The monitoring and evaluation of climate change adaptation in Nepal: a review of national systems

Susannah Fisher, IIED
Michelle Slaney, Practical Action Consulting

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About the authors

Corresponding author: Susannah Fisher is a researcher with the climate change group at IIED. She works on action research projects on climate change adaptation, monitoring and evaluation and low carbon resilient development. www.iied.org/users/susannah-fisher, Contact: Susannah.fisher@iied.org

Michelle Slaney is the International Climate Change Specialist with Practical Action Consulting (PAC). Based in Nepal, Michelle provides technical support on climate change-related consultancies to all regional PAC offices in South Asia, Southern Africa, Eastern Africa, and Latin America.

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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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Summary

National monitoring and evaluation (M&E) systems in Nepal have evolved rapidly over the past decade. The National Planning Commission has developed new guidelines and approaches to move the Government towards results-based management and the use of sectoral and national indicators. Across Government, there are examples of improvements and good practice where targets and sectoral approaches are being used, and data management systems from the local to the national level are in operation. However, even systems with extensive data collection and systems for performance management, such as Education and Health, face challenges in moving from monitoring progress to evaluating performance, and in using data and frameworks to feedback into future planning processes. Within this context, the M&E of climate change adaptation (CCA) is a newly emerging challenge and the Government, with the support of the development partners, is trying a range of approaches to adaptation and its M&E.

The National Adaptation Programme of Action (NAPA) in 2009–2010 identified national adaptation priorities, aspects of which are now being taken forward by various projects supported by the development partners, e.g. the Strategic Progamme on Climate Resilience (SPCR), the Nepal Climate Change Support Programme (NCCSP) and the Hariyo Ban programme. These are three of the largest adaptation interventions in Nepal currently in the planning or implementation phase. Outside these adaptation programmes the Government of Nepal are undertaking many climate-relevant development programmes, but these do not yet explicitly address additional climate risks as a core part of their work.

The M&E of CCA is coordinated by the Ministry of Science, Technology and Environment (MoSTE), which monitors its own annual programme through budgetary and progress reports to national institutions. Development partner projects on adaptation are coordinated within this framework and must report on progress in national formats and processes. But they have their own M&E frameworks and may have global indicators specific to an international programme or global development partner. Therefore, these adaptation programmes have created their own baselines in conjunction with government sources and developed indicators in consultation with the Government, allowing some alignment with government priorities. But contentious issues remain, such as the relationship of new programmes to existing NAPA priorities. Often, multiple pressures in designing the M&E frameworks, including the data requirements of the development partner for their own reporting, mean only partial alignment is possible. New data sources or additional indicators in national surveys may be needed for CCA M&E; though at present extra data is collected on a project-by-project basis and is neither centrally collated nor managed across programmes.

Numerous challenges to successful CCA M&E exist, including a lack of capacity, availability and reliability, management of data, and human resource constraints. But implementation of adaptation programmes provides an opportunity to address these issues from inception. A planned coordinating mechanism for climate change programmes and their results-based frameworks could be the first step towards a more comprehensive approach to M&E of CCA. Using project frameworks to go beyond monitoring to evaluation and learning about more effective adaptation would be an important step for both the Government of Nepal and development partners.

Acronyms

ADB	Asian Development Bank
AEPC	Alternative Energy Promotion Centre
BMU	German Federal Ministry for the Environment
CARE	Cooperative for Assistance and Relief Everywhere
CCA	Climate Change Adaptation
CCMD	Climate Change Management Division
CCPCC	Climate Change Programme Coordination Committee
CCPRF	Climate Change Programme Results Framework
CDM	Clean Development Mechanism
CMED	Central Monitoring and Evaluation Division
COP 15	Copenhagen Climate Change Conference 2009
CTEVT	Council of Technical Education and Vocational Training
DCC	District Coordination Committee
DDC	District Development Committee
DfID	Department for International Development
DHM	Department of Hydrology and Meteorology
DNA	Designated National Authority
DOE	Department of Education
DoHS	Department of Health Services
DPMAS	District Poverty Monitoring Analysis System
EDI	Education for All Development Index
EFA	Education for All
EMIS	Education Management and Information System
FECOFUN	Federation of Community Forestry Users in Nepal
GCMs	Global Circulation Models
GDP	Gross Domestic Product
GLOF	Glacier Lake Outburst Floods
GoN	Government of Nepal
HMIS	Health Management and Information System
IFC	International Finance Corporation
IPCC	Inter-governmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
JARs	Joint Annual Reviews
JICA	Japan International Cooperation Agency
LAPA	Local Adaptation Plan of Action
LDCF	Least Developed Countries Fund
LFA	Logical Framework Approach
MCCICC	Multi-stakeholder Climate Change Initiatives Coordination Committee
MDAC	Ministerial Development Action Committee
MDB	Multilateral Development Banks
MDGs	Millennium Development Goal
MfDR	Managing for Development Results
NAPA	National Adaptation Programme of Action
NCCSP	Nepal Climate Change Support Programme
NDAC	National Development Action Committee
NeKSAP	Nepal Food Security Monitoring and Analysis System
NHSP	Nepal Health Sector Programme
NITC	National Information Technology Centre
NLSS	National Living Standards Survey
NPC	National Planning Commission
NPCS	National Planning Commission Secretariat
NSDRM	National Strategy for Disaster Risk Management
NTNC	National Trust for Nature Conservation
NWP	National Water Plan
PMAS	Poverty Monitoring and Analysis System
PPCR	Pilot Programme on Climate Resilience
PPIS	Project Performance Information System
PRSP	Poverty Reduction Strategy Paper
RBME	Results Based Monitoring and Evaluation
RCMs	Regional Climate Models
REDD	Reducing Emission from Deforestation and Forest Degradation
SEMS	Strengthening Monitoring and Evaluation System
SPCR	Strategic Programme for Climate Resilience
SWAp	Sector-wide approach
TWG	Technical Working Group
TWGs	Thematic Working Groups
TYIP	Three Year Interim Plan
TYP	Three Year Plan
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	US Agency for International Development
VDC	Village Development Committee
WB	World Bank
WFP	World Food Programme
WRS	Water Resources Strategy
WWF	World Wide Fund for Nature

1 Introduction

Nepal is extremely vulnerable to climate change with a GDP closely associated with climate-sensitive activities, particularly agriculture, so the national economy and people's livelihoods depend greatly on climate. Recently, the Government of Nepal (GoN) has established institutions and developed policies and programmes to address climate change as a national priority, resulting in a national Climate Change Policy adopted in 2011. As part of the national programme the Nepalese government intervenes in many climate-relevant activities such as agriculture and water management, with development partners providing over half of the funding. The Ministry of Environment, Science and Technology (MoSTE) coordinates most of the largest adaptation-related programmes including the Strategic Programme for Climate Resilience (SPCR), the Nepal Climate Change Support Programme (NCCSP), a project funded by the Least Developed Countries Fund on Glacier Lake Outburst Floods (GLOFs), an ecosystem-based adaptation project and the Hariyo Ban Programme.

1.1 Purpose and approach of the report and key findings

Nepal is one of the most vulnerable countries to climate change and has received considerable support from development partners to implement climate change adaptation (CCA) interventions. The GoN undertakes many programmes in sectors relevant to climate change under the regular annual programme of government expenditure and activities, so they are not formally registered as climate change programmes or adaptation. These include integrated water resource management, community forestry programmes and irrigation systems. The main adaptation interventions explicitly addressing future climate risk have been supported in various ways by several development partners and are coordinated by MoSTE. Several programmes have only begun implementation in the past 12 months, whilst others are still in the planning stages, so there is very little experience of operationalising adaptation monitoring and evaluation (M&E) frameworks, many of which have not yet been finalised. This report is therefore written at a time of considerable planning and development of CCA M&E but with few concrete results or examples of implementation to consider.

The research approach combined an extensive review of secondary literature on the national M&E system, and project and programme documents on CCA, with a series of interviews and consultations with key stakeholders undertaken in Kathmandu between November 2012 and February 2013. Research focuses on a set of programmes that explicitly consider CCA as their main aim, rather than the range of climate-relevant programmes under the main development programme. For this reason, the primary empirical focus is on MoSTE, although other sectors and the national system are also included for comparison and context.

The key findings from the report are as follows:

Objectives: The national M&E framework has so far focused on monitoring and identifying problems in project implementation rather than evaluating performance or feeding data back into planning and programmes. This continues to be the case in national requirements for the M&E of CCA. It remains unclear to what extent this information will feed back into future adaptation programmes and government systems. The multiple adaptation programmes also present different models of M&E and do not, at present, offer a programmatic M&E framework for the National Adaptation Programme of Action (NAPA) priorities, but instead are project-based assessments of particular approaches.

Stakeholder engagement: Stakeholder engagement in the M&E development of adaptation has been largely through government consultations and presenting the frameworks at programme steering committees. Some frameworks have gone through local consultations and participatory processes such as district consultations with the Local Adaptation Plan of Action (LAPA) indicators and the community work in Hariyo Ban.

Baselines and data: There are very few baselines for CCA beyond existing survey data, which is not collected annually. Some district sources can give background data on poverty and community characteristics but many projects have collected/will collect their own baseline data disaggregated at the household level. There is no mechanism for baseline data collected in different projects and programmes to be centrally managed for use by others, although such a system is planned.

The frameworks: The M&E adaptation frameworks all seek to demonstrate the project's impact on household or community vulnerability and their ability to cope with the adverse consequences of climate change. However, there are multiple pressures on those developing the frameworks to reflect global priorities and indicators, local realities and concerns, and the needs of development partners to demonstrate results in fairly short periods of time. These are in addition to the need to facilitate learning about CCA and how to measure effective reductions in climate vulnerability. It is too early to say what effect these multiple pressures will have on the emerging frameworks and how much learning, both quantitative and qualitative, will remain a priority as the projects develop and M&E systems are finalised and implemented.

Role of learning for planning: Evidence from the rest of the Nepal M&E system suggests that data from the M&E system has not been used to change the course of development planning and there are no indications that this will be different in adaptation. Mechanisms are being set up to bring adaptation results together and apply them to the framework of the NAPA priorities, but how lessons learned will be incorporated into future adaptation programming by MoSTE and other relevant ministries remains unclear.

The report is structured in six sections. The first section outlines the main climate change vulnerabilities of Nepal and gives a detailed background to development planning processes and climate change policies. It also introduces the three adaptation interventions to be discussed in detail in the report: the Hariyo Ban programme, the Strategic Programme on Climate Resilience and the Nepal Climate Change Support Programme. Section 2 covers in detail the national M&E system, how ministries report their progress and how national indicators are monitored to measure progress. Section 3 addresses MoSTE practices and outlines the M&E frameworks of adaptation interventions, including how they will use baselines, indicators and work within government systems. Section 4 presents examples of the M&E systems in Health and Education and considers what we can learn from these sectors for CCA. Section 5 discusses the key issues facing M&E of adaptation and Nepal and potential ways forward drawing on evidence from across the report to consider the key issues of objectives, stakeholder engagement, baselines and targets, and the uptake of M&E results. Section 6 concludes the report.

1.2 Climate vulnerabilities and future predictions

Nepal is an extremely complex country climatically due to its topography, the extraordinary variation in elevation from the plains to the Himalayan high mountains, and the influence of the Himalayan mountain range and the South Asian monsoon (GON, 2010). The lowland regions of Nepal have a warm and humid sub-tropical climate, while the high mountainous regions are cold and remain well below zero in the winter, all within a span of less than 200 km. This results in considerable macro-, meso- and micro-scale variations in climate.

Over the last four decades, a number of studies on Nepal's climatic conditions have been undertaken and more recently, efforts have been made to quantify changes in temperature and precipitation trends and extremes. Shrestha *et al.* (1999) analysed 49 stations in Nepal between 1977 and 1994 and found that the warming was consistent and continuous after the mid-1970s. They also found that the increase in annual mean maximum temperature between 1977 and 2000 was 0.06°C/year, with more pronounced warming in the higher altitude regions of Nepal (i.e. the middle-mountains and Himalayas). In 2009, a comprehensive study of temperature and precipitation across Nepal between 1976 and 2005,was undertaken to determine indications of climate change across geographical areas and over seasons (Practical Action, 2009). An analysis of about 30 years of observed temperature data has shown that maximum temperatures in Nepal are increasing at an alarming rate, with observable impact on the Himalayan glaciers. The 2009 study confirmed that mean annual temperature has been increasing in Nepal between 1976 and 2005, and that maximum temperature has continuously increased since the late 1970s.

