the number of CO members accessing funds from the revolving fund more than one time for IGAs.
	<i>Percentage</i> of CO members that are female	<i>Percentage</i> of CO members with improved levels of food availability
	<i>Percentage</i> of CO subprojects with no more than 50% of investment funds in any one IGA category	
2. LGCDP		
	Condition of primary schools	HHs with food sufficiency less than 3 months
	Condition of health posts	Concentration of marginalized HHs
	Number of ward citizen forums	Prevalence of vulnerable HHs

	Concentration of marginalized HHs	HHs with food sufficiency less than 3 months
	<p>% of DDCs that meet all 15 minimum Conditions per fiscal year</p> <p>% of all DDCs that spend more than 80% of planned capital development budget per year</p> <p>% of DDCs that spend more than 10% of internal income explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year</p> <p>% of DDCs that have less than 2% irregular expenditure</p> <p>% of all Municipalities that meet the Minimum Conditions per year</p> <p>% of Municipalities that score above 50 point in all performance measurements and meet minimum score in all functional areas per fiscal year</p> <p>% of municipalities that spend more than 80% of planned capital development budget per year</p> <p>% of Municipalities that spend more than</p> <p>% of internal income explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year</p>	<p>a) Access to public goods (i) roads; (ii) drinking water</p> <p>b) Access to public services (i) school</p> <p>c) Engagement with local government</p>
	<p>Forest managers (forest group members and related service providers) enabled to responsively manage and utilize forest resources to sustainably maximize the multiple benefits</p> <p>Capacity within and coordination amongst institutions strengthened for forestry sector development and enhanced livelihoods</p> <p>Innovative, inclusive and conflict sensitive approaches shared to inform forest sector planning and policies</p> <p>National Level forest sector capacity and response to field reality strengthened</p>	Poor and excluded groups enabled to participate in and benefit from the forestry sector
3. LFP /LAPA pilot		Reduced vulnerability and improved livelihoods for poor and excluded rural people
		Assets of rural communities are enhanced by more equitable, efficient, and sustainable use of forest resources
		Poverty incidence (Food security, natural disasters, famine, etc.)
		Access to infrastructure (School, drinking water, health, communication, etc.)

		Access to road/market Agricultural productivity (Fertility level, cash crops, fruits, export, etc.)
5. C ADP-N/ LAPA Pilot/NCCSP LAPA	Improving capacity to adaption to climate change related threat(s).	Number of people moving from category of low resilience to higher resilience
		Number of people covered by NCCSP, disaggregated by gender and social Inclusion Value of assets/livelihoods protected from CC impacts
		Number of income sources per household
		Evidence of level and use of knowledge of CC by LAPA beneficiaries
		Percent change in beneficiary behaviour utilizing adjusted processes, practices or methods for managing climate risks ¹⁶
		Improvement in the relevant quantitative development outcome (food security, water resources, health)
		Nepal's poorest and most vulnerable people are able to adapt to the impacts of climate change
		No. people less vulnerable to the impacts of climate change and climate variability.

Annex 6 List of Socio-economic and Climate Indicators

I. Socio-economic indicator	Level	Source	Comments
HHs with food sufficiency less than 3 months	VDC	DAG (LGCDP)	
Concentration of marginalized HHs	VDC	DAG (LGCDP)	
Condition of primary schools	VDC	DAG (LGCDP)	
Condition of health posts	VDC	DAG (LGCDP)	
Prevalence of vulnerable HHs	VDC	DAG (LGCDP)	
Number of ward citizen forums	VDC	DAG (LGCDP)	
Reasons given for children not attending school	DDC	ICIMOD (PVAT 2011)	Education
Sources of total annual HH income	DDC	ICIMOD (PVAT 2011)	HH Consumption, Income and Durable Goods
Remittances, cash, payments received by each household from people within country	DDC	ICIMOD (PVAT 2011)	HH Consumption, Income and Durable Goods
Changes in economic situation of HHs during last 12 months	DDC	ICIMOD (PVAT 2011)	Perceived economic situation and political influence
HHs currently in debt and level of HH debt	DDC	ICIMOD (PVAT 2011)	Loans
II. Climate Indicators	Level	Source	Comments
Community perception of climate variability (multiple indicators)	DDC	ICIMOD (PVAT 2011)	Large number of questions asked e.g. change in frequency and severity
Community perception of natural shocks/damage	DDC	ICIMOD (PVAT 2011)	Shocks and coping subheading
Strategies adopted to cope with these shocks/damage	DDC	ICIMOD (PVAT 2011)	Shocks and coping subheading
Institutions turned to for assistance in dealing with shocks	DDC	ICIMOD (PVAT 2011)	Shocks and coping subheading
Time it took for households to return to before shock	DDC	ICIMOD (PVAT 2011)	Shocks and coping subheading
Average number of months with sufficient food for all HH	DDC	ICIMOD (PVAT 2011)	Food security subheading
Frequency of HH members going full day w/o food	DDC	ICIMOD (PVAT 2011)	Food security subheading
Average number of months with enough food stocks to feed all HH	DDC	ICIMOD (PVAT 2011)	Food security subheading
Number of months HHs could grow/collect/buy fodder during 12 months	DDC	ICIMOD (PVAT 2011)	Livestock and Fishery
Average number of animals owned by each household	DDC	ICIMOD (PVAT 2011)	Livestock and Fishery
Source of a majority of water for agriculture: irrigation or rain	DDC	ICIMOD (PVAT 2011)	Engagement in Agriculture subheading
Primary source of seeds for agriculture	DDC	ICIMOD (PVAT 2011)	Engagement in Agriculture subheading
Use of compost/manure/fertiliser/pesticide during last 12 months	DDC	ICIMOD (PVAT 2011)	Engagement in Agriculture subheading

Primary source of fuel	DDC	ICIMOD (PVAT 2011)	Electricity, water sanitation and health subheading
Primary source of drinking water	DDC	ICIMOD (PVAT 2011)	Electricity, water sanitation and health subheading
Number of days that HH members fetched water for normal daily HH needs	DDC	ICIMOD (PVAT 2011)	Electricity, water sanitation and health subheading
Number of months water was sufficient for watering livestock during 12 months	DDC	ICIMOD (PVAT 2011)	Electricity, water sanitation and health subheading
Perceived ability of dwelling to withstand climate risks w/o damage	DDC	ICIMOD (PVAT 2011)	Dwelling subheading
Number of livestock per head		ICIMOD (MLV)	Access to resources
Secondary and tertiary sector livelihood diversification index		ICIMOD (MLV)	Livelihood strategies
Primary sector livelihood diversification index		ICIMOD (MLV)	Livelihood strategies
Cash crop diversity index		ICIMOD (MLV)	Livelihood strategies
Number of formal/informal institutions assisting HH in stress		ICIMOD (MLV)	Social networks
Time to reach next market centre/hospital/bus stop		ICIMOD (MLV)	Physical accessibility
Severity of water conflicts (within/between communities)		ICIMOD (MLV)	Water security
Number of short term livelihood diversification coping strategies		ICIMOD (MLV)	Coping strategies
Average time to recover from shocks in relation to combined severity		ICIMOD (MLV)	Coping strategies
Number of medium term coping strategies implemented		ICIMOD (MLV)	Coping strategies
Agricultural land flat/sloping		ICIMOD (MLV)	Environmental stability
Agricultural land irrigated		ICIMOD (MLV)	Environmental stability
Soil quality		ICIMOD (MLV)	Environmental stability
Degree to which dwelling can withstand extreme weather events		ICIMOD (MLV)	Environmental stability
Perceived changes in climatic event frequency/severity/temperature/ppt		ICIMOD (MLV)	Medium term exposure
Total area of land	VDC	NekSAP	Primary indicators only shown here, also have secondary etc., these are indicators to be added in with NCCSP and PPCR
People's perception on climate hazards in relation to food security	VDC	NekSAP	Red = mandatory
Irrigation facility in total cultivable land	VDC	NekSAP	
Extent food security assets damaged by the hazards	VDC	NekSAP	
Closest type of road and time to get there	VDC	NekSAP	
Nearest market to buy necessities and sell local products	VDC	NekSAP	
Access to seeds	VDC	NekSAP	
Micro finance service and/or loan facility	VDC	NekSAP	

locally available			
Extent of change of income due to agriculture production	VDC	NekSAP	
Land affected by climatic hazards	VDC	NekSAP	
Variety of food crop in community	VDC	NekSAP	
Changes in cropping practices over time	VDC	NekSAP	
Changes in land use over the years	VDC	NekSAP	
Noticed changes in the state of plants etc.	VDC	NekSAP	
Noticed changes in the state of livestock, poultry	VDC	NekSAP	
Changes in the source of drinking water in last 6 months	VDC	NekSAP	
Change in climatic trends	DDC	NekSAP	
State of water supply at source	DDC	NekSAP	
Changes in volume of water (potable and irrigation)	DDC	NekSAP	
Expansion of ecological belts and its impact	DDC	NekSAP	
Cropping intensity	DDC	NekSAP	
Behaviour of food crop species	DDC	NekSAP	
Status of wild edible herbs	DDC	NekSAP	
Status of local livestock and local food crops	VDC, DDC	NekSAP	
Local level service providers	VDC, DDC	NekSAP	
Livestock protection	DDC	NekSAP	
Extent of disease/pest infection in livestock and crops	VDC, DDC	NekSAP	
Community access to agricultural inputs	VDC, DDC	NekSAP	
Change in land use	DDC	NekSAP	
Crops and food security assets damaged by climatic hazards	VDC, DDC	NekSAP	
Forest area available	DDC	NekSAP	

Annex 7 Intervention/Project Indicators

Intervention /Project Indicators										
S N	Interventions	Outputs (intermediate indicators)	Outcomes (PDO Indicators)	Institutional sub- indicators #(T1)	Resilience (T2) sub- indicators	Impact	Baseline variables	Aligns with	Theory of Change	
1	Poverty Alleviation Fund (PAF) - Nepal					Social re-assessment report revealed that the households received PAF support for a period of 3 years or more recorded 86.25 % rise in average annual income adjusting inflation (i.e. real income). The real income raise at the household level is even higher for Dalit and Janjatis. The average real income of Janjatis grew by 83.95 % and that of Dalit by 79.25 %.	· Land ownership	PRSP	Organizing poor into community organization to identify and plan what is better and sustainable way for them to come out of poverty by helping them to harness local economic opportunity by providing funding support with required skill and technology in a package.	
	a. Infrastructure	Number of infrastructure sub-projects that are completed with target community participation, according to agreed design and quality standards	Number of households benefiting from increased access to community infrastructure	Number of infrastructure sub-projects that are completed with target community participation, according to agreed design and quality standards	Number of households benefiting from increased access to community infrastructure		· Main occupation			Forged partnership with MoFALD, WFP, GTZ, USAIS supported EIG, Helvetas, Hieffer-Nepal, Practical Action, LFP, FNCCI and AEPC.
		Percentage infrastructure subprojects operating with an O&M system	Percentage of beneficiary households have increased their incomes by at least 15% against base year (2007), by the EOP		Percentage infrastructure subprojects operating with an O&M system		· Sources of income			
					Percentage of beneficiary households have increased their incomes by at least 15% against base year (2007), by the EOP		· Types of house / house structure			
	B .Income Generating Activities (IGAs)	Percentage of IGA community organization members who belong to targeted HHs	Percentage of key positions in Project community organization that come from targeted households		Percentage of IGA community organization members who belong to targeted HHs		· Types crops cultivated			
				Percentage of key positions in Project community organization that come from targeted households			· Livestock reared			