Although a number of regional precipitation trends have emerged, the situation remains unclear and large uncertainties prevail. Nepal's NAPA reported that precipitation data does not show any general nationwide trends, though the United Nations Development Programme (UNDP) country profile reported a trend of decreasing annual precipitation (McSweeney *et al.*, 2003). Other studies (Baidya *et al.*, 2008; Practical Action, 2009) report a change in precipitation over time during the different seasons, with some regions showing increases and others showing decreases. Baidya *et al.* (2007) found an increasing trend in the number of extreme precipitation days at the majority of the stations, particularly for stations

below 1500m, which has important implications for landslides, flash floods and inundation. Climate variability and the frequent occurrence of extreme climate events (particularly floods, but also landslides and occasional droughts) have been a major challenge to the country, infrastructure, the agricultural sector and rural livelihoods (GoN MoHA, 2009).

As a large proportion of Nepal's GDP is associated with climate-sensitive activities, particularly agriculture, the economy of the country, and the livelihoods and wellbeing of the people, are therefore highly dependent on climate. The agricultural sector is dominated by smallholders and rain-fed production, and hence is affected by rainfall variability, but also by extremes such as droughts and floods, landslides, and other weather events such as heat stress, hot winds, cold waves, hailstones and snowfall.

Drought events lead to major reductions in production, as shown by the 2008/9 and 2009/10 droughts, the major effects of which have been reported. The UN World Food Programme reported that 2009 winter crop harvests were reduced by 40% (Mountain), 25% (Hill), and 10% (Terai) compared with the previous year because of the dry winter, leading to a national decrease in the two major winter crops of wheat and barley of 15% and 17% (UN World Food Programme, 2009). This led to an annual cereal deficit of 133,000 metric tonnes, despite an excellent summer crop harvest. Combinations of climate variability and impacts have a cumulative and even greater impact. A good example from recent years is a severe winter drought in 2006 combined with extensive summer flooding, and a 2009/2010 drought event, which reportedly led to an 11% loss of rice yields, a 7% loss in wheat and maize, and a grain deficit of 400,000 tonnes (Paudel *et al*., 2011).

As hydroelectric plants are dependent on predictable runoff patterns, and thus sensitive to climate variability (Agrawala *et al*., 2003), hydroelectricity production is also affected by climate variability. In addition, hydroelectric plants are subject to the risks of floods and droughts, including risks from GLOFs. This is critically important as Nepal's electricity generation comes mainly from hydroelectricity.

Floods are the major climate-related hazard in Nepal, though landslides, drought and fire are also recorded. Floods, including GLOF, have frequently led to loss of life, damage to property and infrastructure, and major economic losses and costs to the country (GoN MoHA, 2009). Major floods can also lead to large sedimentation deposits, as well as impacts on land and property. These floods can also affect dams and hydro-reservoirs, greatly affecting a project's lifetime.

The Ministry of Home Affairs (MoHA) estimates that of all disasters reported, floods and landslides are the most devastating in terms of the number of deaths and the amount of damage. Between 2001 and 2008, floods and landslides killed 1,673 people, affected 221,372 families, killed 33,365 livestock, destroyed 52,007 houses and washed away or destroyed over 22,000ha of land. The monetary value of flood damage for 2001–2008 was about US$130 million (US$16 million annually or 0.1% of GDP), according to government data.

In addition, Nepal has experienced 24 GLOF events in the recent past, several of which have caused considerable damage and loss of life. Of these, 14 are believed to have occurred in Nepal itself and 10 were the result of flood surge overspills across the China (Tibet AR)–Nepal border. The Dig Tsho GLOF of 1985 is the most thoroughly documented event. When the end moraine of the Dig Tsho collapsed, the sudden outburst resulted in the loss of four or five lives, destroyed the nearly completed Namche

Small Hydel facility (hydropower plant) some 11 km downstream, destroyed 14 bridges, destroyed long sections of the main trekking route to the Mt Everest base camp, caused more than three million dollars worth of damage, disrupted the downstream community of Khumbu for several months, and caused other losses as far as 50 to 60 km downstream. Furthermore, because of the unstable nature of many sections of the valley walls, landslides and general instability caused many problems, including loss of life, for several months after the initial event (ICIMOD, 2011). Table 1 shows some of the losses and damages, in terms of lives lost, people displaced or affected, and property and infrastructure damages, as a result of floods, droughts and landslides in Nepal between 1971 and 2007.

Table 1: Information on disasters in Nepal 1971–2007

	Floods	Droughts	Landslides	GLOF (e.g. The Dig Tsho GLOF of 1985)
Number of lives lost (1971–2007) (ISDR, 2009)	2,936 dead 578 missing	0	3,987 dead 517 missing	5
Number of people displaced/affected 1971–2007	3,367,974	1512	479,972	Disrupted the downstream community of Khumbu for several months, and in other communities as far as 50 to 60 km downstream
Property damages 1971–2006 (MoHA & DPNet, 2009)	3,713 million NRS	10 million NRS	835 NRS	>$US3 million
Infrastructure 1971–2007	78,830 houses destroyed 75,274 houses damaged	-	16,878 houses destroyed 8,573 houses damaged	Destroyed the nearly completed Namche Small Hydel facility (hydropower plant) some 11 km downstream, 14 bridges, and long sections of the main trekking route to the Mt Everest base camp
Other 1971–2007	196,977ha agriculture land and crop loss	329,332ha agriculture land and crop loss	21,794ha agriculture land and crop loss	Landslides and general instability of valley walls caused many problems, including loss of life, for several months after the initial event

Projecting the future climate in Nepal is extremely challenging due to the extreme differences in elevation and the complex regional climate. However, projections have been made using Global Circulation Models (GCMs), statistically downscaled models and Regional Climate Models (RCMs). While there is a significant range of temperature change across different scenarios and from different models, all models project strong warming trends for Nepal. The picture for precipitation, however, is less clear because GCMs, statistically downscaled models and RCMs do not show a clear trend in projected annual precipitation (some models project an increase, others a decrease). Overall, the projections indicate high uncertainty about future rainfall, even higher uncertainty about changes in variability and extremes, and thus broadly for water-related impacts and water resources.

Farming success is dependent on the timely arrival of the monsoon, but the monsoon can also cause problems such as landslides, debris flow and flash floods in the hills and foothills, and floods, debris and cutting off land in the plains. This often results in loss of life, livestock, farmland and property. Conversely, when there is a prolonged break in the monsoon, severe drought often leads to famine. The regional monsoon system may change significantly over time and there is a high degree of inconsistency between models predicting future monsoon processes.

Given its high vulnerability to climatic risks, the Government of Nepal has been active in developing climate change and development policies and programmes, which are addressed in the following section.

1.3 National approaches to development and policies on climate change

Development planning in Nepal has been primarily through the making of Five-Year Plans (outlined in section 1.3.1). Climate change policies began to be developed more recently (see section 1.3.2) and corresponding institutions have been set up to implement these policies (see section 1.3.3).

1.3.1 Development planning processes

Although some efforts were made prior to 1951, the planning process for social and economic development in Nepal was marked with the launch of the First Five-Year Plan (1956–1961), following the establishment of a Planning Board (1955) (Pyakuryal & Suvedi, 2000). The plan did not fully succeed in creating the necessary base for economic development (in terms of infrastructure), however, it did create public interest and support for planning, and resulted in significant progress in the fields of education and health.

In developing the Second Plan, it was recognised that existing economic conditions could not be accurately determined given the absence of survey data and studies of natural recourses, agricultural output, national income and other economic variables. The Second Plan therefore gave priority to activities that would form the base for more comprehensive future plans, and, through supporting private sector investment (with loans), substantial amounts of money were spent on power development, industry, roads and irrigation. In addition, long-term targets in some sectors of the economy could be set as a result of steps taken during the Second Plan.

More than 20 years after the First Five-Year Plan was developed, the Sixth Five-Year Plan (1980–1985) recognised that the environment needed to be integrated into development planning and committed to achieving this. However, environmental objectives were not fully realised throughout several planning cycles, and so the Eighth Five-Year Plan (1991–1995) and the Nepal Environmental Policy and Action Plan (1993) re-emphasised the need to integrate environmental concerns into the development process.

In addition to these 'short-term' planning processes, there is also a longer term Nepal Development Vision 2030 (NPC, 2011). This contains the aspiration to make Nepal a middle-income country over the next decade and an upper middle-income country by 2030.

1.3.2 Climate change policies

In May 1994, the Government of Nepal ratified the United Nations Framework Convention on Climate Change (UNFCCC), and in September 2005, the Kyoto Protocol was ratified. Since ratifying the Convention, the GoN has been increasingly active in the negotiation process and has undertaken several activities and initiatives at the national level to meet their commitments. In 2004, the GoN completed and submitted their first National Communication to the UNFCCC secretariat, and will soon submit their second National Communication. The GoN has also established a Designated National Authority (DNA) to executive CDM projects.

Table 2: Development of climate policies in Nepal

		1994	----->	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	**Ratification of UNFCCC**													
2	**1st National Communication Completed**													
3	**Ratification of Kyoto Protocol**													
4	**Interim Constitution of Nepal (2007)** highlighted environment management and climate change													
5	**The Tenth Plan (2002-2007)** highlighted environment management and climate change													
6	**Three Year Interim Plan (2008-2010)**													
7	**National Strategy for Disaster Risk Management**													
8	**NAPA** Completed													
9	NPC initates **climate resilient planning tools**													
10	**Climate Change Policy**													
11	**LAPA Framework, and 70 LAPAs** completed													
12	**Low Carbon Economic Development and Climate Resilience Strategy** being developed													

The Interim Constitution of Nepal (2007) and the Three-Year Interim Plan (2008–2010) also addressed the issue of environmental management and climate change, thus signifying climate change as a priority issue on the national agenda. In September 2010 Nepal completed its NAPA, which sets nine priority activities and was prepared through a country-driven inclusive and consultative process, in which over 2,500 people were involved at various stages of NAPA preparation. This process was instigated and coordinated by MoSTE (the then Ministry of Environment), and involved six government-led multi-stakeholder Thematic Working Groups (TWGs).

In recognition of the diversity of climatic and ecological regions in Nepal, the Government spearheaded a process to go beyond the NAPA, which identifies immediate and urgent adaptation needs at a national level. As a result LAPAs are being developed at the community level and a framework to guide their implementation has been developed. This is an innovative and patent example from Nepal of identifying local adaptation needs by grassroots consultation.

To date, 70 LAPAs have been prepared to address climate change impacts in 14 districts of the Mid-Western and Far-Western regions of Nepal, and the framework to guide their implementation was recently completed. There are over 3,000 activities identified in the LAPAs, which are broken down into five categories shown below. Percentages represent the number of priority activities within those categories.

- Agriculture and food security, livelihoods, forests and biodiversity (43%)
- Capacity development (27%)
- Climate-induced hazards and disasters (12%)
- Water resources and alternative energy (9%)
- Infrastructure related (9%)

Of these 3,000 activities, 1,800 of the most urgent and immediate priorities identified in LAPAs will be addressed by the Nepal Climate Change Support Programme (funded by the Department for International Development (DFID) and the EU).[1]

In 2011 the national Climate Change Policy was formulated to address the adverse impacts of climate change and utilise the opportunities created by it to improve livelihoods and achieve climate-friendly physical, social and economic development.[2] The main goal of this policy is to improve livelihoods by mitigating and adapting to the adverse impacts of climate change, adopting a low-carbon emissions socio-economic development path and supporting and collaborating in the country's commitments to national and international agreements related to climate change. The policy explicitly states that 'at least 80% of the total funds available for climate change activities flow to the grassroots level'. A list of strategies needed to realise the goals of the policy have been identified and the GoN is currently in the process of formulating some of these strategies (e.g. The Low Carbon Economic Development and Climate Resilience Strategy).

1 Interview with UNDP official, February 2012.

2 The Climate Change Policy 2011 is available at http://www.climatenepal.org.np/main/?p=research&sp=onlinelibrary&opt=detail&id=419

In addition, some of the targets mentioned in the policy include:

i establishment of a climate change centre within one year;

ii implementation of community-based local adaptation actions as mentioned in NAPA by 2011;

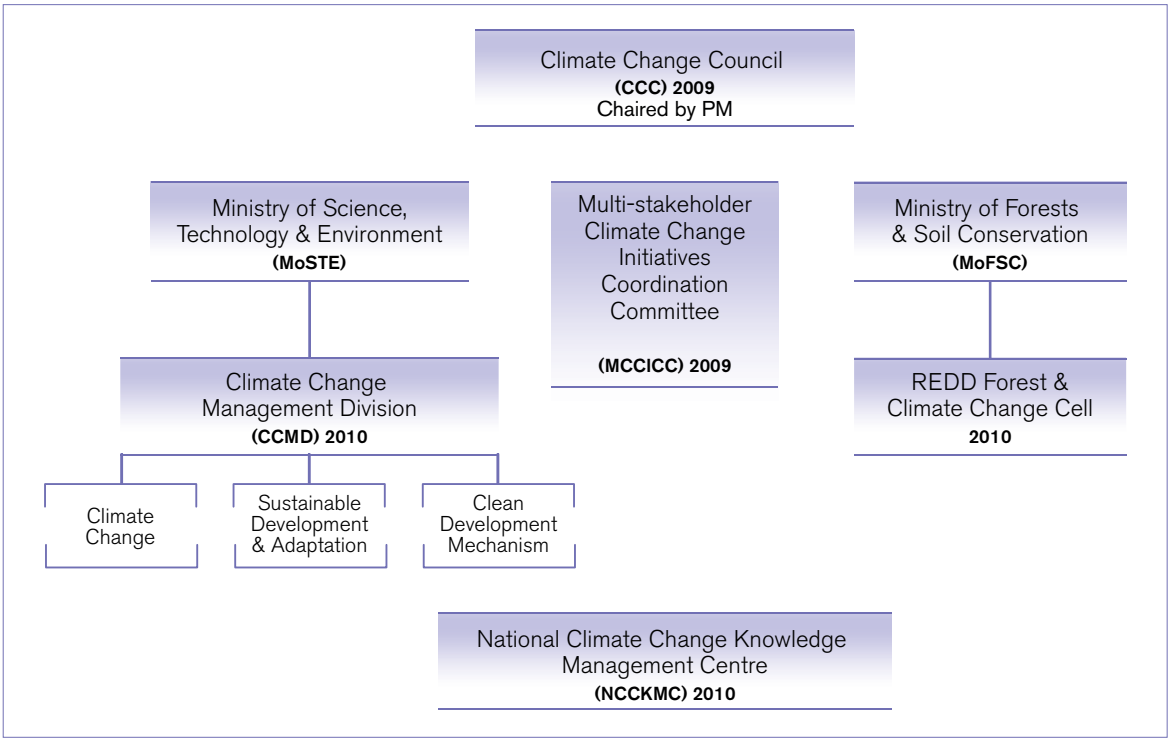
iii promotion of climate adaptation and adoption of effective measures to address adverse impacts of climate change through technology development and transfer, public awareness, capacity building and access to financial resources;

iv development of a reliable forecasting system to mitigate the adverse impacts of climate change on vulnerable areas, natural resources, and people's livelihood.

1.3.3 Climate change institutional framework

To ensure effective implementation of these policies and actions, national coordination mechanisms and institutional arrangements are required. The GoN has created several institutions since 2009 to manage this process (shown below in Figure 1).

Figure 1: Institutions supporting implementation of climate change policies in Nepal



The GoN formed the Climate Change Council in 2009, prior to the Copenhagen Climate Change Conference (COP 15).[3] The Council is a 25-member high-level coordination body chaired by the

3 The 15th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change

Prime Minister. To coordinate climate change activities and implement collaborative programmes, a Multi-stakeholder Climate Change Initiatives Coordination Committee (MCCICC) was formed in 2009, with representation from relevant ministries and institutions, international and national non-governmental organisations, academia, the private sector, and development partners. A Nepal Climate Change Knowledge Management Centre (NCCKMC), hosted by the National Academy of Science and Technology (NAST) has also been established for managing climate change knowledge in Nepal, although is not yet fully operational.

MoSTE is the designated focal point and lead Ministry in implementing the provisions of the UNFCCC and coordinating the implementation of other climate change-related activities including adaptation. Within MoSTE there is a Climate Change Management Division (CCMD), established in the first quarter of 2010. This has three sections: Climate Change; Sustainable Development and Adaptation (formerly the Climate Change Council secretariat); and Clean Development Mechanism. In the same year, a Reducing Emission from Deforestation and Forest Degradation (REDD) Cell was also established within the Ministry of Forests and Soil Conservation (MoFSC). MoSTE is also responsible for reporting and liaising with the Climate Change Council (the apex body responsible for policy coordination) and MCCICC.

1.4 Large-scale adaptation interventions

Many climate-relevant programmes are undertaken by GoN under the regular annual programme of government expenditure and activities and so are not formally registered as climate change programmes or adaptation. Programmes include integrated water resource management, community forestry programmes and irrigation systems, which are monitored and evaluated through national government systems. The reporting format depends on their national priority and the procedures of the Ministry (these processes are outlined in sections 2 and 4).

There are plans for a climate change budget code in the national and local budgets to allow government climate expenditure to be tracked but this is not yet fully operational. Calculating government climate change expenditure is therefore a difficult task. There are 83 expenditure codes in the government budget that have some relevance to climate mitigation and adaptation identified through a qualitative assessment and these programmes are split across key ministries such as MoFSC, Ministry of Agricultural Development and Ministry of Physical Works and Planning (Bird, 2011). These programmes made up 6.7% of total government expenditure from 2007–2012.

In 2011/2012, expenditure on these codes comprised 44.1% government funds, 40.4% foreign grants and 15.5% loans, with over half being funded by development partners. Some climate change projects are off-budget (such as technical assistance estimated at $13 million a year) or go directly to NGOs, and are therefore excluded from the total expenditure here. The 50% of climate change expenditure supported by development partners is higher than the percentage of the total government budget supported by foreign loans and grants, which was around 25% in 2011/12, although in development programmes the figure reaches 60% (Bird, 2011).

Several ministries are key in implementing climate change-relevant programmes and MoSTE has the remit to coordinate all climate change activities across government, multilateral development banks

(MDBs), and other implementing agencies. There are various ways in which adaptation programmes are being undertaken with the support of development partners. In some cases the GoN has applied to a fund, such as the Least Developed Countries Fund (LDCF) for funding of specific projects. This funding will come to the government but must be managed through an implementing agency (such as the UNDP) that acts as a service provider for the government. In another case, the GoN has been invited to participate in a global programme, the Pilot Programme on Climate Resilience (PPCR), and once it accepts, the funding will go directly to the government and through the government budget, although the MDB partner is involved in the design, implementation and M&E. In another instance, development partners provide funding, while the project is implemented jointly by the government partner and an implementing partner providing technical assistance. This is the modality of the Nepal Climate Change Support Programme (funded by DFID and the EU) with technical assistance from the UNDP.

Although other climate-related projects have been and are being undertaken in Nepal, this section summarises the large-scale adaptation interventions that are directly and explicitly related to adaptation, either through the whole programme or an adaptation component. These interventions are intended to support implementation of the Climate Change Policy and the NAPA.

As several projects have not yet begun, they are not included in this report. One is the Community-based Flood and Glacial Lake Outburst Risk Reduction projects finance by the LDCF through a grant of $6 million. It aims to reduce the risk from GLOFs in one hazardous glacier lake by artificially reducing the lake level and establishing monitoring and early warning systems. In addition to minimising the hazards of GLOFs, the project will also support measures to reduce flood risks. The UNDP will be the implementing agency for this project. Another project on ecosystem-based adaptation in mountain ecosystems is still in development, to be implemented by the International Union for the Conservation of Nature (IUCN), UNDP and the United Nations Environment Programme (UNEP) with support from the German Federal Ministry for the Environment (BMU). Additional information on these initiatives can be found in Annex 2.

This report focuses on the three programmes below (Hariyo Ban, the SPCR, and the NCCSP) as they are substantial programmes with a significant adaptation component and are furthest along in developing their M&E approaches.

1.4.1 Hariyo Ban

Hariyo Ban is a five-year initiative (2011–2016) that aims to reduce the adverse impacts of climate change and threats to biodiversity in Nepal. It is supported by the United States Agency for International Developments (USAID) and implemented by a consortium of four NGOs, including the World Wildlife Fund (WWF), the Cooperative for Assistance and Relief Everywhere (CARE), the Federation of Community Forestry Users in Nepal (FECOFUN) and the National Trust for Nature Conservation (NTNC). By working with the government, communities, civil society and the private sector, the programme emphasises the links between people and forests. Adaptation to climate change is one of three thematic components of the Hariyo Ban Programme, the others being biodiversity conservation and payments for ecosystem services including REDD+. Livelihoods, governance, and gender and social inclusion are cross-cutting themes within these three main components.

Within the adaptation component, the partners are developing an integrated local approach that combines both ecosystem- and community-based approaches to adaptation. They are also exploring how best to link with bottom-up and top-down adaptation efforts in line with Nepal's NAPA and LAPA. Of the $30 million dollars supporting the programme, the largest sum has been allocated to the adaptation component ($11.1 million), and an additional $1.2 million has been allocated for M&E of the programme.

1.4.2 The Strategic Programme for Climate Resilience (SPCR)

The PPCR is one of the international Climate Investment Fund's (CIF's) programmes that seek to explore and pilot programmatic approaches to climate change resilience. Nepal was one of a group of pilot countries selected for the PPCR, which funds technical assistance and investments to support countries' efforts to integrate climate risk and resilience into core development planning and implementation.

The PPCR is being implemented in Nepal in partnership with the GoN and the Asian Development Bank (ADB), International Finance Corporation (IFC) and World Bank (WB). From the PPCR, a Strategic Programme for Climate Resilience (SPCR) has been agreed in Nepal with stakeholders and approved for funding by the PPCR sub-committee. The five components of the SPCR have approved financing of $86 million (58% grant, 42% near-zero interest credit).

The SPCR focuses on long-term interventions aimed at enhancing climate resilience in Nepal through five components:

- Building climate resilience of watersheds in mountainous eco-regions, an investment project administered by ADB.
- Building resilience to climate-related hazards, an investment project administered by WB.
- Mainstreaming climate change risk management in development, which is a technical assistance project administered by ADB.
- Building climate-resilient communities through private sector participation, an investment project administered by IFC.
- Enhancing climate resilience of endangered species, an investment project administered by WB.

1.4.3 Nepal Climate Change Support Programme (NCCSP)

The Nepal Climate Change Support Programme is a 4-year programme, supported by UK AID of the DFID and the EU (for £14.6 million) with technical assistance from the UNDP. It is intended to enable the GoN to manage climate finance, implement the NAPA and mainstream CCA into local and national development planning. It will build the capacity of GoN to implement the Climate Change Policy and local level CCA actions through developing LAPAs. To date, 70 LAPAs have been prepared to address climate change impacts in 14 districts of Mid-Western and Far-Western regions of Nepal, and the framework to guide their implementation was recently completed. This will contribute to achieving the goal of ensuring that the poorest and most vulnerable communities in Nepal are able to adapt to the impacts of climate change.

2

Frameworks, practices and institutions for national monitoring and evaluation systems

The M&E system in Nepal is a multi-layered system from national to local level, which is coordinated and supported by the National Planning Commission Secretariat (NPCS), the bureaucratic arm of the NPC. The NPC is the apex body responsible for formulating the development plans, assessing progress towards development, and approving ministerial programme documents. It has developed guidelines to formulate programmes, as well as guidelines and formats, for M&E and reporting. All ministries monitor their annual programmes and report to the NPC on a four-monthly basis. Local data is collected through district offices that report to their line ministries and also to District Development Committees (DDCs). The NPCS generally focuses on monitoring of priority projects and development partner-funded projects, and monitors the aggregate outcome and outputs at national level. The release of national budgetary funds is linked to reporting, which is generally in relation to physical progress. Some national M&E systems are being developed, such as the Poverty Monitoring and Analysis System (PMAS) developed in 2004 to monitor efforts to reduce poverty, but not yet fully functional. There is a national M&E system and set of guidelines in place, but this is not fully operational and ministries are at different stages of moving to new results-based approaches. There is a set of national indicators that are currently being revised and will include climate change in the new iteration. The national indicators are used for monitoring rather than used as a tool for evaluation or for further programme development.