	<i>Percentage of CO members (from a sample survey) with IGA investment Economic Rate of Return (ERR) of at least 10% in a year</i>	<i>Number of CO members *(households)</i>		<i>Number of CO members *(households)</i>		·Financing facilities /acrrs to financial servi es
				<i>Percentage of CO members (from a sample survey) with IGA investment Economic Rate of Return (ERR) of at least 10% in a year</i>		·Extent of food security assets
	<i>Percentage increase in the number of CO members accessing funds from the revolving fund more than one time for IGAs.</i>	<i>Number of non CO members *(households)</i>		<i>Number of non CO members *(households)</i>		·Membership of civil society organization /Participation
				<i>Percentage increase in the number of CO members accessing funds from the revolving fund more than one time for IGAs.</i>		·Sources of energy used
	<i>Percentage of CO subprojects with no more than 50% of investment funds in any one IGA category</i>	<i>Percentage of CO members that are female</i>		<i>Percentage of CO members that are female</i>		·Infrastructural facilities-road, school, health, drinking water, irrigation etc.
				<i>Percentage of CO subprojects with no more than 50% of investment funds in any one IGA category</i>		
	<i>Percentage of CO members with improved levels of food availability</i>			<i>Percentage of CO members with improved levels of food availability</i>		
c. Innovation	<i>Percentage of project-funded innovations that are completed and from which lessons learned have been disseminated.</i>		<i>Percentage of project-funded innovations that are completed and from which lessons learned have been disseminated.</i>			

	d. Capacity building, Monitoring and Evaluation	<i>Percentage of DDCs/VDCs participating in monitoring PAF activities</i>		<i>Percentage of DDCs/VDCs participating in monitoring PAF activities</i>					
		<i>Percentage of VDCs/COs Network with at least one Local Resource Person</i>		<i>Percentage of VDCs/COs Network with at least one Local Resource Person</i>					
		<i>Percentage of POs that have been evaluated by COs</i>		<i>Percentage of POs that have been evaluated by COs</i>					
	Administration of PAF	<i>Percentage of CO agreements endorsed/ approved by TAC within a month</i>		<i>Percentage of CO agreements endorsed/ approved by TAC within a month</i>					
		<i>Percentage of POs that submit PO Progress and monitoring reports according to Project standards of timeliness to Project management</i>		<i>Percentage of POs that submit PO Progress and monitoring reports according to Project standards of timeliness to Project management</i>					
		<i>Percentage of complaints received by PAF recorded, addressed satisfactorily and the actions documented through complaint handling mechanism.</i>		<i>Percentage of complaints received by PAF recorded, addressed satisfactorily and the actions documented through complaint handling mechanism.</i>					
2	LGCDP	1: Communities and community organizations participate actively in local governance processes 2: Increased capacity of citizens, communities and marginalized groups to assert their rights and hold local governments accountable 3: Local governments gain access to greater fiscal resources in	1: Citizens and communities engaged actively with local governments and hold them accountable 2: Increased capacity of local governments to manage resources and deliver basic services in an inclusive and equitable manner 3: Strengthened policy and national institutional framework for devolution and local self-governance	1.% of DDCs that meet all 15 minimum Conditions per fiscal year 2.% of DDCs that meet all 15 minimum Conditions per fiscal year 3.% of all DDCs that spend more than 80% of planned capital development budget per year 4.% of DDCs that spend more than 10% of internal income	a)Access to public goods I) LOCAL ROADS ii)DRINKING WATER b) ACCESS TO PUBLIC SERVICES I) School a) ENGAGEMENT WITH LOCAL GOVERNMENTS		1. road (earth roads) 2. drinking water (reservoirs, pipes) 3. education (school buildings, teacher salaries, primary & secondary schools) 4. electricity (national grid, micro hydro)	the Ministry of Local Development (MLD) with Phase I covering: • 75 District Development Committees (DDCs) • 58 Municipalities • 3,915 Village Development Committees (VDCs)	The overarching goal of LGCDP is “to contribute towards poverty reduction through inclusive responsive and accountable local governance and participatory community-led development that will ensure increased involvement of women, Dalit, Adibasi, Janajati,

		<p>equitable and appropriate ways</p> <p>4:Appropriate capacity building services passed on to all levels of the local government service delivery system</p> <p>5:Local governments service delivery mechanisms and processes fine-tuned</p> <p>6:Policy framework for decentralization promoted a more enabling environment for effective, transparent and accountable local governance</p> <p>7:Policy framework for decentralization promoted a more enabling environment for effective, transparent and accountable local governance</p> <p>8.Support provided for programme implementation</p>	<p>explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year</p> <p>5.% of DDCs that have less than 2% irregular expenditure (Beruju)</p> <p>6.% of all Municipalities that meet the Minimum Conditions per year</p> <p>7.% of Municipalities that score above 50 point in all performance measurements and meet minimum score in all functional areas per fiscal year</p> <p>8.% of municipalities that spend more than 80% of planned capital development budget per year</p> <p>9.% of Municipalities that spend more than 10% of internal income explicitly on women, children, DAGs, ethnic groups, disabled and old people per fiscal year</p>			5. health	<p>Development partners:</p> <ul style="list-style-type: none"> • ADB • DANIDA • CIDA • DFID • UN System (UNDP, UNICEF, UNCDF, UNFPA, UNV, UNIFEM etc.) • Government of Norway • SDC • GTZ • JICA • World Bank 	<p>Muslim Madhesi, disadvantaged groups in the local governance process”.</p>
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			<p>1) Forest managers (forest group members and related service providers) enabled to responsively manage and utilize forest resources to sustainably maximize the multiple benefits</p> <p>2) Poor and excluded groups enabled to participate in and benefit from the forestry sector</p> <p>3) Capacity within and coordination amongst institutions strengthened for forestry sector development and enhanced livelihoods</p> <p>4) Innovative, inclusive and conflict sensitive approaches shared to inform forest sector planning and policies</p> <p>5) National Level forest sector capacity and response to field reality strengthened</p>					
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3	LFP	<p>Output1 Internal management systems and social processes of CFUGs are strengthened and more equitable and gender sensitive</p> <p>Output2 Capacity of FUG members to manage forests is improved</p> <p>Output 3 improved enabling environment for district forestry sector</p>	<ol style="list-style-type: none"> 1. Identify and develop a broader understanding of livelihoods status and its linkage with the forest use of Forestry User Groups. 2.Characterise the livelihoods status of the FUG members; identify the poorest. 3 Understand current trends in assets acquisition and depletion. 4 Characterize vulnerability. 5 institutional issues. 	<ol style="list-style-type: none"> 1. strengthen policy at the district and national levels 2. operational environment for the forestry sector. 3.efficient, equitable, and sustainable use of forest resources 4. enhance the assets of rural communities. 	<p>Poverty incidence (Food security, natural disasters, famine, etc.)</p> <p>Access to infrastructure (School, drinking water, health, communication, etc.)</p> <p>Access to road/market</p> <p>Agricultural productivity (Fertility level, cash crops, fruits, export, etc.)</p>	<ol style="list-style-type: none"> 1.Reduced vulnerability and improved livelihoods for poor and excluded rural people 2.Assets of rural communities are enhanced by more equitable, efficient, and sustainable use of forest resources 	<ol style="list-style-type: none"> 1.The Livelihoods and Forestry Programme 2.Sustainable Forestry 3.Community Based Enterprise 4.Climate Change 5.Community Development 6.Social Inclusion 7.Governance 8.Capacity Building 9.Partnerships 10.Safe and Effective Development 11.Inclusive Planning and Monitoring 12.The Future Innovations and Good Practices 	<p>DFID,MFSC/GON , NGO partners , civil society partners & FUGs</p>	<p>Strengthened policy at different and building the capacity of forest users, forest managers and service providers to manage natural resources equitably and sustainably (including forest management, public land management, soil conservation, watershed management, private forestry, and alternative energy technologies); encouraging livelihoods diversification and income generating activities for poor and excluded households; and developing enterprise and small-scale infrastructure enhances the assets of the rural communities.</p>
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1) Forest managers (forest group members and related service providers) enabled to responsively manage and utilize forest resources to sustainably maximize the multiple benefits
2) Poor and excluded groups enabled to participate in and benefit from the forestry sector
3) Capacity within and coordination amongst institutions strengthened for forestry sector development and enhanced livelihoods
4) Innovative, inclusive and conflict sensitive approaches shared to inform forest sector planning and policies
5) National Level forest sector capacity and response to field reality strengthened

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4	SPCR component 1	<p>Outputs</p> <p>1. Participating communities have improved catchment management and new or improved water storage infrastructure</p> <p>2. Communities and Government manage water and land in an integrated and inclusive manner within watersheds</p> <p>. Knowledge-based approaches for integrated water and land management and improved water reliability and accessibility in the wake of climate change adopted by Government</p>	<p>Communities in climate-vulnerable mountain watersheds have improved access to and enhanced reliability of water resources By 2018: 35,000 households have access to improved domestic and irrigation water systems (baseline: 0) (ADB)</p> <p>Domestic water collected during dry season increased by 50% (baseline: 8 ltrs/person/day) (ADB)</p> <p>Time women and children spend collecting domestic water during the dry season reduced by 75% (baseline: 3-8 hours/day/household) (ADB)</p>	<p>New watershed planning approach adopted by 75% of trained DSCWM staff (NDF)</p> <p>At least 33% female and proportional representation of disadvantaged groups in CDG Committees; at least one woman is in a leadership role (ADB)</p> <p>Good practices in water and soil conservation that are responsive to the specific needs of women and DAGs are adopted by participating communities (ADB)</p> <p>12 new knowledge products are produced from project outcomes, 4 of which focus on gender and social inclusion (NDF)</p> <p>Lessons, including those derived from a gender and social inclusion perspective, incorporated into DSCWM, DWSS, and DOI guidelines (NDF)</p> <p>Method to monitor project interventions on watershed hydrology developed and agreed by Government (NDF)</p>	<p>By 2018: 35,000 households have access to improved domestic and irrigation water systems (baseline: 0) (ADB)</p> <p>Domestic water collected during dry season increased by 50% (baseline: 8 ltrs/person/day) (ADB)</p> <p>Time women and children spend collecting domestic water during the dry season reduced by 75% (baseline: 3-8 hours/day/household) (ADB)</p>	Climate resilience in Nepal mountain communities improved	not known	NekSAP for evaluation,	Improved and more constant supply of water to rural communities, through both watershed management and small scale infrastructures managed by local groups, will lead to better climate resilience amongst the communities
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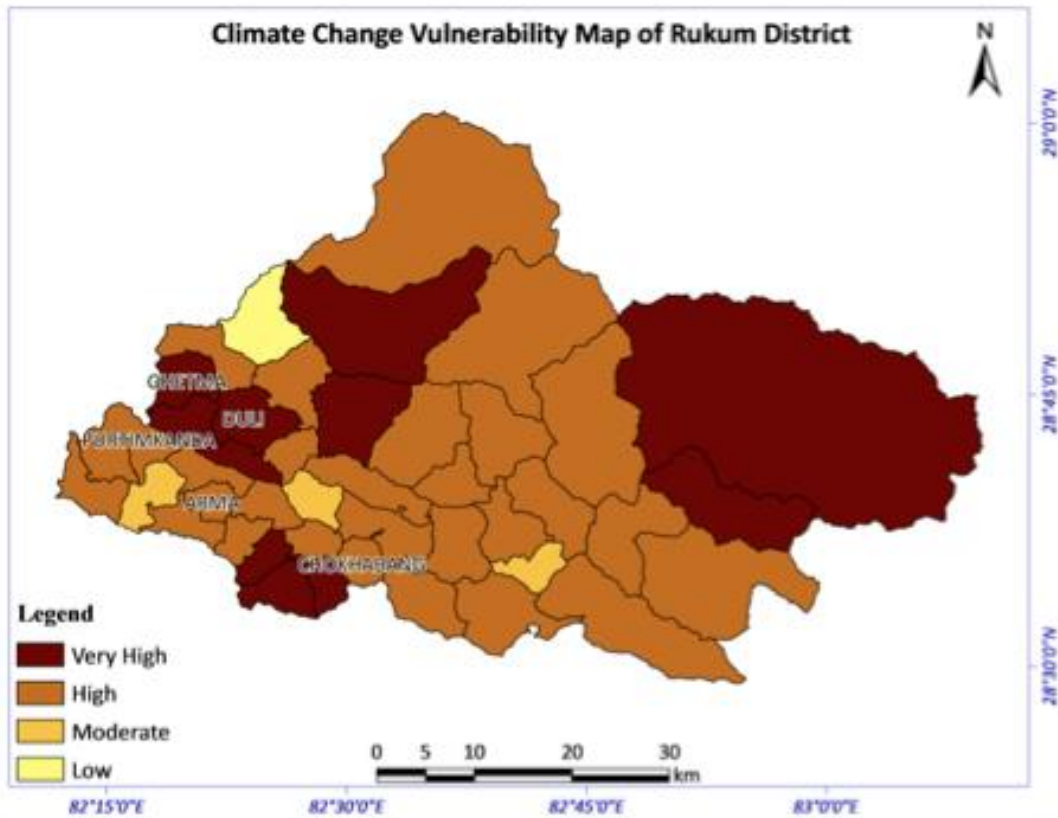
					<p>By 2018: Yield of water sources (spring or surface water) remains stable or is increased (ADB)</p> <p>Availability of irrigation water during the dry season of at least 0.3 lps/ha (baseline: 0) (ADB)</p>				
5	NCCSP	<p>1. 70 LAPAs implemented on time and on budget in ways that deliver effective adaptation services to the satisfaction of the most vulnerable</p> <p>2. Local and regional mechanisms to implement and promote scalable adaptation and resilience are put in place</p> <p>3. GON institutional and funding mechanisms are established/further developed for supporting CCA</p> <p>NCCSP seeks to achieve these results through two interlinked streams of activities:</p> <p>4. Capacity building activities at national, regional, district and village levels to support institutions to better identify and deliver adaptation benefits.</p> <p>5. Related support for the preparation,</p>	<p>1.% HH adopting CC adaptive actions implemented on time and on budget in ways that deliver effective adaptation services to the satisfaction of the most vulnerable</p> <p>2.Enhanced capacity of GO and NGO institutions to implement CC policy & most urgent and immediate adaptation actions to increase the resilience of the climate vulnerable poor</p>	<p>1.Number/type of stakeholders engaged in trainings/awareness raising activities under NCCSP</p> <p>2.Level of knowledge and understanding of climate change and vulnerability by key agents of change in local institutions</p> <p>3.Number of plans/programmes introduced or adjusted to incorporate climate change risk</p> <p>4.Evidence of re/orientation of planning processes towards the climate vulnerable poor</p> <p>% budget (re)allocated to LAPA priorities</p> <p>5.Evidence of regulatory/legislative frameworks</p>	<p>1.Number of people moving from category of low resilience to higher resilience</p> <p>2.Number of people covered by NCCSP, disaggregated by gender and social Inclusion</p> <p>Value of assets/livelihoods protected from CC impacts</p> <p>3.Number of income sources per household</p> <p>Evidence of level and use of knowledge of CC by LAPA beneficiaries</p> <p>4.Percent change in beneficiary behavior utilizing adjusted processes, practices or methods for managing climate risks</p> <p>5.Narrative description of the role of project interventions in reducing vulnerability (or improving capacity to adapt to climate change related</p>	<p>1. Nepal's poorest and most vulnerable people are able to adapt to the impacts of climate change</p> <p>2.No.people less vulnerable to the impacts of climate change and climate variability.</p>	<p>1.training on climate change(CC) or climate change adaptation (CCA)</p> <p>2. HH level Types of Loss/damage</p> <p>3. cope with the effects of the hazards</p> <p>4.Adaptive Capacity Assessment</p> <p>5.Land ownership Description</p> <p>6. food stock</p> <p>7.Livestock assets of HH</p> <p>8.Groups/organizations</p> <p>Membership</p> <p>9. Physical asset and income</p> <p>10. Income description</p> <p>11. Services and Institutions</p> <p>12.infrastructure Facility</p>	<p>MCPM, MoFALD, PMAS, DPMAS, seeks to align in future with NeksAP</p>	<p>The development and implementation of locally inclusive and responsive LAPAs that are integrated into village, municipality, district and sectoral planning processes, coupled with capacity building of these institutions, will result in the delivery of adaptation services that improve the adaptive capacity of the climate-vulnerable poor.</p>

		<p>implementation and monitoring of Local Adaptation Plans for Action (LAPAs), as a vehicle for mainstreaming adaptation priority actions from local to national levels, and delivering adaptation resources from the national to local levels. In order to monitor and assess the progress and achievements for NCCSP baseline data is required. A baseline survey was conducted during the NCCSP Start Up phase In order to provide a basis from which to measure progress and change. This Baseline Survey Report provides a summary of the baseline data collected at the local level.</p>			<p>threat(s). 6.Improvement in the relevant quantitative development outcome (food security, water resources, health</p>				
5	NCCSP		<p>No. of DDCs delivering adaptation benefits through integration of adaptation priorities into planning and budgetary processes</p>						

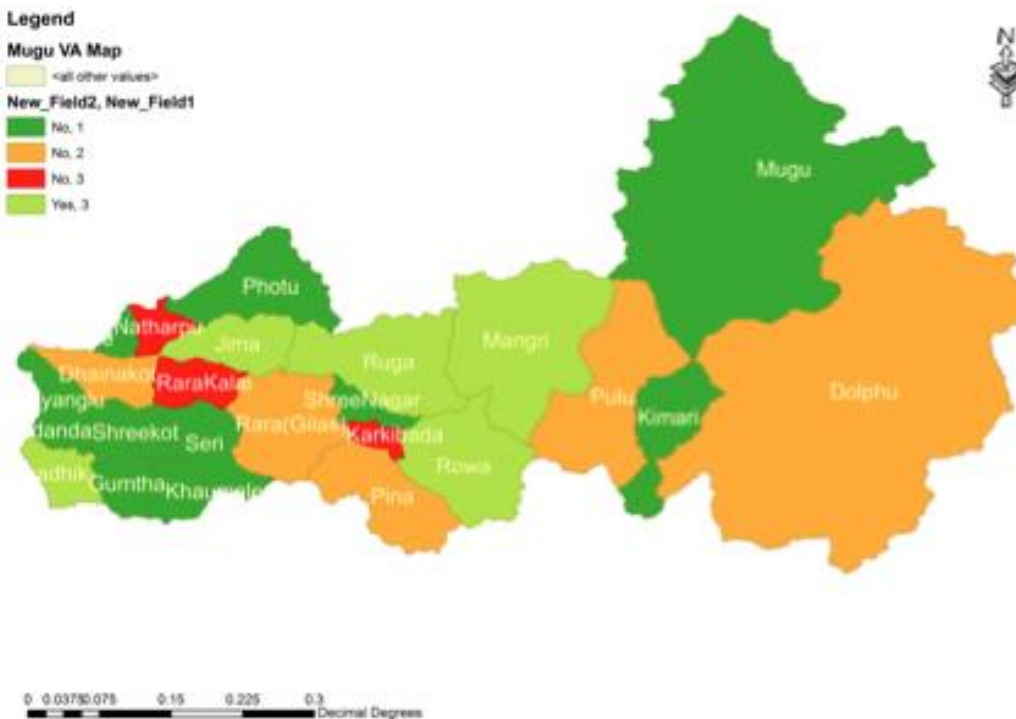
		NO. of CVP satisfied with performance of LAPA service providers	Service providers are providing effective adaptation services to vulnerable HHs using funds channeled through DEECCs						
		No. functional CCCCs at district, regional and village level							
		No. districts with integrated cc and energy plans							
		No. districts with LATF with appropriate fiduciary safeguards							

Annex 8 Vulnerability Mapping by VDC for shortlisted districts where available:

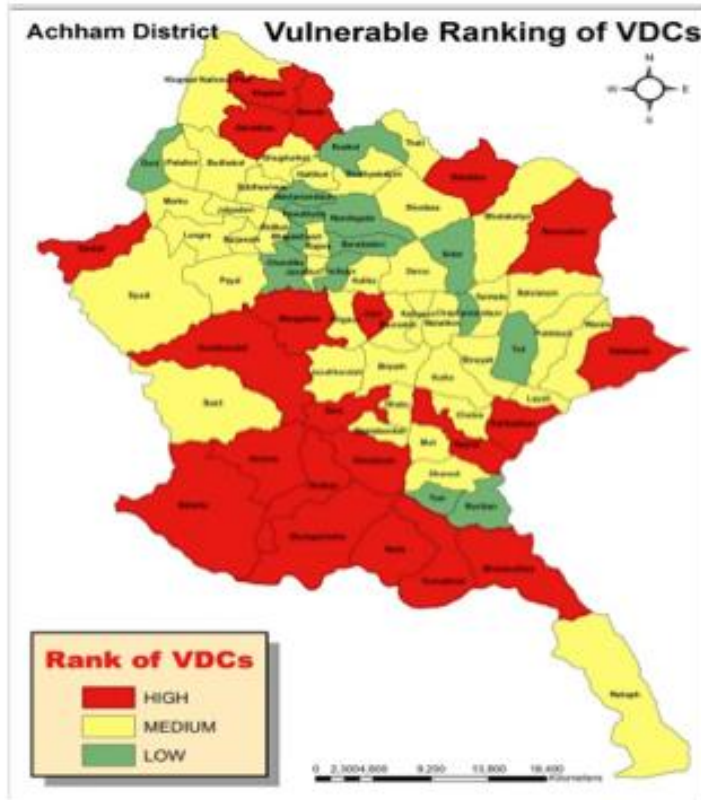
- Rukum Vulnerability Map by VDC



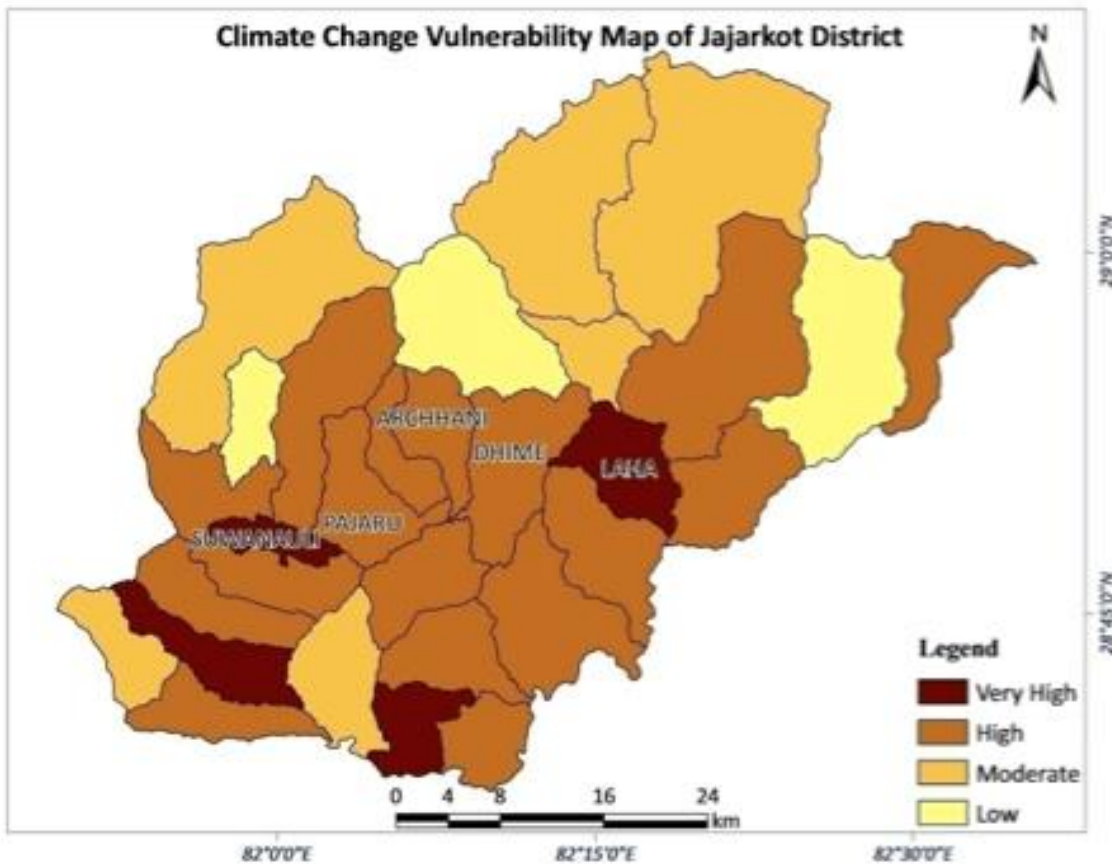
- Mugu Vulnerability Map by VDC



- Achham Vulnerability Map by VDC



- Jajarkot Vulnerability Map by VDC



District Vulnerability Context

Definitions from the NAPA (2010)

- Exposure – ‘the nature and degree to which a system is exposed to significant climatic variations’
- Sensitivity – ‘the degree to which a system is affected either adversely or beneficially, by climate-related stimuli’
- Adaptive capacity – ‘the ability of a system to adjust to climate change, to take advantage of opportunities and to cope’

Exposure:

- Over the last 30 years, which hazards have communities been exposed to

Sensitivity:

- Human loss
- HH Infrastructure loss
- Loss of land
- Epidemic outbreak after exposure to hazard

Adaptive capacity:

Core System:

- Access to electricity and drinking water facility
- Irrigated land
- Level of food sufficiency of VDC level HHs

Secondary system:

- Nearest distance to the market centre
- Telephone network in the VDC
- Number of HHs relying on agriculture as main occupation

Tertiary system:

- Literacy rate
- Number of cooperative organisations
- Distance to nearest market

Annex 9 NPC Result Based Monitoring and Evaluation Guideline Indicators

Main Indicators of Outcome/Impact/Effect Monitoring

1. Income/Consumption poverty

Population below poverty line

- Proportion of population below poverty line
- Proportion of population below poverty line in the total national consumption
- Gini Coefficient

2. Economic growth

- Overall GDP growth (real) percentage per year
- Agriculture sector growth (real) percentage per year
- Industrial sector growth (real) percentage per year
- Service sector growth (real) percentage per year
- Per capita income growth (real) percentage per year

3. Macroeconomic stability

Fiscal balance

- Revenue /GDP ratio (percentage)
- Capital expenditure/Total expenditure ratio (percentage)
- Domestic borrowing/GDP ratio (percentage)
- Development expenditure/GDP ratio (percentage)
- Domestic borrowing/GDP ratio (percentage)

Balance of payment status

- Export/gross domestic product ratio (percentage)
- Import/gross domestic product ratio (percentage)
- External remittance of the workers/labourers/gross domestic ratio (percentage)
- Gross revenue
- Current account balanced amount

Monetary stability

- Broad money growth (percentage per year)
- Domestic credit growth (percentage per year)

Inflation

- Consumer inflation (percentage) per annum
- Capacity in public expenditure
- Prioritization (priority 1, priority 2, priority 3) (percentage)
- Budget dispersion to the priority 1 project compared to the allocation (percentage)
- Privatization/Number of public organisations cancelled their registration
- Pro-poor expenditure compared to the total expenditure (percentage)
- Money spent addressing the target group compared to the total expenditure (percentage)
- Gender based expenditure compared to the total expenditure (percentage)

Financial sector

- Percentage of annual change in mobilisation of total deposit (of commercial banks)
- Total deposit/at the ratio of gross domestic product
- Total internal loan/at the ratio of gross domestic product
- Ratio of non-performing capital
- Amount of short-term loan
- On the spot inspection of commercial banks (times)

4. Agriculture

Food crisis

- Number of districts facing food crisis
- Number of food supplied districts among those facing food crises

Agriculture sector development

- Number of households having access to agriculture extension

- Quantity of main food crops (metric ton)
- Area of cultivated land (hector)
- Area of land with crop plantation (hectare)
- Number of agriculture product collection/number of markets
- Amount of agriculture loan
- Irrigated area (hector)
- Use of chemical fertilizer (metric ton)
- Number of employment received from agriculture sector

Crop production

- Number of the active farmer groups
- Number of agriculture cooperatives
- Production of improved seeds (metric ton)
- Distribution of improved seeds (metric ton)
- Number of pocket programmes in operation

Livestock product

- Number of households with access to livestock service
- Number of farmer groups involved in animal husbandry
- Number of artificially bred animals
- Milk production (litre)
- Fish production (metric ton)
- Meat production (metric ton)
- Number of pocket programmes
- Animal husbandry loan
- Eggs production (number)

Cooperative

- Number of cooperatives
- Number of cooperative affiliated members
- Capital mobilised through cooperative
- Number of employment received from cooperative sector

5. Irrigation

Area irrigated throughout the year

- Area irrigated from surface irrigation system (hectare)
- Area irrigated from underground irrigation system (hector)
- Water user group/number of organisations
- Area with irrigation facility throughout the year (hector)

Transfer of management to water user group/organisation

- Number of the transferred irrigation system and irrigated area (hector)
- Number of irrigation systems operated in joint management and irrigated areas (hectare)

Control of water induced disaster

- Embankment construction (kilometre)

6. Forest and soil conservation

Area covered by dense forest

- Area of national forest (hectare)
- Area of community forest (hectare)
- Number of community forestry users
- Area of leasehold forest (hectare)
- Number of leasehold forest users
- National park/area of forest within protected area
- Area of aorestation (hectare)
- Total area covered with forest (hectare)
- Number of employment received from forest
- Area protected from soil conversation programme (hectare)
- Area with herbs plantation (hectare) Income from forest

- Income generated by forest user group
- Income from herbs

7. Environment

Improvement in environment

- Ratio of traditional fuel (firewood) among the total energy use
- Per capita energy consume (metric ton)
- Urban pollution level
- Population benefited from alternative energy (percentage)

8. Industry,commerce/trade and supply

Expansion of industrial product

- Annual growth rate of productive industry (percentage)
- Annual growth rate of service sector (percentage)
- Portion/ratio of productive industry in gross domestic product
- Portion/ratio of service sector in gross domestic product
- Loan amount for industrial and service sector
- Foreign direct investment amount
- Number of additional employment

Supply management

- Food quantity stored by Nepal Food Cooperation (metric ton)
- The sold food quantity (metric ton)
- Storage capacity of petroleum (kilolitre)
- Import quantity of petroleum (kilolitre)
- Quantity of iodine salt supply (quintal)
- Number of registered (cottage, small, medium and small)medium scale industry large) industries
- Number of trainings held/participants
- Amount of capital investment
- Number of additional employment created

Import/export trade

- Status of import trade (percentage)
- Status of export trade (percentage)

9. Labour

Labour and employment

- Number of the Nepali workers working in the countries other than in India
- Total annual external remittance amount
- Employment targeted trained human resources
- Internally employed human resources