2.1 Institutional arrangements for national M&E

The system for M&E in Nepal has evolved through the periodic development plans, which are formulated and performance-assessed by the NPC.

In the Fifth Plan (1975/76), output and outcome M&E was developed to measure achievements of periodic plans and goals and targets. The Eighth Plan (1992–97) highlighted shortcomings in the current system such as a lack of coordination, capacity and data, and identified M&E as one of its ten priorities. In addition, various institutional arrangements and procedural reforms were advanced to institutionalise the national M&E system. However, the focus was on a narrow cohort of input and output indicators, with some evaluation of a few projects, depending upon the availability of resources. The plan emphasised the importance of M&E in implementation, achievement of planned targets, and enhancing efficiency of the development efforts (NPCS & JICA, 2012). M&E was given higher priority from this point onward and the GoN took various initiatives to institutionalise and further strengthen M&E efforts.

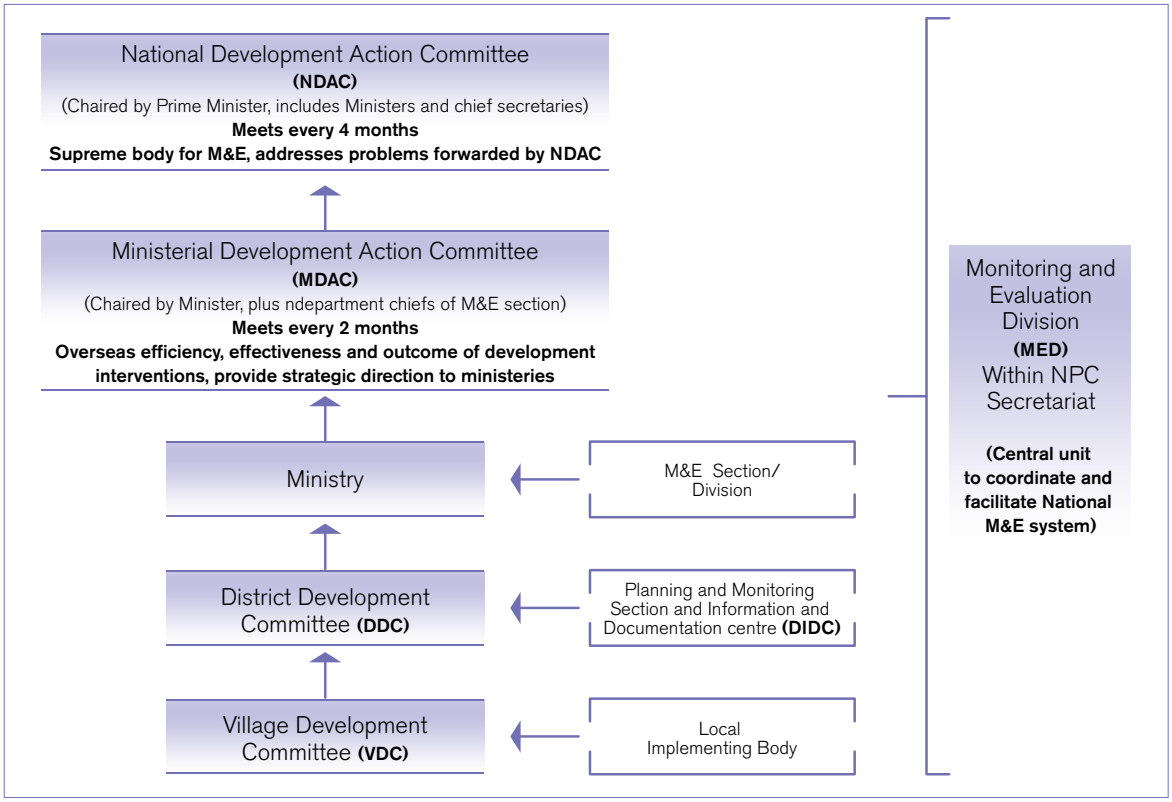
In the Ninth (1997–2002) and the Tenth Plans (2002–2007), further plans, policies and programmes were implemented to strengthen the M&E system. Realising the need for developing a comprehensive M&E system that linked inputs with results (output, outcome and impact) the GoN from the Tenth Plan began to institutionalise results-based approaches in its planning process. The Plan, the summary of which was also Nepal's first Poverty Reduction Strategy Paper (PRSP) introduced the logical framework approach (LFA), which became the main tool for M&E (for further details see section 2.3), and it became mandatory to have an LFA for both central level projects and projects supported through external development assistance. The Tenth Plan also introduced two levels of M&E: both of programme and project progress at the implementation level and the monitoring and evaluation of the impact of these programmes and projects on poverty alleviation. The Plan also provided a set of poverty monitoring indicators that linked poverty reduction objectives with the indicators of physical achievement and poverty indicators. As part of the PRSP process and also as an effort to institutionalise results based approaches in M&E, the NPC (with the support of the UNDP) has developed a Poverty Monitoring and Analysis System (PMAS) that reports against a set of poverty indicators (input/output and outcome/ well-being indicators) at both district and national levels[5].

A multi-layered system is in place from the national to the local level for M&E as shown in Figure 2.

The **National Development Action Committee (NDAC),** is the supreme body for monitoring and, evaluation, and is chaired by the Prime Minister. It consists of ministers, the Chief Secretary and other Secretaries of all ministries (the principal civil servant in a Ministry). They meet every 4 months, or as required, and review progress of project implementation under different ministries, and collectively find solutions to problems relating to inter-ministerial coordination, policy and legal issues that are not addressed by the meetings of Ministerial level Development Action Committee.

A **Ministerial Development Action Committee (MDAC)**, chaired by Ministers, and consisting of department chiefs of planning and M&E divisions, reviews progress on project implementation. Similarly, in the MDAC there is representation from each sectoral and M&E divisions of the NPC, Ministry of Finance and Ministry of General Administration. This committee, which normally meets every 4 months,

Figure 2: The institutional arrangements for national M&E



aims to review progress and find solutions to problems faced while implementing projects, and what cannot be resolved at this level, is forwarded to NDAC for discussion through the M&E division of the NPCS. The MDAC should oversee the efficiency, effectiveness and outcome of development interventions and provide strategic direction to the ministries.

There are **M&E Sections/Divisions** designated in every ministry concerned with development activities, and regional offices/directorates under each line ministry should perform monitoring and evaluation of the programmes under their responsibility, and provide progress reports to the central ministries. At the district level, there is a Supervision and Monitoring committee within the District Development Committees (DDCs) for supervision and monitoring of district level projects. The monitoring and evaluation of the local level projects implemented by VDCs and municipalities should be done by the local bodies who implement them and also the DDCs.

To co-ordinate and facilitate national level M&E activities, a **Monitoring and Evaluation Division (MED)** in the NPC Secretariat was formed to act as the central unit for the M&E System. The MED within the NPC Secretariat provides secretariat services to the NDAC and monitors implementation of its decisins. It is responsible for collecting all information related to M&E from the line ministries and to manage central poverty monitoring functions. In addition it facilitates evaluation of policies, programmes and projects through engaging third party consultants. The NPC also developed a Project Performance

Information System (PPIS), (though it is not yet operational) as well as development projects monitoring forms, guidelines and samples of logical frameworks. The Division also monitors the monitoring practices of the rest of the Government and builds M&E capacity within line Minstries.

2.2 Methodologies for national M&E

Monitoring and evaluation of projects and programmes both government funded and those with development partner support is mandatory within the Government of Nepal (GoN). The NPC is the apex body within the GoN for formulating the development plans, assessing progress towards development, and approving new programmes and projects as well as the ministerial programme documents. NPC has developed guidelines to formulate programmes, as well as guidelines and formats for M&E. Ministries will report both on their annual programme of activities agreed with the NPC, any special priority projects, and any development partner-funded projects.

The M&E Division of NPCS generally focuses on monitoring priority projects and development partner-funded projects, and monitors aggregate outcome and outputs at national level, for which it uses set indicators. The M&E divisions/sections of line ministries and the sectoral divisions of NPCS monitor the annual programme (Nepal, 2012). A performance-based budget system is in place, in which only projects with more than 80% progress over the last three months can obtain funding directly from the District Treasury and Controller Office. Otherwise, approval with justifications must be sought from the line ministry (Nepal, 2012). In some ministries this is still based on progress reporting and not necessarily indicator-based reporting.

Data for M&E at the district level is collected mainly from DDCs[5] and the district level line agency offices. DDCs and some of the district offices of line agencies have a Planning Section or a Planning and Monitoring Section responsible for monitoring the implementation of national and/or locally funded projects/programmes. DDCs are mainly responsible for preparing the district annual development plans and implementing local projects in their respective district in line with the guidelines and budget ceiling provided by the NPC, and to update the resources and information of the district. NPC M&E guidelines are not mandatory for DDCs, and although they must use these formats for central reporting, in many cases NPC M&E guidelines are not used.

The Central Bureau of Statistics (CBS) and some line ministries also carry out national surveys such as the Census, the National Living Standards Survey (NLSS), the Nepal Demographic and Health Survey, and the Agricultural Survey. The Social Welfare Council (SWC) is responsible for M&E of projects and programmes implemented by all NGOs in Nepal.

2.2.1 Monitoring the annual programme and priority projects

The annual programme of government is monitored through four-monthly progress reports on outputs and activities to the line ministries, the NPCS, and in some cases the Ministry of Finance. The main monitoring occurs through progress reporting on fiscal matters (expenditure) and physical progress (activities undertaken and outputs achieved). Physical reporting is based on activities (outputs) rather than

5 DDCs are currently led by Local Development Officers (LDOs) who are appointed by and seconded from MoFALD.

outcomes. There are some output indicators included in the reporting forms (to be specified by the relevant implementing institution), but interviewees suggested they were not being used in all government projects or for the annual programme. Some ministries are not reporting against the performance indicators defined in the results-based M&E guidelines (RBME) to the NPC on the annual programmes, although these are in development. One reason for this is that those indicators mostly demand survey-based information and surveys are not done annually. However, the CBS has recently introduced an annual survey that may provide some of the data needed. The Medium Term Expenditure Framework (MTEF) approach that Nepal has endorsed in 2002 stresses the importance of performance-based M&E and the use of sectoral indicators.

M&E is a rapidly changing area within the government. In 2009, the NPC developed the 'Managing for Development Results (MfDR) Guidelines', from which seven ministries and six departments have prepared their respective sectoral business plans with M&E frameworks. Following this, the NPC introduced the 'Results Based Monitoring and Evaluation (RBME) Guidelines' in 2010,[6] intended to make the M&E process systematic, regular, and results-based in enhancing its effectiveness. The government is attempting to link ministerial development plans and programmes with MfDR by asking for business plans (Nepal, 2012). However, the system is starting through priority projects (known as P1) and development partner-funded projects, for which the RBME system is compulsory.

There are several guidelines and frameworks available within this RBME system but several interviewees noted that the system is not yet fully operational, nor is it always being used appropriately.

Under the RBME, a logical framework must be submitted to the planning division before a project is started. This outlines the main objectives of the project as well as the Objectively Verifiable Indicators (OVI) to measure the project and the means of verification. These indicators will be agreed with the NPCS before the project is approved. For an example of the log frame see Annex 5.

Monitoring occurs through two types of indicators, work performance indicators and outcome/output indicators. Monitoring of implementation should follow the key areas and indicators shown in Table 3.

Table 3: Example of sectoral monitoring of implementation in agriculture using the RBME guidelines

Sector	Objective	Strategy	Activities	Indicators	Source of information	Responsible agency
Agriculture	Increase agriculture product, productivity and income for poverty alleviation and food security	Extend/expand the use of available modern technology	Increase the technology transfer process based on small groups and develop capacity of staff and farmer groups	Number of active farmer groups • Number of technologies transferred to minimal food district • Number of visits paid to control quality of fertiliser	Report of Ministry of Agriculture and Cooperative	Ministry of Agriculture and Cooperative

6 An unofficial translation of the Results Based Monitoring and Evaluation Guidelines is available at http://www.npc.gov.np/new/uploadedFiles/allFiles/rbme.pdf.pdf.

The guidelines suggest that evaluation should use a variety of methodologies such as direct observation, structured interviews, focus groups, surveys etc., as well as the indicators.