10. Tourism

Contribution of tourism

- Total number of tourist coming to Nepal (total, airways/road)
- Number of promotional activities outside Nepal
- Available seats in the international flights (every week)
- Duration of the tourists' stay (average days)
- Number of stars/tourist friendly hotels
- Number of tourism industry
- Number of employment received from tourism sector
- Per day per tourist expenditure (in USD)
- Earning of foreign currency from tourism sector
- Proportion of tourism in gross domestic product

11. Road

Increase in road service/facility

- Total length of roads (k.m.)
- Construction of new roads (k.m.)
- Number of district headquarters with access to roads

- Road upgrading, reconstruction and improvement (k.m.)
- Period repair and maintenance (k.m.)
- Regular repair and maintenance (k.m.)
- Number of bridge constructions
- Number of repair of bridges

12. Energy (power)

Electricity service

- Consumption of total energy (.....)
- Capacity of total connected electricity (megawatt)
- Status of electricity supply (percentage)
- Percentage of electricity leakage (percentage)
- Household having electricity connected already (percentage) Increase in rural utility
- Per capita utility of rural electricity
- Number of VDCs having access to electricity

13. Information and communication

Access to telephone service

- Total number of people with access to telephone
- Number of telephone service providers (including private sector)
- Telephone density (per one hundred)
- Number of VDCs with access to telephone services

Radio & television

- Percentage of population having access to the radio/television service
- Percentage of the area having access to the radio/television
- Number of radio/television service providers (including private)

14. Education

Improvement in access

- Number of pre-primary/Child Development Centres
- Net enrolment ratio at pre-primary/Child Development Centre
- Number of primary schools
- Net enrolment ratio in primary schools
- Percentage of students receiving scholarship (foundation level)
- Percentage of household having access to school within just half and hour distance

Education quality

- Ratio of continuation of the students until grade V.
- Ratio of retention of the students until grade 8
- Net enrolment ratio in grade 1
- Percentage of training primary/secondary school teachers
- Number of the schools transferred to the community
- Students who completed the primary cycle (percentage)

Adult education (15 + year)

- Number of community study centres
- Adult literacy ratio
- Portion of Adult education in total education expenditure

Gender equality

- Portion of female teachers in primary school (percentage)
- Number of girl students receiving scholarship (primary/secondary)
- Number of schools having separate toilets for girl students
- Gender equality indicator in net enrolment (basic/secondary)

15. Health

Access to health service

- Number of primary health (first aid) centre, health post, sub-health post and district hospitals
- Number of private and community health services/organisations
- Number of transferred sub-health posts

- Ratio of population who need to walk more than one hour to reach to health centre for health service (percentage)

Improvement in quality

- Number of primary health centres having full staff according to approved vacancy
- Percentage of the unfulfilled vacancy in remote area
- Number of health centres providing minimum 15 medicines among the most necessary medicines

Infant/child/maternal mortality

- Ratio of women receiving health checked up after delivery
- Percentage of under 1 year old children having access to services who suffered from respiratory infection
- Percentage of one year old children full course of vaccine against the targeted diseases
- Percentage of children suffering from mal-nutrition
- Ratio of women affected from mal-nutrition
- Number of women having access to obstetric care

service in hospital and health centres

- Number of health workers promoted to ANM
- Pre-matured birth rate
- Pre-matured mortality rate
- Infant mortality rate (per thousand)
- Child mortality rate (per thousand)
- Maternal mortality rate (per one hundred thousand)
- Under-5 suffering from dysentery /diarrhoea rate
- Under-5 respiratory infection rate

Life expectancy (at birth)

- Per capita health expenditure (national level)
- Life expectancy at birth

Population growth

- Contraceptive prevalence rate
- Infection from main diseases
- Number of HIV infected
- Number of patients diagnosed and treated for tuberculosis, malaria, black fever and Avian influenza

16. Drinking water supply and sanitation

Access to clean drinking water

- Number of population benefited from basic drinking water services
- Number of population benefited from high and medium level drinking water services

Reduction of waterborne disease

- Number of population benefited from sanitation services

17. Social inclusion and targeted programme

Human development index of central and far-western development region

- Budget expenditure in mid-western development region and far-western development region
- Budget allocated to provide grant to the local bodies on the basis of poverty formula
- Number of districts in which Poverty Eradication Fund has operated programmes
- Human development index of mid-western development region and far-western development region

Access of women, *Dalit* and ethnic

- Number of women, *Dalit*, *Madheshi* and ethnic population benefited from scholarship
- Number of women, *Dalit*, *Madheshi* and *Janajati* benefited from training
- Number of women, *Dalit*, *Madheshi* and *Janajati* receiving scholarship for higher education
- Ratio of boys and girls students in primary and secondary education

Life expectancy of *Dalit* and oppressed community/ sector

- Number of trained attendants, ANM and nurse
- Number of health centres in remote areas (22 districts)

Ratio of women, *Dalit* and ethnic group involved in politics and public position

- Number of women, *Janajati*, *Madheshi*, *Dalit*, disable and remote area population involved in teaching profession

- Number of women, *Dalit*, *Madheshi* and *Janajati* holding political position/portfolio
- Ration of the seats represented by women, *Dalit* and

Janajati in the parliament Access of women, *Dalit* and ethnic group to debt

- Number of women groups
- Mobilisation of saving from women groups
- Amount of loan given to women and their numbers
- Amount of loan given to *Dalits* and their numbers
- Amount of loan given to *Janajatis* and their numbers

Ratio of women in income employment

- Portion of women in income generating employment in non-agriculture sector

18. Governance/ Improvement in civil service

Improvement in governance

- Number of survey of organizations and management
- Number of survey of complaint/settlement (management)
- Number of investigation of management
- Number of beneficiary surveys
- Effectiveness of implementation of good governance act and rule Women, *Dalit* and ethnic group in public service
- Number of application received from women, *Dalit*, *Madheshi* and *Janajati* groups at civil service
- Percentage of women, *Dalit*, *Madheshi* and *Janajati* groups in civil service

19. Corruption control

Cases of corruption

- Number of corruption related cases: Registered/filed, adjudicated, convicted (fully/partially)

20. Decentralization

Allocation of quality service/delivery

- Number of the agencies delivering services transferred to the local bodies
 - Agriculture extension service (districts/areas)
 - Health service
 - Primary and secondary school
 - Other
- Length of urban/rural road transferred to the local bodies (k.m.)
- Number of the trained staff in the local bodies
- Number of districts having prepared or updated periodic district development plan
- Number of districts (District Development Committee) having prepared Citizen Charter
- Ratio of conditional grant in development budget Increase in self dependence and accountability
- Percentage of internal income in the annual budget of local body (VDC/municipality/DDC)
- Number of local bodies conducting one hundred percentage of public audit of the projects operated by them
- Number of local bodies conducting public hearing (VDC/municipality/DDC)
- Number of complaints registered at local bodies and the complaints adjudicated (VDC/municipality/DDC)
- Number of local people's complaints against the infrastructural projects accomplished by the local bodies
- Number of local bodies to inform local people through the media (radio, newspapers, interaction) and percentage of the population to receive information about the projects operated by local bodies
- Number of the local bodies to accomplish financial audit in time

21. Human rights

Violations of human rights

- Number of cases investigated against human rights

Annex 10 Meteorological Stations in Nepal

METEOROLOGICAL STATIONS - PRECIPITATION source: Department of Hydrology and Meteorology, Nepal

Station name	Index No.	District	Latitude	Longitude	Elevation	Estd. date	
			deg.min.	deg.min.	meter	Month	Year
AISEALUKHARK	1204	Khotang	2721	8645	2143	MAY	1948
AMLEKHGANJ	907	Bare	2717	8500	396	JUN	1955
ANARMANI BIRTA	1409	ihapa	2638	8759	122	MAR	1956
ARU GHAT D.BAZAR	1002	Dhading	2803	8449	518	JUN	1957
ASARA GHAT	206	Achham	2857	8127	650	MAR	1963
BAGHARA	629	Myagdi	2834	8323	2330	APR	1992
BAHRABISE	1027	Sindhupalchok	2747	8554	1220	DEC	1965
BAHUN TILPUNG	1108	Sindhuli	2711	8610	1417	MAY	1958
BAIJAPUR	414	Banke	2803	8154	226	FEB	1971
BAITADI	102	Baitadi	2933	8025	1635	FEB	1973
BAJURA	204	Bajura	2923	8119	1400	JAN	1976
BALE BUDHA	410	DaiLekh	2847	8135	610	MAY	1965
BANDIPUR	808	Tanahun	2756	8425	965	JUN	1956
BANGGA CAMP	210	Achham	2858	8107	340	MAR	1963
BARGADAHA	415	Bardiya	2826	8121	200	NOV	1967
BARMAJHIYA	1226	Saptari	2636	8654	85	SEP	1975
BAUNEPATI	1018	SirbdhupaLchok	2747	8534	845	NOV	1970
BEGA	626	Myagdi	2828	8336	1770	APR	1992
BELAURI SANTIPUR	106	Kanchanpur	2841	8021	159	FEB	1971
BELUWA	920	Makwanpur	2733	8449	274	DEC	1974
BELUWA (GIRWARI)	704	Nawalparasi	2741	8403	150	FEB	1957
BHADAURE DEURALI	813	Kaski	2816	8349	1600	MAY	1969
BHAGWANPUR	723	Kapilbastu	2741	8248	80	JAN	1975
BHAKTAPUR	1052	Bhaktapur	2740	8525	1330	MAY	1971
BIJAYAPUR (RASKOT)	309	Kalikot	2914	8138	1814	DEC	1956
BIJUWAR TAR	505	Pyuthan	2806	8252	823	AUG	1957
BIRGANJ	918	Parse	2700	8452	91	FEB	1974
BOBANG	615	BagLung	2824	8306	2273	DEC	1977
CHANDRA GADHI	1412	Jhapa	2634	8803	120	FEB	1971
CHANGU HARAYAN	1059	Bhaktapur	2742	8525	1543	MAY	1974

CHAPA GAUN	1060	LaLltpur	2736	8520	1448	OCT	1975
CHARIKOT	1102	Dolkha	2740	8603	1940	JUN	1959
CHATARA	1316	Sunsari	2649	8710	183	JUN	1959
CHAURIKHARK	1202	solukhumbu	2742	8643	2619	APR	1948
CHAUTARA	1009	Sindhupalchok	2747	8543	1660	JUL	1947
CHEPUWA	1317	Sankhuvwasabha2746	2746	8725	2590	JUN	1959
CHISAPANI BAZAR	1112	Dhanusa	2655	8610	165	JUL	1955
CHISAPANI GADHI	904	Makwanpur	2733	8508	1706	MAY	1956
CHYUNTAHA	924	Bara	2657	8508	86	APR	1992
DAMAK	1408	Jhapa	2640	8742	163	MAR	1986
DAMAULI	817	Tanahun	2758	8417	358	JAN	1974
DARBANG	621	Myagdi	2823	8324	1160	FEB	1989
DARMA	313	Humla	2944	8206	1950	SEP	1979
DHADING	1005	Dhading	2752	8456	1420	MAY	1956
DHAP	1078	Sindhupalchok	2754	8538	1310	MAR	1997
DHAP	1025	Sindhupatchok	2755	8538	1240	DEC	1976
DIKTEL	1222	Khotang	2713	8648	1623	JUN	1973
DINGLA	1325	Bhojpur	2722	8709	1190	MAY	1948
DOLAL GHAT	1023	Kabhre	2738	8543	710	JUL	1947
DOVAN	1420	Taptejung	2721	8736	763	JUL	1947
DUBACHAUR	1017	Sindhupalchok	2752	8534	1550	NOV	1970
DUMKIBAS	710	Nawalparasi	2735	8352	164	MAY	1970
GAM SHREE NAGAR	306	Mugu	2933	8209	2133	OCT	1970
GARAKOT	726	Palpa	2752	8348	500	NOV	1979
GAUSALA	1119	Mahottari	2653	8547	200	FEB	1979
GHAMI (MUSTANG)	610	Mustang	2903	8353	3465	NOV	1972
GHANDRUK	821	Kaski	2823	8348	1960	MAY	1976
GHAREDHUNGA	823	Lamjung	2812	8437	1120	JUL	1976
GHORAH (MASINA)	509	Dang Deukhuri	2803	8230	725	DEC	1970
GHORAPANI	619	Myagdi	2824	8344	2742	MAR	1975
GULARIYA	408	Bardiya	2810	8121	215	JAN	1957
GUMTHANG	1006	Sindhupalchok	2752	8552	2000	JUL	1947
GURJA KHAMI	616	Myagdi	2836	8313	2530	DEC	1978
GUTHI CHAUR	304	JumLa	2917	8219	3080	JUN	1976
HARAINCHA	1312	Morang	2637	8723	152	APR	1956
HARIHARPUR GADHI VALLEY	1117	Sindhuli	2720	8530	250	MAR	1978
HIMALI GAUN	1410	Itam	2653	8802	1654	FEB	1968
JAGAT (SETIBAS)	801	Gorkha	2822	8454	1334	JUL	1957
JAARKOT	404	Jajarkot	2842	8212	1231	DEC	1956

JAMU (TIKUWA KUNA)	403	Surkhet	2847	8120	260	MAY	1963
JHAWANI	903	Chitawan	2735	8432	270	FEB	1957
KAKERPAKHA	101	Baitadi	2939	8030	842	MAY	1956
KALAIYA	921	Bare	2702	8500	140	FEB	1976
KARKI NETA	613	Parbat	2811	8345	1720	FEB	1977
KATAI	205	Dot!	2900	8108	1388	DEC	1957
KHAPTAD	211	Doti	2923	8112	3430	APR	1976
KHOPASI(PANAUTI)	1049	Kabhre	2735	8531	1517	JUN	1971
KHOTANG BAZAR	1211	Khotang	2702	8650	1295	MAY	1959
KNULDI	828	Kaski	2826	8350	2100	JUN	1992
KOILABAS	510	Dang Deukhuri	2742	8232	320	FEB	1971
KOLA GAUN	214	Doti	2907	8041	1304	FEB	1975
KOLBHI	923	Bare	2655	8501	109	APR	1992
KUHUN	627	Myagdi	2823	8329	1550	APR	1992
KUNCHHA	807	Lamiung	2808	8421	855	JUN	1956
KURULE GHAT	1210	Khotang	2708	8626	497	DEC	1947
KUSUM	407	Banke	2801	8207	235	NOV	1956
LAMACHAUR	818	Kaski	2816	8358	1070	JAN	1972
LARKE SAMDO	806	Gorkha	2840	8437	3650	JUN	1978
LEGUWA GHAT	1305	Dhankuta	2708	8717	410	JUL	1947
LELE	1075	Lalitpur	2735	8517	1590	AUG	1994
LIBANG GAUN	504	RoLpa	2818	8238	1270	JUL	1957
LUMBINI	727	Rupandehi	2728	8317	95	OCT	1980
LUNGTHUNG	1403	Taplejung	2733	8747	1780	JUL	1947
LUWAMJULA BAZAR	512	SaLyan	2818	8217	885	NOV	1971
MACHUWAGHAT	1322	Dhankuta	2658	8710	158	MAY	1948
MAGMA	308	Kalikot	2912	8154	1905	OCT	1970
MAINA GAUN (D.BAS)	418	Jajarkot	2859	8217	2000	MAY	1975
MAKWANPUR GADHI	919	Makwanpur	2725	8510	1030	DEC	1974
MALANGWA	1120	Sarlahi	2652	8534	150	MAR	1983
MANANG BHOT	820	Manang	2840	8401	3420	JUN	1975
MANDAN	1020	Kabhre	2742	8539	1365	JUL	1947
MANE BHANJYANG	1207	Okaldhunga	2729	8625	1576	NOV	1947
MANGALSEN	217	Achham	2909	8117	1345	JAN	1976
MANTHALI	1123	Ramechhap	2728	8605	495	MAR	1992
MARKHU GAUN	915	Makwanpur	2737	8509	1530	DEC	1971
MELUNG	1104	Dolkha	2731	8603	1536	JUN	1959
MEMENG JAGAT	1406	Panchther	2712	8756	1830	JUL	1947
MUGU	301	Mugu	2945	8233	3803	JUN	1958

MUL GHAT	1308	Dhankuta	2656	8720	365	JUN	1947
MUNGA	1306	Dhankuta	2702	8714	1317	JUL	1947
MUSIKOT	722	Gutmi	2810	8316	1280	JUN	1956
MUSTANG(LOMANGTANG)	612	Mustang	2911	8358	3705	SEP	1973
NAGARJUM	1079	Kathmandu	2745	8515	1690	JUN	1997
NAGDANA	1101	Dolkha	2741	8606	850	JAN	1977
NAIKAP	1076	Kathmandu	2741	8515	1520	JUN	1996
NAUBASTA	412	Banke	2816	8143	135	FEB	1971
NAWALPUR	1008	Sindhupalchok	2748	8537	1592	JUN	1959
NAYABASTI (DANG)	507	Dang Deukhuri	2813	8207	698	DEC	1970
NEPALTHOK	1115	Sindhuli	2727	8549	1098	APR	1948
NIJGADH	910	Bare	2711	8510	244	JUN	1955
NUM	1301	Sankhuvwasabha	2733	8717	1497	JUN	1959
PACHUWAR GHAT	1028	Kabhre	2734	8545	633	JAN	1966
PAKARNAS	1203	solukhumbu	2726	8634	1982	DEC	1947
PAMDUR	830	Kaski	2816	8347	1160	MAR	1992
PARASI	708	Nawalparasi	2732	8340	125	MAY	1971
PATTHARKOT (WEST)	721	Kapilbastu	2746	8303	200	MAR	1973
PATTHARKOT(EAST)	1109	Sarlahi	2705	8540	275	JAN	1956
PIPALKOT	201	Bajhang	2937	8052	1456	JUN	1956
RAJAIYA	925	Makwanpur	2726	8459	332	JUN	1991
RAJAPUR	411	Bardiya	2826	8106	129	FEB	1971
RAMOLI BAIRIYA	912	Routahat	2701	8523	152	JAN	1956
RANGKHAMI	622	Bagtung	2809	8334	1740	JAN	1989
RANIPAUWA (M.NATH)	608	Mustang	2849	8353	3609	MAY	1969
RIDI BAZAR	701	Gulmi	2757	8326	442	JUL	1956
RUKUMKOT	501	Rukum	2836	8238	1560	JUL	1957
RUMJAKOT	827	Tanahun	2752	8408	660	MAY	1989
SALLERI	1219	solukhumbu	2730	8635	2378	DEC	1947
SALLYAN	829	Kaski	2816	8345	1000	APR	1992
SAMAR GAUN	624	Mustang	2858	8347	3570	APR	1992
SAMOA	625	Mustang	2854	8341	3570	JAN	1992
SANDEPANI	208	KaiLaLi	2845	8055	195	DEC	1957
SANGACHOK	1062	Sindhupalchok	2742	8543	1327	MAY	1979
SANISCHARE	1415	Jhapa	2641	8758	168	JAN	1972
SANKHU	1035	Kathmandu	2745	8529	1449	SEP	1970
SARMATHANG	1016	SirbdhupaLchok	2757	8536	2625	NOV	1970
SATBANJH	108	Baltadi	2932	8028	2370	JUN	1976
SHERA GAUM	502	Rukum	2835	8249	2150	JUL	1957

SHERI GHAT	305	KaLikoT	2908	8136	1210	FEB	1966
Shyano Shree (Chepang)	413	Bardiya	2821	8142	510	FEB	1971
SIKLESH	824	Kaski	2822	8406	1820	JUN	1977
SIRAHA	1216	Siraha	2639	8613	102	JUN	1947
SIRKON	630	Parbat	2808	8337	790	APR	1992
SIRWA	1224	solukhumbu	2733	8623	1662	MAY	1959
SITAPUR	212	Ka!Lati	2834	8049	152	FEB	1971
SUNDARIJAL	1077	Kathmandu	2745	8525	1360	JUN	1995
SUNDARIJAL	1074	Kathmandu	2746	8525	1490	NOV	1993
TAPLETHOK	1404	Taplejung	2729	8747	1383	JUL	1947
TARKE GHYANG	1058	Sindhupalchok	2800	8533	2480	JAN	1974
TATOPANI	606	Myagdi	2829	8339	1243	MAY	1969
THAMACHIT	1054	Rasuwa	2810	8519	1847	NOV	1971
THANKOT	1015	Kathmandu	2741	8512	1630	SEP	1966
THIRPU	302	Kalikot	2919	8146	1006	DEC	1956
THOKARPA	1063	Sindhupalchok	2742	8547	1750	JUL	1979
TIMURE	1001	Rasuwa	2817	8523	1900	JUN	1956
TISEDI	831	Syangja	2802	8346	1100	APR	1992
TRIBENI	1309	Dhankuta	2656	8709	143	MAY	1948
TRIBENI	620	Parbat	2802	8339	700	FEB	1989
TULSI	1110	Dhanusa	2702	8555	457	DEC	1955
TUMLINGTAR	1321	Sankhuvwasabha	2717	8713	303	MAY	1977
WALLING	826	Syangja	2759	8346	750	NOV	1988

Annex 11 List of Stakeholders Consulted

Organization	Name (s)/Position	Date
RWBSSD	Mr. Bhupendra Aryal , M&E Division Chief/ RWBSSD	7 th June 2013
WFP	M&E and Report Coordinator Ms. KantaKhanal	8 th June 2013
PAF	Mr. Raj Babu Shrestha ED/PAF and collected M&E framework and other relevant documents	10 th June 2013
RWSSFD Board	DED/Mr. BhupendraAryal and M&E Division Chief Mr. Manoj Kumar Lal	20 th June 2013
PAF	ED Mr.Raj BabuShrestha,	20 th June 2013
Rupantaran,Nepal Meeting	CEO Mr.BrahmaDhojGurung and Programme and Service Manager Mr. SohanLalShrestha	21 th June 2013
Tri-Chandra Campus	Professor Dr. Tara Bhattarai	21 th June 2013
MSFP Meeting	Team Leader Mr. Ramu Subedi	21 th June 2013
LGCDP Meeting(MoFALD)	M&E Specialist Dr. Raghu Shrestha, Environment specialist Mr. Ek Raj Sigdel,	26 th June 2013
Meeting(MoFALD)	Under Secretary Mr. Chakra Pani Sharma, Environment specialist Mr. Ek Raj Sigdel,	26 th June 2013

Annex 12 Information on Potential Districts for Selection

A. First 3 Districts Achham, Kaliko and Mugu:

4.