Although the NPC has developed monitoring forms, guidelines and samples of logical frameworks to strengthen the M&E system, the process is ongoing, gradually improving, and used with varying degrees of success across different ministries. The latest capacity-building initiative on M&E (SMES-2 supported by the Japan International Cooperation Agency (JICA) which will run from 2011 to 2015) indicates that strengthening the systems and their use from district to national level requires a concerted focus.

2.2.2 National indicators and the Poverty Monitoring and Analysis System (PMAS)

Within some priority sectors special systems have been set up for monitoring and data collection in addition to the general frameworks for M&E, and a set of national indicators monitored by the NPC.

The periodic national plans include a set of national priorities and indicators that cover many of the Millennium Development Goals (MDGs) and other national priorities. These indicators are written into sectoral plans for the relevant line ministries, and data is provided from a variety of sources such as line ministries and national household surveys (such as the Census and the National Health and Demographic Survey) to monitor them. These national indicators cover many MDGs but issues remain in monitoring all the goals. The MDG progress report in Nepal (GoN/UNDP, 2010) notes problems with the 'unavailability of data directly related to the MDG indicators, unavailability of updated data, lack of consistency in definition and survey methodology, and lack of disaggregated data'. Targets are increasingly being set in key sectors but the system is not yet operating in a way that allows targets to be used for performance evaluation or feedback. A review of the use of targets in the Ministry of Agricultural Development's Agricultural Development Strategy highlighted that targets are often overly ambitious, rigid and top-down.[7] A gap exists between the national indicators that are translated into sectoral plans and M&E frameworks, and the indicators and log frames of the line ministries' programmes and projects. In some ministries they have their own M&E frameworks, which may not map onto the national indicators.

In 2004, the PMAS was developed to monitor efforts to reduce poverty, with the support of the UNDP. It aims to coordinate, consolidate, harmonise and analyse the data from the existing poverty monitoring system and feed it back into the policy-making system, using district level institutions for data collection. The PMAS objectives are to monitor: budget allocations to core programmes and policies; process/activity indicators of policies and programmes; and targets for core policies and programmes within the PRSP. The PMAS uses household surveys and different government information systems to undertake input, output and outcome monitoring (Sharma, 2006). It identified a set of core poverty indicators monitored through the national and district level system (DPMAS), which have been regularly revised in consultations with a range of stakeholders and are being integrated into the new RBME guidelines.

7 TA 7762-NEP Preparation of the Agricultural Development Strategy – Assessment Report, April 2012

Although efforts were made to establish a Decentralised Management Information System (DMIS) and DPMAS (NPCS & JICA, 2012), they are not fully in place. The DPMAS aims to introduce results-based indicators for the local level, and to link district level planning and effective monitoring with the national level PMAS. Software has been designed and provided to all DDCs, though the system is reportedly not yet functional (NPCS & JICA, 2012). The NPC and Ministry of Federal Affairs and Local Development have started to refine the DPMAS, building local level M&E capacities and motivating the local line agencies to regularly feed-in information to track the DPMAS indicators. As MoSTE does not have local level offices and its programmes also require monitoring by local bodies, some interviewees suggested including climate change-related indicators in the DPMAS.

There are duplications between the PMAS and the RBME systems and neither framework has been owned or used effectively by the ministries. Recognising this, the NPC is now attempting to integrate all M&E guidelines (MfDR, PMAS and RBME) and indicators are being refined and revised through consultations with ministries and others to form a single set of national indicators owned by all actors. Discussions with the ministries and the first round of consultation with development partners have already taken place and the integrated guidelines drafted.

The national indicators and sectoral strategies are at various stages of development towards a results-based approach using indicators and targets. However, stakeholders largely agree that the general focus is on monitoring national progress rather than evaluation, and information from these systems does not yet seem to feed back into planning processes and programme development.

3

Monitoring and evaluation of climate change adaptation

There are an increasing number of climate change-related programmes and activities being undertaken in Nepal, both as part of the annual programme and through specialised projects with the support of the development partners. MoSTE is the focal ministry for climate change-related activities. It coordinates all development partner programmes to ensure that they are guided by national priorities, as identified through the NAPA process, and in line with the Climate Change Policy and national poverty reduction priorities. MoSTE's role in M&E is to help develop indicators, oversee the monitoring process, and report (on both physical and budgetary) progress of projects and programmes. Any intervention going through government budgets must adhere to national procedures for M&E and fulfil reporting requirements outlined in the previous section. Monitoring at MoSTE is largely activity/progress-based, rather than monitoring against a baseline. No overall strategy currently exists for further developing the M&E of adaptation, although the SPCR is undertaking some work on this at the request of MoSTE.

Development partners support the three programmes described in this section (SPCR, NCCSP and Hariyo Ban), which act through different modalities that determine their precise M&E requirements and relationship to the Ministry. They do not yet act as a comprehensive programme to address the NAPA priorities, but are separate programmes that engage different sections of the government with different priorities and approaches. A common challenge for all adaptation programmes is the lack of adaptation baseline data, as project teams have had to collect data to assess climate vulnerability to establish baselines. Indicators have been developed with government consultation, and data is collected through a

range of primary and secondary sources. A project unit or office will process data from different sources and fulfil the reporting requirements of the government and the development partners. A Climate Change Programme Coordination Committee (CCPCC) is being established under the SPCR to better harmonise programmes within MoSTE's climate change portfolio with a view to developing a joint results-based framework. Each component/project will still have their own framework based on the needs of the MDB or development partner.

3.1 M&E within the Ministry of Science, Technology and Environment responsible for climate change coordination

MoSTE is a relatively small, centralised policy-making ministry with only one recently established Department of Environment and Information Technology and no regional offices. Most CCA activities will take place in rural areas of Nepal, and so MoSTE's role is mainly coordination and management of monitoring and evaluating adaptation programmes and projects. It does not currently implement its own programmes at the district level.

MoSTE monitors its own activities on a regular basis and physical progress reports (focusing on whether activities have been implemented) and budgetary progress reports (on expenditure) are developed. It submits a physical progress report to the Prime Minister's Office each month, and both physical and budgetary progress reports are submitted to the Ministry of Finance and NPCS every four months. Progress is then reviewed four-monthly, at the ministerial level by the MDAC, and by the NDAC chaired by the Prime Minister, which also meets every four months. More detail on the NPC logical framework and an example framework are included in Annex 5.

Within MoSTE there is a Planning, Monitoring and Administration division, and the Programme Formulation division, in which the M&E section sits.[8] Although MoSTE has the authority to monitor at field level, they do not have the human resources or the capacity. There are only four individuals in MoSTE responsible for planning and monitoring, and they are responsible for all programmes in all sections within the ministry, not just climate change and environment.

As MoSTE is a centralised ministry, the ministry has to rely on the DDCs, VDCs, or the Alternative Energy Promotion Centre (with offices in all 75 districts) for local data. Similarly, when the implementation of adaptation programmes commences, critical M&E information for these programmes will have to be obtained through coordination with local offices, other line ministries and implementing agencies.

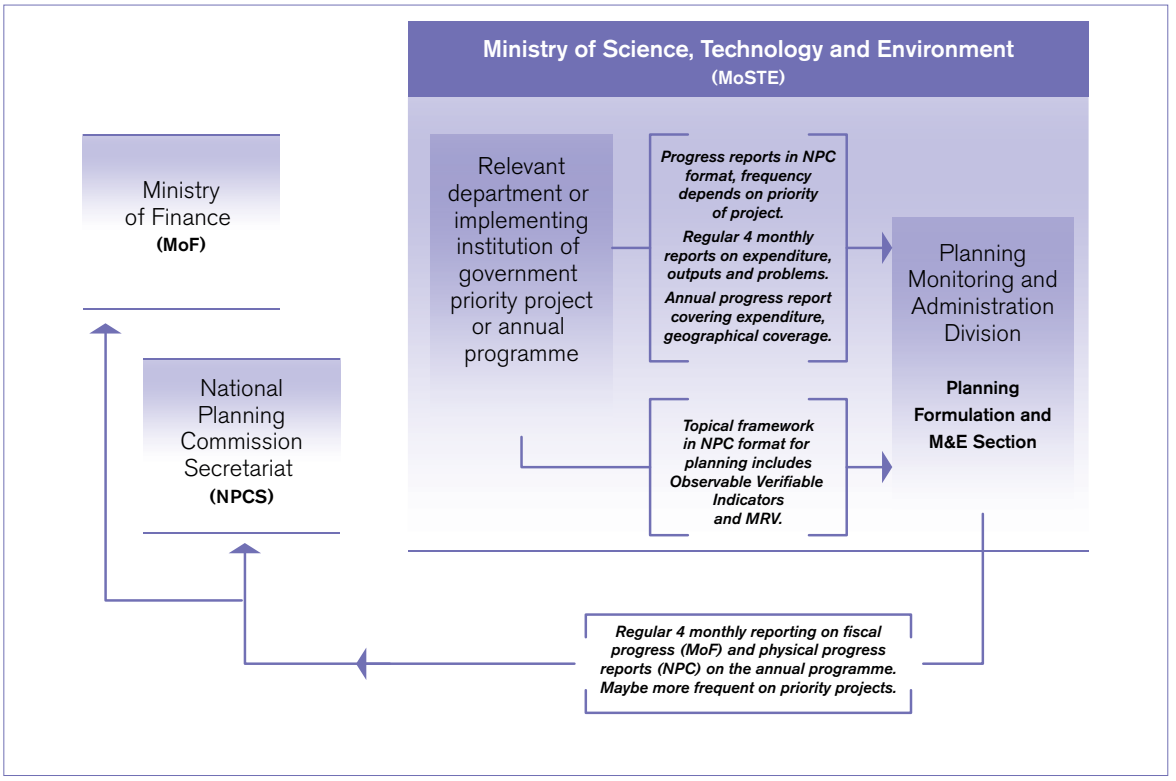
The GoN collects a range of national data through mechanisms such as the VDCs and DDCs, and District Forest Offices (DFOs). This information is used by the line ministries and also collated by the CBS. The CBS also conducts national surveys such as the Census and other national priority areas such as poverty reduction have their own information and monitoring systems (for example, the PMAS). Other departments also collect data such as the Department of Hydrology and Meteorology (DHM) under

8 This structure is currently being revised and will be the Planning, Monitoring and Budget Coordination Section.

MoSTE, which collects data on temperature and precipitation. MoSTE does not often use such data in its own monitoring, as this is largely activity/progress-based rather than monitoring against a baseline. Some ministries have their own data management systems (see section 4). National systems such as the PMAS and the DPMAS, once fully operational, will provide national baselines, and the annual data collection by the VDCs and DDCs will continue to measure progress.

Although significant data on climate impacts and vulnerabilities was collected by the TWGs during the NAPA process, which was then compiled in a synthesis report, this did not include adaptation baseline data. Therefore, many of the development partner-funded adaptation projects have had to create their own baselines through extra data collection to assess climate vulnerability. The NCCSP and Hariyo Ban have undertaken household surveys for baselines in their project areas, which is used in conjunction with village and district level data on poverty levels etc., from the government. Another source of national data is the household survey started by the World Food Programme (WFP) in 2005 on food security, the Nepal Food Security Monitoring System (NeKsap). When complete, this should be institutionalised into the Ministry of Agricultural Development. The WFP are working with the Institute for Social and Environmental Transition in Nepal to integrate climate vulnerability indicators into this annual survey.