6) Achham

The first district shortlisted is Achham, a hill district in the Far West region of Nepal with a very high vulnerability to drought and landslides as well. Although the vulnerability indices for Achham are not as high as for Mugu, the factors used in calculating these indices (exposure, sensitivity and adaptive capacity) may influence this. Achham ranks much higher than Mugu under the Human Development Index (HDI), however considering the Risk/Exposure Index also calculated in the NAPA Vulnerability Analysis, Achham is more vulnerable to drought and landslide than Mugu⁹.

As well as a high vulnerability to both droughts and landslides, Achham also contains both the CADP-N LAPA and NCCSP LAPA interventions.

NCCSP LAPA

Five VDCs selected for LAPA preparation fell in the high vulnerability bracket (2.51-3.25)¹⁰. The five VDCs selected for LAPA preparation and implementation under the NCCSP framework were Nada, Turmakhand, Dhungachalla, Bhairabsthan and Ghodasain. These VDCs fall in the south-eastern corner of the district as shown in the Vulnerability Map. There were 29 LAPAs prepared in Nada and so the future site selection process could also focus on these communities. CADP-N LAPA

Under the CADP-N project, a LAPA was prepared in Ghodasain VDC in Achham. The LAPA preparation was carried out by the British Nepal Medical Trust and focussed on public health as the entry point.

The TAMD Feasibility Study could use the data and information collected during this LAPA preparation as Ghodasain is also one of the VDCs selected for preparation of the NCCSP LAPA.

⁹ Drought Risk/Exposure Sub-Indices: Achham – 0.624 and Mugu – 0.611; Landslide Risk/Exposure Sub-Indices: Achham – 0.257 and Mugu – 0.044, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

¹⁰ Bhairabsthan – 3.26, Turmakhand – 3.75, Nada – 3.97, Dhungachalla – 3.32 and Ghodasain – 3.20, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

As the LAPA under CADP-N was completed and results have been produced, this may provide a useful complement to the NCCSP data as its LAPA has not been implemented.

LGCDP

Within Achham, phase I of the LGCDP had 6 projects at the ward level in three VDCs – Jarnalibandali, Oligaun and Mangalsen, none of the VDCs selected under the NCCSP LAPA.

Rukum

According to the criteria set out above, the mid-Western, hill district Rukum was the second most promising district for consideration under the TAMD Feasibility Study. All four of the interventions have projects in Rukum and it is also at very high vulnerability to both drought and landslides.

NCCSP LAPA

Rukum contains 194 LAPAs under the NCCSP LAPA Programme and these are spread across 5 VDCs – Chaukhawang, Arma, Duli, Ghetma and Purtimkanda, in order of vulnerability. Household level assessments of vulnerability were carried out and Chaukhawang VDC contained the most highly vulnerable households.

Both short and long term adaptation options were implemented, varying from awareness raising, water harvesting and alternative energy to terrace improvement, micro hydro and the establishment of seed banks.

CADP-N LAPA

Under the CADP-N Programme, the NGO Rupantaran implemented a LAPA in Ransi VDC of Rukum. The entry point of this LAPA was forestry planning. Landslides due to irregular rainfall and increased infestation of disease and pests in livestock and agriculture were concluded as the major climatic threats. Livestock rearing is the main source of income in this VDC and thus the VDC is very vulnerable. A VDC level LAPA was prepared in coordination with the District Climate Change Coordination Committee (DCCCC). However, this LAPA was not implemented.

LFP

Unfortunately, the information on the LFP Projects in Rukum has not been attained and therefore it is unclear how many and in which VDCs were prepared and implemented.

LGCDP

There are two LGCDP projects in Rukum, and they fall in Duli and Musikot VDCs, wards number 9 and 5 respectively. Neither of these VDCs contain the aforementioned interventions,

which makes it harder to analyse the linkages between the interventions as there is likely to be topographical, climatic and socio-economic differences between VDCs.

7) Mugu

Mugu was the third most promising district for the TAMD Feasibility Study. Mugu is a mountain district in the Mid West region of Nepal with a very high vulnerability to both drought and landslides. The agricultural sector of Mugu relies on a short period of the year when the climatic conditions allow the cultivation of crops and this makes it very vulnerable to future climate change projections – especially higher temperatures. The terrain of dry and arid lands and snow-covered mountains increase the district's sensitivity to landslides. The socio-economic status of Mugu means that its sensitivity and adaptive capacity to these climate risks is much higher than a more developed district. Various sensitivity and adaptive capacity indicators¹¹ were used along with consideration of the exposure of VDCs and allowed a climate change vulnerability ranking of VDCs to be formed.

NCCSP LAPA

LAPAs have been prepared for the most vulnerable VDCs – Ruga, Rowa, Jima, Mangri and Sukadhik¹². The five VDCs selected for LAPA preparation all fell in the very high vulnerability index (3.26->4) apart from Ruga and Sukadhik that were defined as high (2.51-3.25)¹³.

During the LAPA preparation process in Mugu, climate-induced vulnerability was assessed using specific indicators related to exposure, sensitivity and adaptive capacity – the same framework as used in the calculation of NAPA Vulnerability Indices by district. It was found that the communities had been exposed to drought, landslide and disease outbreaks in the last 30 years. The district also ranks as the 70th of 75 districts under the Human Development Index (HDI).

LGCDP

Within Mugu, phase I of the LGCDP had 2 projects at the ward level in the VDC Mugu, not selected under the NCCSP LAPA. There are only 2 projects, however, in ward 5 and ward 6 and the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

In conclusion, all three of these districts meet the majority of the criteria set out above and have strong arguments for VDC selection to fall in these districts in the TAMD Feasibility Study. All three of the districts fall in the Western half on Nepal and none of them fall in the Terai region, however the ecological zone and location are of lower importance according to the criteria for

¹¹ Listed in Annex

¹² DFID LAPA Highlights Summary Document, IIED and HTSPE Partnered, Unpublished Copy, see map in Annex

¹³ Ruga – 3.12, Sukadhik – 2.99, Mangri – 3.31, Jima -3.27 and Rowa – 3.5, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

selection. Access to NCCSP, CADP-N and LFP baseline data and accessibility and the slight lack of breadth that these three regions together, all need to be considered before a final decision can be made.

B. Alternative Districts – Kalikot, Udayapur and Jajarkot:

The district of Mugu has already been explained and analysed above. Therefore, from the other 6 districts listed above, those that satisfy the next three criteria have been listed below:

- Kalikot – both CADP-N LAPA, LGCDP and NCCSP LAPA
- Udayapur – both LGCDP and LFP
- Jajarkot – both LGCDP and NCCSP LAPA

8) Kalikot

Kalikot is a hill district in the Mid West region with a very high vulnerability to drought and a high vulnerability to landslides. Kalikot falls under the same Hub of the NCCSP LAPA Programme as Mugu and both regions are characterised by similar socio-economic statistics and climatic hazards. Difficult terrain, a short growing period and lower food production due to these conditions mean that as a district, Kalikot has low adaptive capacity and high sensitivity to climate change.

CADP-N LAPA

Under the CADP-N Programme, two LAPAs were prepared in Kalikot by the NGO Rural Self-Reliance Development Centre, Kathmandu. The LAPAs were prepared under the entry point of finance and service delivery and were located in Shivagadi and Kumalgaun. RSDC were piloting the LAPAs to see poverty through the climate adaptation lens with regard to financial delivery mechanisms and local level planning. Kalikot was selected because of its high poverty levels, inequality and a highly vulnerable economy to climate change.

Vulnerability assessments were carried out using the Gateway System Analysis tool and the proportion of vulnerable people were mapped within the VDCs. If a sector-specific approach is used in TAMD and the financial delivery sector is selected, the data collected and analysis of these VDCs may be useful.

NCCSP LAPA

Of the 30 VDCs in Kalikot, the NCCSP LAPA Programme selected Manma, Daha, Kalika (Mugraha), Lalu and Rakku as the VDCs for LAPA implementation. Vulnerability indices were calculated by VDC across the district using the same indicators and methodology as in Achham and Mugu. The most vulnerable of these VDCs to climate change is Rakku and all of them

except Manma were ranked as very high in the spectrum of vulnerability¹⁴. In total, 210 LAPAs were prepared under this Programme in Kalikot, with 48 of these falling in Rakku and thus providing many options for site selection at a community level for the TAMD Feasibility Study.

As with the LAPA preparation process in Mugu and Achham, many different entry points were used across the LAPAs, especially focussing on improving access to basic facilities such as water, energy and daily livelihood resources. Off-farm income and market linkage were also strongly promoted to diversify income generation and reduce the economic vulnerability of the district to climate change.

LGCDP

Within Kalikot, phase I of the LGCDP had projects at the ward level in the VDC Manma, one of the VDCs selected under the NCCSP LAPA. This is useful because it will allow linkages between the different interventions to be highlighted by analysing data from different communities within Manma, which will likely have similar climate vulnerabilities. There are only 2 projects, however, in ward 5 and ward 9 and the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

9) Udaypur

The district of Udaypur lies in the Terai region of Eastern Nepal. It has the highest vulnerability to landslide out of all 75 districts according to the NAPA and contains LAPAs under the CADP-N project and LGCDP projects.

CADP-N LAPA

The NGO Nepal Water for Sanitation prepared a LAPA for Rauta VDC in Udaypur. Water for Sanitation was the entry point of the LAPA preparation and the pilot took place from September to December 2010. Detailed adaptation capacity development work was carried out in the village of Guranse and involved a wide range of stakeholders to produce a LAPA.