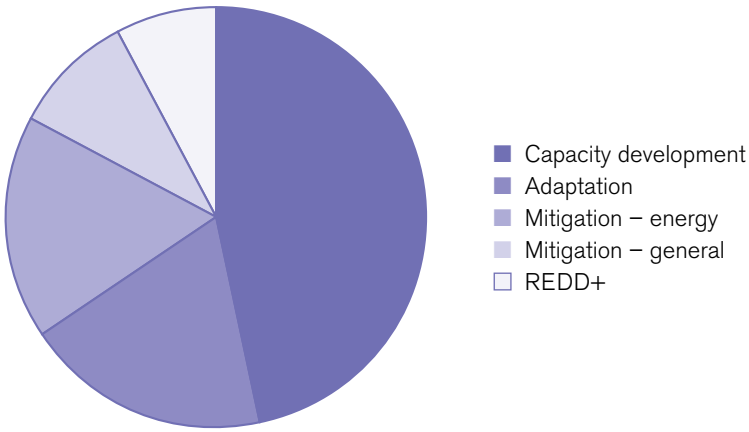
Figure 3: Representation of main M&E practices in MoSTE



3.2 M&E frameworks for the main adaptation interventions and their position within government institutions

There are an increasing number of climate change-related activities underway in Nepal. As discussed in section 1.4 the GoN undertakes a range of activities that support resilience and development as part of their annual programme, however, only a few explicitly include CCA as a key element. Many development partners are supporting or designing climate change-related programmes, some of which form part of the core programme. Over the last decade, an indicative estimate of approximately US$650 million of international public grant finance has been made available for climate change actions, with support increasing in the last five years. Development partner assistance made up over 50% of government climate change-related expenditure in 2011/12. Of 71 projects listed by development partners, most involved capacity-strengthening and awareness-raising activities (Bird, 2011).[10]

Figure 4: Thematic break down of development partner financing for climate change in Nepal (Source: World Bank, ref. Bird, 2011)



MoSTE coordinates all development partner programmes on CCA. The current modality of development aid requires that programmes are country-led and guided by national priorities, which in Nepal were identified through the NAPA process and are in line with the Climate Change Policy and national poverty reduction priorities. In this process MoSTE develops programme documents with development partners through a series of consultations and meetings. The NPC has to approve formulated programmes (and any changes that may be later required), and the proposed M&E frameworks.

For any government-led initiatives, whether development partner supported or not, national procedures for M&E and reporting requirements must be adhered to. The specific reporting formats and frequency will be agreed on a project-by-project basis for those funded by the development partners, however, this will include three-monthly reporting in the formats devised by the NPC (and revised under the MfDR and

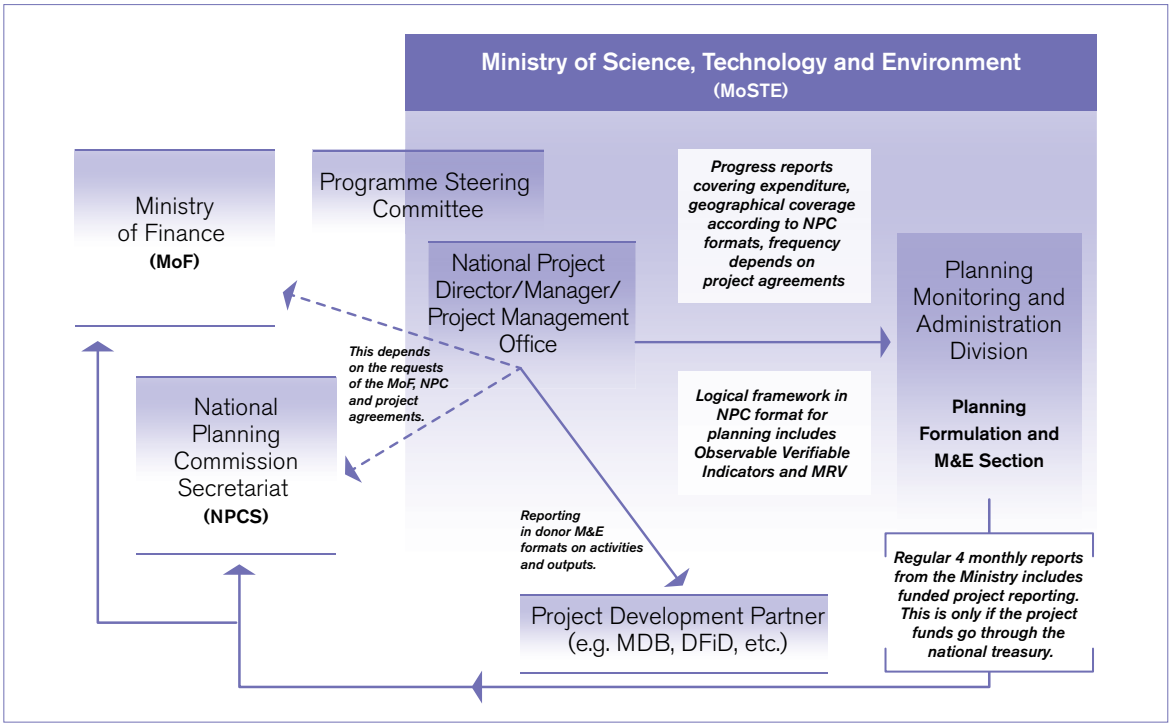
10 The Bird (2011) study was part of a broader effort by UNDP to strengthen the capacity of national and local level institutions to manage scaled-up climate finance, leading to development of a climate fiscal framework at the national level.

RBME guidelines). Therefore, existing adaptation programmes, such as the NCCSP, follow results-based M&E frameworks with objectives, results and outcome indicators for the government. Figure 7 shows how this works within MoSTE.

A National Project Director or Manager (or a unit depending on the size of the project) reports to the M&E division in the Ministry and to the development partner using their respective formats. This is due to the differing requirements of the development partners and the NPC, as development partners may need more information for their respective governments.

Project indicators will normally be developed by the development partner or implementing agency (and often international consultants). This will be through a series of consultations with relevant ministry officials to get feedback on the approach. The indicators and M&E framework will then be presented to the programme steering committee (a group of stakeholders including both government representatives and development partners), where it will be officially approved.

Figure 5: Main reporting channels and M&E frameworks for an external development partner-funded project in MoSTE



3.2.1 Hariyo Ban

Hariyo Ban has developed a three-tiered monitoring system, although the final version awaits USAID approval.

First, there will be participatory monitoring of activities by programme beneficiaries, and second, monitoring of progress, effectiveness and results by field offices. Finally, there will be output and outcome level

monitoring by the central Hariyo Ban Programme. They have conducted a baseline survey that will serve as a basis for M&E. Approximately 5% of the programme budget is dedicated to M&E and the Hariyo Ban staff see this as a real opportunity to develop a good system through an iterative process of 'learning by doing'.

At the national level, the overall outcome for CCA is to increase the ability of targeted human and ecological communities to adapt to the adverse impacts of climate change.

Beyond this, there are a series of outcome and outputs in four key areas: government and civil society understanding on vulnerabilities of climate change and adaptation; pilot demonstration actions for vulnerability reduction conducted and expanded; participatory and simplified systems for vulnerability monitoring established; and creation, amendment and execution of adaptation policies and strategies.

Hariyo Ban staff suggested in interview that using the indicators can be challenging for those monitoring at the local level. Indicators are often composite, and the same indicator can be understood differently by donor and monitor. Hence, they have indicator reference sheets specifying in detail what the indicator is and what data sources will be used to measure it. Hariyo Ban also has six global USAID indicators that it is required to report against.

Hariyo Ban will collect the majority of data for M&E through the consortium partners as there are not the relevant national data sets available. The project team will aggregate the data into the M&E framework, so it can be used for management, reported to USAID and to the Ministry for Forests and Soil Conservation. They will then process the data for reporting to the NPC, for which less detail is needed. At the district level, Hariyo Ban data collection will also be fed into the District Forest Offices (DFO) system. Hariyo Ban is using a rolling baseline for some indicators, so the previous year's data will become the baseline for the next year. The baseline study was in Hariyo Ban's two main landscape areas, Chitwan Annapurna Landscape (CHAL) and Terai Arc Landscape (TAL) in 28 VDCs and one municipality, and at national level. As well as household surveys, the baseline study used discussion groups, consultations and collection of secondary data from local offices.

This project is collecting large amounts of data to feed into the WWF's database, the CARE information management system and the USAID system. Both Hariyo Ban partners and the district offices will use the data. In interview, Hariyo Ban staff emphasised that there were significant capacity constraints within the project M&E staff and the partner M&E staff, and that verifying data and ensuring its quality is very challenging.

3.2.2 The SPCR

The M&E frameworks for the five individual SPCR components in Nepal are yet to be finalised. Each component will have its own results-based framework based on the reporting requirements of its MDB partner (e.g. ADB, WB or IFC), which will be developed as the programmes are finalised. The SPCR will have component- and country-specific results-based frameworks containing the PPCR global core indicators, which will be common across all countries.

Component 3 of the SPCR in Nepal aims to coordinate and manage MoSTE's portfolio on climate change (GoN, 2012), including three other projects: the NCCSP; the ecosystem-based adaptation

project (implemented by the UNDP); and a community-based GLOF risk reduction programme (implemented by the UNDP). The goal is a coordinating mechanism to better harmonise these projects and the other SPCR components, to find an integrated way of communicating and managing results and to bring together adaptation projects into a programme that addresses eight of the nine adaptation priorities in the NAPA. As part of this, MoSTE intends to create a harmonised results-based framework and to establish a Management Information System (MIS). This component is managed by the ADB, and supported by technical assistance from international consultants.

There will be a Climate Change Programme Coordination Committee (CCPCC),[11] bringing together National Project Directors and nominated representation from the Steering Committees of the eight adaptation projects under MoSTE.[12] This committee will meet three-monthly, chaired by the Joint Secretary, in an attempt to develop a joint results-based framework and will 'draw together project-level frameworks and utilise the NAPA as well as sectoral visioning and planning to establish a practical, achievable, measurable and attributable results framework tailored to the Nepali context'.[13] It seeks to develop a unified project implementation reporting template across the GoN's climate change portfolio and to manage and integrate information collected in each project. Both consultants and development partners remain unclear on how this will be achieved.

The CCPCC will report to the PPCR coordination committee chaired by the Minister for Science, Technology, and Environment and the first meeting was held in Dec 2012. The CCPCC TWG has also been proposed to support the M&E of CCPCC projects in coordinating the results management frameworks for MoSTE, and will feed into the CCPCC. This TWG is intended to convene meetings when necessary (GoN, 2012).

The SPCR in Nepal has both national component level frameworks and international PPCR indicators, which will be common across all pilot countries. Figure 7 shows how the PPCR core indicators fit into the proposed system for Nepal, and the role of the proposed results-based framework between the PPCR and CIF Admin unit requirements and the national priorities and indicators.

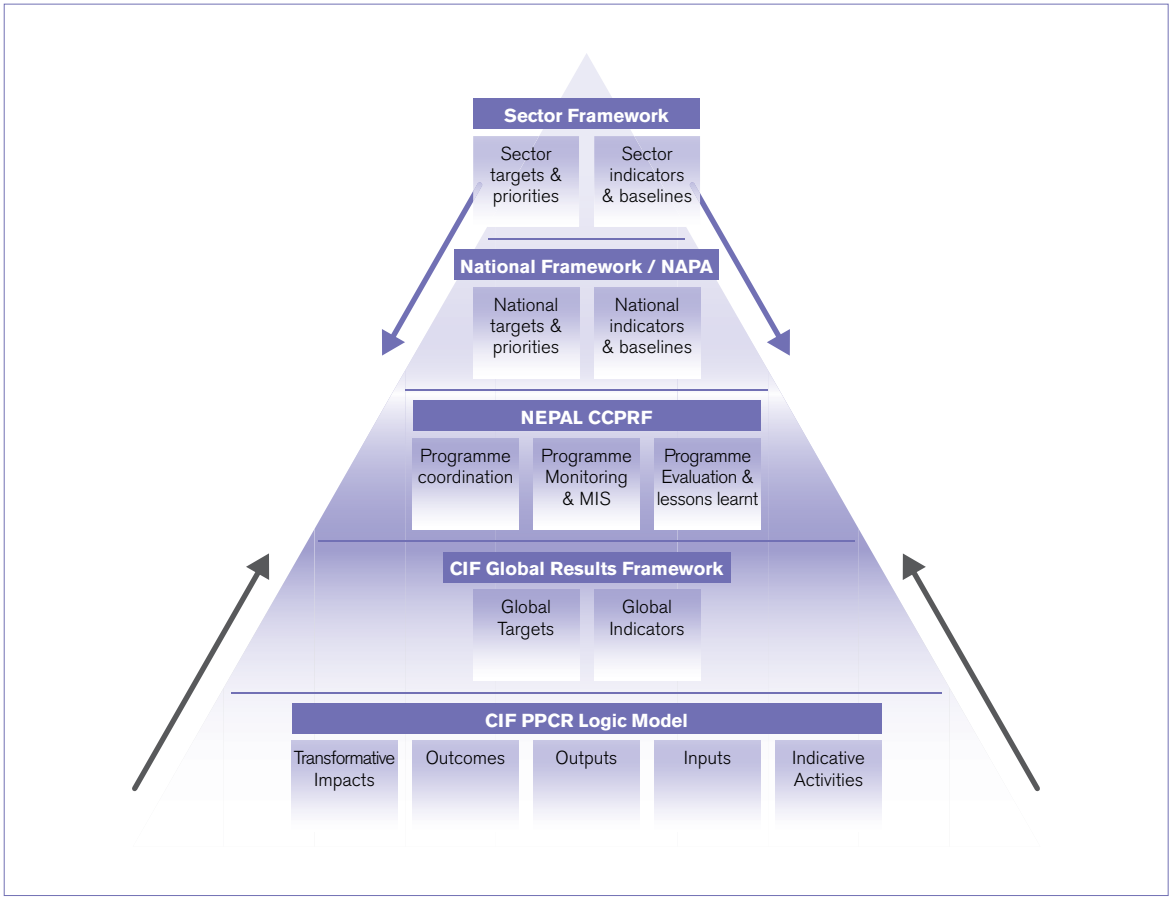
In addition to creating an overarching mechanism for results management, Component 3 of the SPCR will seek to create a system of data management for monitoring outputs from the SPCR and other adaptation programmes. This data management will involve creating a database of vulnerability data collected through the eight projects, management of knowledge outputs across the projects and performance management across the projects.

The consultant team aims to ensure reporting across the eight projects is consolidated and to present progress as a programmatic approach to the GoN. They are studying national plans and strategies to find national indicators that realistically could be used for the PPCR results-based framework. The idea is to use data that the ministry itself can collect in order to track progress on indicators and baselines.

Most SPCR component frameworks await completion. The team working on Component 2 have developed the project framework with the implementing partners in government, the DHM and the Ministry of Agricultural Development.

11 This was formerly known as the Climate Change Programme Results Framework Committee.
12 These were selected to represent some of the portfolio. Hariyo Ban and other programmes are not included at this stage.
13 SPCR C3 inception report, Jan 2013 (draft that may still be amended or updated).

Figure 6: Development of the Nepal results based framework[14]



Component 2 has four results level indicators:

- Increased financial sustainability of DHM operations
- Increased accuracy and timeliness of weather forecasts
- Increased satisfaction of users with DHM services
- Introduction of an Agricultural Management Information System

The indicators will be tracked through a mixture of government data sources (budget reporting, DHM data, government GIS data) and extra survey data collected through consultants. Extra data is usually needed in areas where there is no baseline or where satisfaction is being measured. The data will be collated by the government focal point for the component, together with the consultant team within the relevant ministry, who will report both to the NPC and to the MDBs in their required formats.

14 *Draft inception report for SPCR Component 3, p. 67. This document may be amended or updated.*

3.2.3 NCCSP

In the case of the NCCSP, there is M&E both at a district level (LAPAs) and across the whole project. The M&E of the NCCSP also seeks to differentiate between the performance of the UNDP in delivering the programme and the improvements in the client group of the programme (the climate-vulnerable poor), which includes factors beyond the control of the UNDP.

The results framework was developed by the NCCSP Start Up Phase (a national team with some international consultants) with input and feedback from the DFID, MoSTE and UNDP. The UNDP is responsible for monitoring the NCCSP, including supporting local bodies in monitoring the LAPAs, and the GoN and DFID are responsible for evaluations and are the primary, although not exclusive, information users (see Annex 3 for the Logic model).

Some key indicators for monitoring NCCSP outcomes and outputs at the local level include: vulnerability level of the household; social inclusion; migration; food security and diversity of food intake status (time-specific indicators); climatic hazards; knowledge on CCA; CCA options; access to different services and the quality of those services and existence of service providers.

The LAPAs will be monitored at a local level by NCCSP project staff based in the District Energy and Environment Sections of the District Offices. Local data will be collated and sent to the NCCSP project database, which will be managed by the NCCSP central project office.

An NCCSP scoping mission in March 2012 consulted with a range of government and non-government stakeholders to ensure the indicators and M&E system of the NCCSP were as compatible as possible with existing systems, particularly at the district level. The M&E NCCSP team and different stakeholders identified that there is no comprehensive data on vulnerability at the local level, but several monitoring systems exist that might be a future entry point for the NCCSP and implementation of the LAPAs. This included government systems such as the Minimum Conditions and Performance Measures (MCPM) for local bodies, the PMAS and the DPMAS.

However, that LAPA planning was done in 69 VDCs and one municipality without a finalised M&E framework in place. Furthermore, as the M&E framework, log frame and indicators had not been finalised when the baseline survey was done, it was difficult to suggest new indicators that related to the log frame, but for which no baseline data was collected.

The baseline survey for the NCCSP used a combination of primary and secondary documents to create a household baseline for the programme interventions of the NCCSP. Primary data was collected from over 2000 households through systematic sampling in the NCCSP districts. Indicators addressed vulnerability through exposure, sensitivity and adaptive capacity and households were categorised into four different levels of vulnerability from low to high. The national data sets did not have the household coverage of vulnerability that was needed for the project M&E framework, so supplementary data was collected and used in conjunction with village and district level government data (GoN/DFID, Dec 2012). The baseline survey (GoN/DFID, Sep 2012) suggests that the greatest emphasis for M&E in NCCSP should be on measuring changes in vulnerability level of the climate-vulnerable poor (i.e. those at vulnerability level V2, V3 or V4).

3.3 The alignment of development partner frameworks and national approaches

The UN agencies, bilateral agencies and the development banks all have a significant presence in Nepal and exert influence over the government's development and climate change agendas. However, significant progress has been made at the strategy level to align external support with government systems. Fourteen development partners and the then Ministry of Environment (now MoSTE) signed a Memorandum of Understanding (MoU) on 2 September 2009 listing a set of principles to guide development partners' support on climate change. It provides a basis for development partners offering technical support and financial resources for climate change activities to act in a coordinated and coherent manner.

It is common practice at the programme level to establish programme steering committees, with a range of government and development partner stakeholders, to secure support for the mainstreaming of actions across different sector ministries.

3.3.1 Development of indicators

The Hariyo Ban indicators have been developed by the consortium partners and programme team to incorporate USAID global indicators and project-specific indicators. Hariyo Ban is an NGO project but the GoN's Social and Welfare Council of the GoN will be involved in the mid-term and final evaluations. Hariyo Ban reports on the M&E framework to their government counterparts in the Ministry of Forests and Soil Conservation. Indicators were developed mainly by programme staff and consortium partners (apart from USAID-specific indicators).

The NCCSP indicators were developed through an iterative process between the NCCSP Start Up Phase Team, DFID, UNDP and MoSTE. During the scoping phase, there was much consultation on indicators. Initially, the local indicators were prepared with communities and districts, and once the draft was ready it went through DFID, EU, UNDP and then the Programme Steering Committee. Presentations were given to government officials on the overarching framework, who were not unhappy with the indicators but made further suggestions on how to align the process with existing district mechanisms.[15] The NCCSP will initially rely on local NCCSP staff based in the District Energy and Environment Sections, whose mandate will be expanded to include CCA, with data going to the NCCSP central office for collation and reporting both to the GoN and the development partners in their respective formats. Ideally, this will be mainstreamed into existing data collection processes such as the MCPM for local bodies, managed by the Local Bodies and Fiscal Commission of the Ministry of Local Development, the NeKSAP systems for food security monitoring, and the PMAS that is being implemented at the national and district (DPMAS) levels.

The stated aim of the global PPCR results framework is to align with national M&E systems as far as

15 *Interview with M&E specialist from NCCSP Start Up Phase, Feb 2013.*
16 *Based on interviews with the PPCR government and MDB representatives in eight countries Nov–Dec 2012 for a DFID UK funded project conducted by IIED.*
17 *The five core indicators are: (1) Numbers of people supported by the PPCR to cope with effects of climate change; (2) Degree of integration of climate change in national, including sector planning; (3) Extent to which vulnerable households, communities businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to CV&CC; (4) Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience; and (5) Quality of and extent to which climate responsive instruments/ investment models are developed and tested.*

possible, and avoid creating parallel structures. The CIF admin unit developed the global CIF results framework in consultation with the MDBs and government partners, but the initial framework was perceived by some government partners to be top-down and unfeasible to implement.[16] Also, the proposed framework was thought to have no clear results chain, with too many indicators across different levels not corresponding to data and statistics collected in-country (CIF, 2012).

In a series of international meetings of the pilot countries, the number of global indicators was reduced from 22 to 11, of these 11 only five are 'core' and therefore compulsory.[17] This global framework is needed to compare results and the aggregate impact of the PPCR and the indicators cover both the transformative effect of the PPCR programme and the programme outcomes. Each PPCR country (and component) will develop a results-based framework in addition to these global indicators. In Nepal, the consultants working on the technical assistance for the mainstreaming component have plotted the global CIF indicators onto national data sets and NAPA priorities to show their national relevance. Five of the 12 indicators plot onto NAPA priorities, three can be assessed using sectoral data sources and four are new for the SPCR (see Annex 4 for the indicators). Of the PPCR core indicators, none can be measured using indicators or composite indicators from existing sectoral M&E frameworks and one, 'Quality of and extent to which climate responsive instruments/ investment models are developed and tested', is not a NAPA priority.

Consultants and government partners are developing indicators for the SPCR components in line with MDB reporting requirements. The NCCSP indicator development used a series of government consultations (as discussed above) and the PPCR component frameworks use a similar modality to their government counterparts. Whilst this does offer the government a chance to input into the frameworks there may be information asymmetries in these consultations despite the best intentions of the development partners and the consultants. The technical specialists from the programmes are meeting officials who may not have had much M&E training and have many other responsibilities. At interview M&E experts and government officials highlighted a lack of capacity and training in M&E as key challenges, as well as not enough time to properly engage in these processes, making meaningful engagement difficult.

3.3.2 Priorities and criteria

The SPCR inception document for Component 3 contains an aim to align the SPCR results framework with the NAPA priorities, which were the existing GoN climate change priorities defined before the PPCR. The approach aims to allow the GoN to report on progress on the NAPA and other projects.

The GoN asked for a harmonisation mechanism to be included in the M&E component of the SPCR, so the CCPCC mechanisms were developed within Component 3,[18] therefore in one way it has been aligned with national priorities for climate change M&E. The approach and inclusion of the NAPA clusters in the PPCR results framework could also be interpreted as an alignment with government frameworks. Whilst Component 3 will seek to find a way to align frameworks, each component/project will still have their own framework based on the needs of the MDB or development partner. For example, the

18,19 & 20 Interview with M&E consultant, Dec 2012, Kathmandu.

ADB, WB and IFC each have different reporting requirements and the results-based framework is 'not replacing them but complementing them'.[19] Most reporting will use the same data collected through both consultants and existing national mechanisms. In some cases the development partner may collect and report on more information about the efficiency of investments and the global indicators that must be reported on for global programmes, such as the PPCR and USAID global indicators.

Importantly, Component 3 is working with eight different government departments and each have their own ways of working, and so do not always link up well, even within the government itself.[20] This presents a considerable challenge to the development partner in aligning external and priorities frameworks with internal ones.