This pilot provided a wide range of lessons for future LAPA projects and studied in depth the responses – both positive and negative – to the LAPA in Rauta VDC. This information, such as the indicators used, could always be useful in the design of the TAMD framework.

LGCDP

Within Udaypur, phase I of the LGCDP had 4 projects at the ward level in the VDCs of Saune and Khanbu as well as 2 projects in the municipality of Triyuga. The projects are all identified by

¹⁴ Dahha – 3.35, Lalu – 3.34, Manma – 2.70, Kalika (Mugaraha) – 2.92 and Rakku – 3.52, Climate Change Vulnerability Mapping for Nepal, National Adaptation Programme of Action, 2010

ward number, however, the details of these projects are currently unknown and thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

10) Jajarkot

The district of Jajarkot is a mid-Western district in the Hill ecological zone of Nepal that has the highest vulnerability to drought out of all the 75 districts. Jajarkot was selected as one of the districts for NCCSP LAPA implementation based off of this vulnerability.

LAPA Piloting/ NCCSP

Of the 30 VDCs within the district, 4 of them were designated highly vulnerable to climate change. 5 VDCs were selected for LAPA preparation and implementation – Arcchani, Dhime, Laha, Pajaru and Suwanauli. The vulnerability assessment in Jajarkot used the Gateway Systems Analysis – using exposure, sensitivity and adaptive capacity characteristics to calculate vulnerability. Of the 5 VDCs, Pajaru contained the most highly vulnerable household, followed by Dhime and then Arcchani, so these three VDCs should be considered first if Jajarkot is selected as one of the districts for implementation.

LGCDP

Within Jajarkot, phase I of the LGCDP had 2 projects at the ward level in the VDC Khalanga, not one of the VDCs selected under the NCCSP LAPA. This may provide problems in analysing the linkages between the interventions because it is likely that there are topographical, climatic and socio-economic differences between the VDCs. Thus further consultation with LGCDP is needed to ascertain if these interventions can be analysed in TAMD.

In summary, the 6 districts described above are the most promising districts in Nepal to fit the criteria for site selection under the TAMD Feasibility Study. A final decision can only be made on the districts to be selected once the selection of interventions has been finalised.

Annex 13 ICIMOD PVAT 2010 and 2011 Survey

A. ICIMOD

ICIMOD has developed a Poverty and Vulnerability Assessment Tool that collects data through VDC sampling and aggregates it to a DDC level. From the 2011 survey, a list of indicators from the following sub-headings deemed potential indicators for the TAMD:

- i. Climate variability and coping – community perception of climate vulnerability (multiple)
- ii. Shocks and coping – strategies adopted to cope with shocks/damage, institutions turned to for assistance in dealing with shocks, time it took for households to return to level before shock
- iii. Food security – average number of months with sufficient food for all HH, frequency of HH members going full day w/o food, average months with enough food stocks to feed all HH
- iv. Livestock and fishery – months HHs could grow/collect/buy fodder for 12 months, average number of animals owned by each HH
- v. Engagement in agriculture – majority of agriculture irrigation or rain-fed, primary source of seeds, use of compost/manure/fertiliser/pesticide during last 12 months
- vi. Electricity, water sanitation and health – primary fuel source, primary drinking water source, number of days HH members fetched water for normal daily HH needs, number of months water was sufficient for watering livestock during 12 months
- vii. Dwelling – perceived ability of dwelling to withstand climate risks without damage

A. ICIMOD MLV Assessment

ICIMOD carried out the MLV Assessment across the following 6 districts – Siraha, Udaypur, Khotang, Dolakha, Sunsari and Kavre. The data was collected in 2012 and it was determined that the following indicators could be useful under these 8 sub-headings:

- (i) Access to resources – number of livestock per head
- (ii) Livelihood strategies – primary, secondary and tertiary sector livelihood diversification index, cash crop diversity index
- (iii) Social networks – number of formal/informal institutions assisting HHs in stress
- (iv) Physical accessibility – time to reach next market centre/hospital/bus stop
- (v) Water security – severity of water conflicts (with/between communities)
- (vi) Coping strategies – number of short-term livelihood diversification coping strategies, average time to recover from shocks in relation to combined severity, number of medium term coping strategies implemented

- (vii) Environmental stability – agricultural land flat/sloping, agricultural land is irrigated or not, soil quality, degree to which dwelling can withstand extreme weather events
- (viii) Medium term exposure – perceived changes in climatic events (frequency/severity/temperature/precipitation)

B. NeKSAP

The WFP's NeKSAP has collected data at the VDC and DDC levels in term of food security but are currently carrying out a survey including the following indicators that consider the climate change element :

- i. People's perception on climate hazards in relation to food security
- ii. Irrigation facility in total cultivable land
- iii. Extent of food security assets damaged by hazards
- iv. Closest type of road and time to get there
 - v. Nearest market to buy necessities and sell local products
- vi. Access of seeds
- vii. Micro finance services and/or loan facility locally available
- viii. Extent of disease/pest infection in livestock and crops
- ix. Community access to agricultural inputs

D.NLSS/CBS (indicators)

All 75 districts are ranked based on composite index of 28 development indicators transferred into Zero-to-one (value of 0 represents worst and 1 represent excellent) unit-less scoring of the development conditions. Following list of indicators used for aggregation of indicators mainly on demography, health, education, access, use of energy, employment, agriculture production.

- Access to improved source of drinking water
- Access to toilet facility;
- Proportion of households having electricity facility;
- Proportion of households using solid fuels for cooking;
- Proportion of households having radio facility;
- Telephone lines per thousand population;
- Road density (length/sq.km. Area;
- Singulated mean age at marriage female
- Child dependency ratio;
- Ratio of girls to boys in primary education;
- Student teacher ratio in secondary education;
- Literacy rate of population 15-24 years;
- Ratio of literate female to literate male 15-24 years;
- Share of women in wage employment in non-agriculture sector;
- Employment to population of working age ratio;
- Proportion of children 10-14 who are working;
- Proportion of urban population;
- Yield of vegetables;

- Incidence of ARI per 1000 children < 5 years;
- Incidence of diarrhoea per 1000 children < 5 years;
- Proportion of malnourished children under 3 years;
- Reported death per 1,000 population;
- Primary school net enrolment ratio;
- Yield of fruits;
- Yield of cash crops;
- Yield of fisheries;
- Yield of cereal crops;
- Yield of pulses

E National Planning Commission

The National Planning Commission (NPC) of Nepal has developed a Results Based Monitoring and Evaluation Guidelines Indicators (2010) put into place to monitor outcome/impact/effect of development interventions in country. The Guidelines different 28 sectors/subject in details including governance, access, drinking water and sanitation, agriculture, environment, forest and soil conservation with outcome indicators. Some indicators of the forest, soil conservation, environment and social inclusion and targeted programme could be relevant to TAMD feasibility study.

a Key Indicators on Forest and soil conservation

- Area of national forest (hectare)
- Area of community forest (hectare)
- Number of community forestry users
- Area of leasehold forest (hectare)
- Number of leasehold forest users
- National park/area of forest within protected area
- Area of afforestation (hectare)
- Total area covered with forest (hectare)
- Number of employment received from forest
- Area protected from soil conversation programme (hectare)
- Area with herbs plantation (hectare) Income from forest
- Income generated by forest user group
- Income from herbs

b. Key Indicators on Environment

- Ratio of traditional fuel (firewood) among the total energy use
- Per capita energy consume (metric ton)
- Urban pollution level
- Population benefited from alternative energy (percentage)

c. Key Indicators on Social inclusion and targeted programme

- Number of women, *Dalit*, *Madheshi* and ethnic population benefited from scholarship
- Number of women, *Dalit*, *Madheshi* and *Janajati* benefited from training

- Number of women, *Dalit*, *Madheshi* and *Janajati* receiving scholarship for higher education
- Ratio of boys and girls students in primary and secondary education
- Number of trained attendants, ANM and nurse
- Number of women, *Janajati*, *Madheshi*, *Dalit*, disable and remote area population involved in teaching profession
- Number of women, *Dalit*, *Madheshi* and *Janajati* holding political position/portfolio
- Ration of the seats represented by women, *Dalit* and Medheshi and Janjati
- Number of women groups
- Mobilization of saving from women groups
- Amount of loan given to women and their numbers
- Amount of loan given to *Dalits* and their numbers
- Amount of loan given to *Janajatis* and their numbers
- Portion of women in income generating employment in non-agriculture sector

Annex 14 Vulnerability Indicators

- % HHs experiencing a reduction of vulnerability of flood because of river training
- % HHs experiencing a reduction of vulnerability of landslide because of plantation on a barren land;
- % HHs experiencing a reduction of vulnerability of drought/ crop failure because of irrigation facility on their agricultural land;
- % HHs experiencing a reduction of vulnerability with diversified and better income because of irrigation facility practice commercial crops like vegetable;
- % HHs experiencing a reduction of vulnerability because of cultivation of drought resistance varieties/local and indigenous varieties;
- % HHs having improved access of infrastructures (such as safe drinking water, vehicular road, bridge, health post.hospital, school/collage, communication facility, alternative energy – electricity, biogas, LPG, micro-hydro, solar panel, community hall, information sharing, early warning system);
- % HHs having access to financial services project such as insurance, money transfer, remittance services, saving, loan etc.;
- % HHs feel secured food security because of increased income/farm production;
- % HHs organized into CBOs, empowered and participated in local development planning and implementation;
- Poor and excluded groups enabled to participate in and benefit from the forestry sector;
- Enhance the assets of rural communities;
- Poverty incidence (Food security, natural disasters, famine, etc.)
Access to infrastructure (School, drinking water, health, communication, etc.)
- Access to road/market agricultural productivity (Fertility level, cash crops, fruits, export, etc.);
- Poor and excluded groups enabled to participate in and benefit from the forestry sector;
- Communities in climate-vulnerable mountain watersheds have improved access to and enhanced reliability of water resources;
- At least 33% female and proportional representation of disadvantaged groups in CDG Committees; at least one woman is in a leadership role;
- Good practices in water and soil conservation that are responsive to the specific needs of women and DAGs are adopted by participating communities;
- Time women and children spend collecting domestic water during the dry season reduced;
- Poorest and most vulnerable people are able to adapt to the impacts of climate change;
- No. of people less vulnerable to the impacts of climate change and climate variability.



Project materials

Climate change

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International Institute for Environment and Development
80-86 Gray's Inn Road, London WC1X 8NH, UK
Tel: +44 (0)20 3463 7399
Fax: +44 (0)20 3514 9055
email: info@iied.org
www.iied.org

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