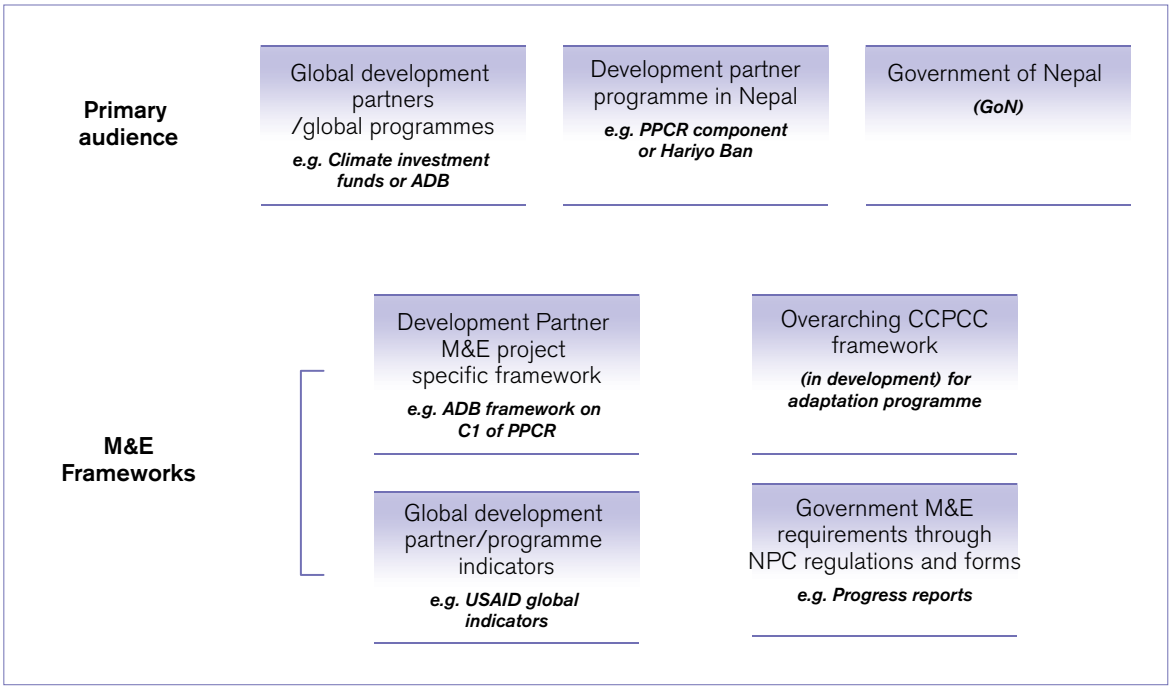
The relationship between the PPCR and NAPA priorities has been controversial in Nepal and a source of tension between MDB and GoN counterparts as well as civil society. Ayers *et al.* (2011) suggest that in the inception phase of the PPCR in Nepal different stakeholders understood the concepts of climate resilience and adaptation in different ways leading to conflict in some early phases of PPCR development. The MDBs understood resilience as something distinct to adaptation whilst MoSTE (then the MOE) did not. Therefore, MoSTE thought the adaptation planning done under the NAPA (still ongoing at the time of the PPCR inception) should be eligible for funding under the PPCR. The MDBs, however, felt that the PPCR had a different aim (of long-term resilience) to the NAPA, based on adaptation planning. There were therefore tensions as to what programmes the PPCR would support and their relationship to the NAPA. Ayers *et al.* (2011) suggest there was/is an inbuilt tension between the aim of the PPCR process to demonstrate results for building climate-resilient development within the short to medium term, and a longer term transformative agenda supporting adaptive management.

3.3.3 Alignment across programmes

As described above, each development partner programme has its own M&E framework, and there have been formal and informal attempts to align these through the donor coordination group and informal meetings between consultants working on the different programmes. However, as the programmes have been developing along different time frames it is difficult to align their M&E development .

Also, not every programme is completely free to align their frameworks with others as several also have international commitments, such as the PPCR core indicators or the USAID global indicators, or different sectoral foci. The CCPCC is being set up by Component 3 of the SPCR to harmonise results frameworks, but this will be in addition to programme frameworks. Figure 8 shows the multiple frameworks being used in Nepal and their primary audience.

Figure 7: Different M&E frameworks and their audiences



3.4 The impact of development partner approaches on Government frameworks

Development partners have directly and indirectly influenced the M&E frameworks, at both the project and programme level, within the Government.

Since 1993 there have been a number of initiatives supported by development partners to strengthen the M&E system, build capacity, enhance coordination, and improve project management and reporting in Nepal. These have all had a direct and indirect impact on the systems that have been developed and implemented by the NPCS, line ministries and districts involved in M&E. Capacity development will be discussed in detail in section 5.1.

Another such example of how development partner approaches to M&E influence national frameworks is the MfDR framework. The concept and practice has been promoted and encouraged by development partners, and over the years this framework has been adopted by many developing countries, including Nepal. As a result, planning and implementation of national programmes and budgets in Nepal are increasingly results-oriented. In 2005, the GoN requested that the ADB support capacity development of government institutions to operationalise MfDR. Also, in recognition of the need for ongoing, long-term commitment to enhancing in-country capacity for results management, two Technical Assistance funds (TAs) (ADB TA 4765 and RETA 6306) were implemented by the ADB between 2006 and 2008. These TAs supported operationalisation of MfDR in selected government agencies. As a result, planning and

implementation of national plans and budgets are becoming increasingly result-oriented. Managing for results is at an early stage of development within Nepal and it is not immediately clear what type of result is relevant for climate change programmes, beyond 'greater resilience' to climate change (Bird, 2011).

The SPCR is putting new institutional mechanisms into place for the M&E of CCA, such as the CCPCC and the TWG, and developing a results framework to harmonise several climate change projects, and thus may have an impact on government M&E frameworks.

Development partner programmes have played a role in creating new institutions within MoSTE itself, as well as influencing the national M&E system through capacity-building programmes that emphasise results-based approaches such as the MfDR approach. Also, due to the added pressure of external reporting requirements, the development partner-funded programmes are some of the few that regularly report in the given format, with a range of data (including supplementary data collected through household surveys etc.). This provides a model for how other priority projects can operate, or other parts of the government M&E system. This has already been recognised by the NPC, which has implemented the new RBME system initially just for priority (P1) national projects, mostly funded by development partners. Interviewees suggested that working with the SPCR and other development partner-funded projects will help to build capacity for M&E, which can then help to improve the national system. However, many development partner-funded M&E frameworks are largely developed externally by consultants, with indicators based at least partly on development partner requirements, potentially limiting their usefulness in M&E framework development.

4

M&E of other government initiatives in key socio-economic sectors

Health and education are both priority sectors where the GoN has put considerable effort into establishing information systems and national interventions to improve performance. Some indicators the government is monitoring in these sectors are derived from, or support the monitoring, of the MDGs through household survey systems. They are therefore of national and international priority. The Ministry of Health and Population (MoHP) have a Health Management and Information System (HMIS) that produces a range of detailed information, and upon which the ministry relies for reporting on service delivery and coverage. The Ministry of Education (MoE) also has a management information system and both ministries have an extensive system of local district offices for data collection. These sectors offer two examples of M&E and data management systems that have received considerable resources and political attention. Even in these high priority areas, information from the M&E is rarely used to feedback into programmes and the focus is more on monitoring than evaluation and uptake of results.

4.1 M&E of major interventions in the Ministries of Health and Education

4.1.1 Ministry of Health

In addition to Government public spending on health services, external development partners support the implementation of the National Health Sector Programme (NHSP). This is a sector-wide approach (SWAp) and financial resources are pooled in order to use resources more efficiently and avoid

duplication of effort. External development partners do not have separate reporting requirements or formats, using instead the national M&E systems in line with national policy and priorities. Within the MoHP there is an M&E section that reports to the central Government, and a Sector Coordinator reporting specifically to development partners on the SWAp. Development partners only require a three-monthly report for key indicators or specific areas, otherwise reporting to external development partners is done annually While there are periodic reviews, there is little focus on evaluation as many programmes in the health sector are long-running.

The MoHP (GoN, Ministry of Health and Population, 2012) revised the M&E Framework of the Nepal Health Sector Programme to facilitate more effective M&E of the second phase (NHSPII) (2010–2015). In developing the framework, a TWG on Health Sector M&E, comprising government officials and external development partners who implement and support NHSPII, was established and is still operational.[21] The M&E Framework was developed following the MfDR guidelines set out by the NPC format. Three outcomes were set out in the results framework,(GoN, Ministry of Health and Population, 2010) with output and impact indicators showing progress since 1991 and targets to 2015 chosen to reflect the health MDG targets.

The three intended outcomes are:

- To increase access to quality essential health care services
- To improve the health system to achieve universal coverage of essential health services
- To increase adoption of healthy practices

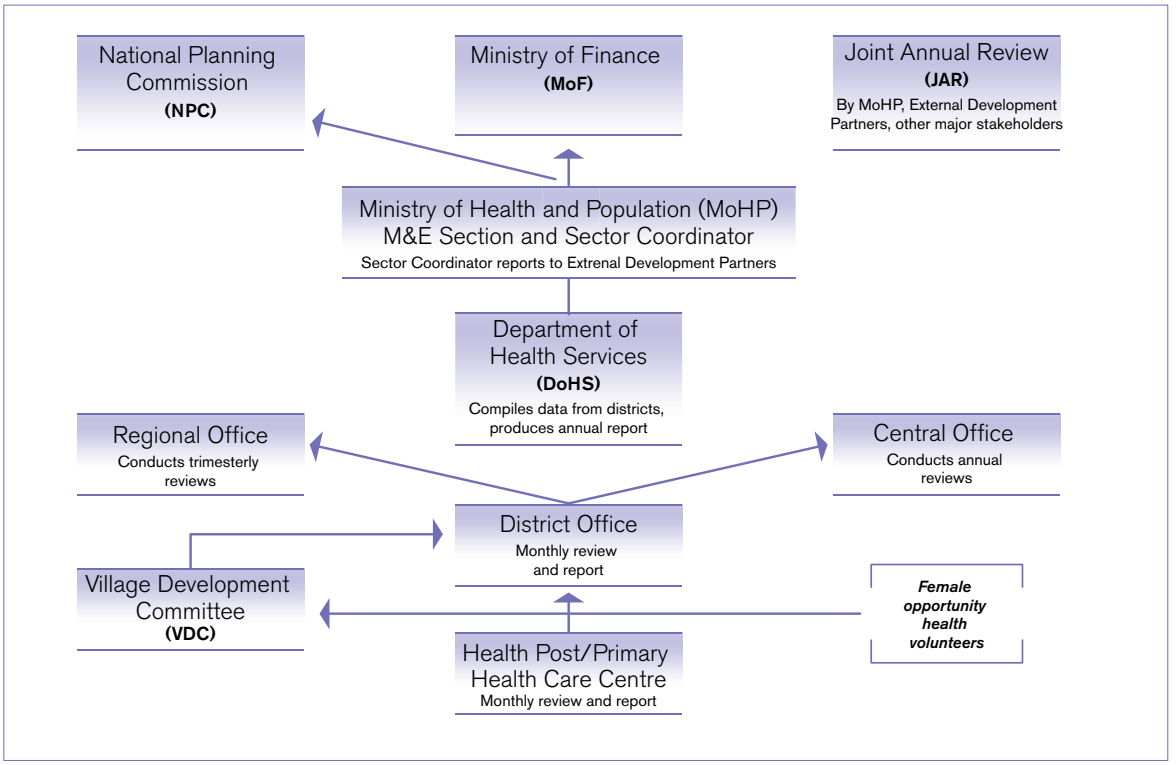
The MoHP have an HMIS producing a range of detailed information, upon which it relies for reporting on service delivery and coverage. In addition to data and information related to specific health targets, the HMIS contains data on training programmes, financial and logistical management and laboratory services to support policy development, planning and budgeting. HMIS data has been supplemented by a range of regular household and facility surveys yielding data that cannot easily be collected from routine reporting, and providing valuable information on both non-users and users. All information is disaggregated by age, gender, targets group, caste and ethnicity, so informing programme managers, policy-makers and external development partners about health-seeking behaviour and barriers to access and use. In addition to the HMIS, other major sources of data and information are the Population Census, the Nepal Demographic and Health Survey, the Nepal Living Standard Survey, three-monthly health facility surveys, annual household surveys, specific studies (e.g. on maternity and morbidity), and others. However, reporting by non-state health care actors is neither routine nor comprehensive.

HMIS data is regularly compiled, reported and reviewed at regional and national levels. Female community health volunteers report on a monthly basis to their VDC health officer, who reports to the district level health office. The Health Post or Primary Health Care Centres conduct monthly reviews and report to the district levels. The districts complete a similar monthly review and report to the region and central offices, who conduct three-monthly and annual reviews, respectively. At District level, the

21 Consultation with MoHP official, December 2012.

DDC usually coordinates with other sectors (agriculture, forests, health, education, etc.) for their district reports. The Department of Health Services compiles the data from the districts and produces an annual report. In addition to the progress reviews conducted by the MDAC and NDAC, Joint Annual Reviews (JARs) are also conducted among the MoHP, external development partners, and other major stakeholders. JARs focus on planning and budgeting, performance based on macro-level indicators, and MoHP's achievements. The NPC has classified activities as priority 1, 2, and 3, and only priority 1 activities, which are mentioned in the budgetary objectives, are reported monthly; the others are reported three-monthly.

Figure 8: Monitoring and Reporting System within the Ministry of Health and Population

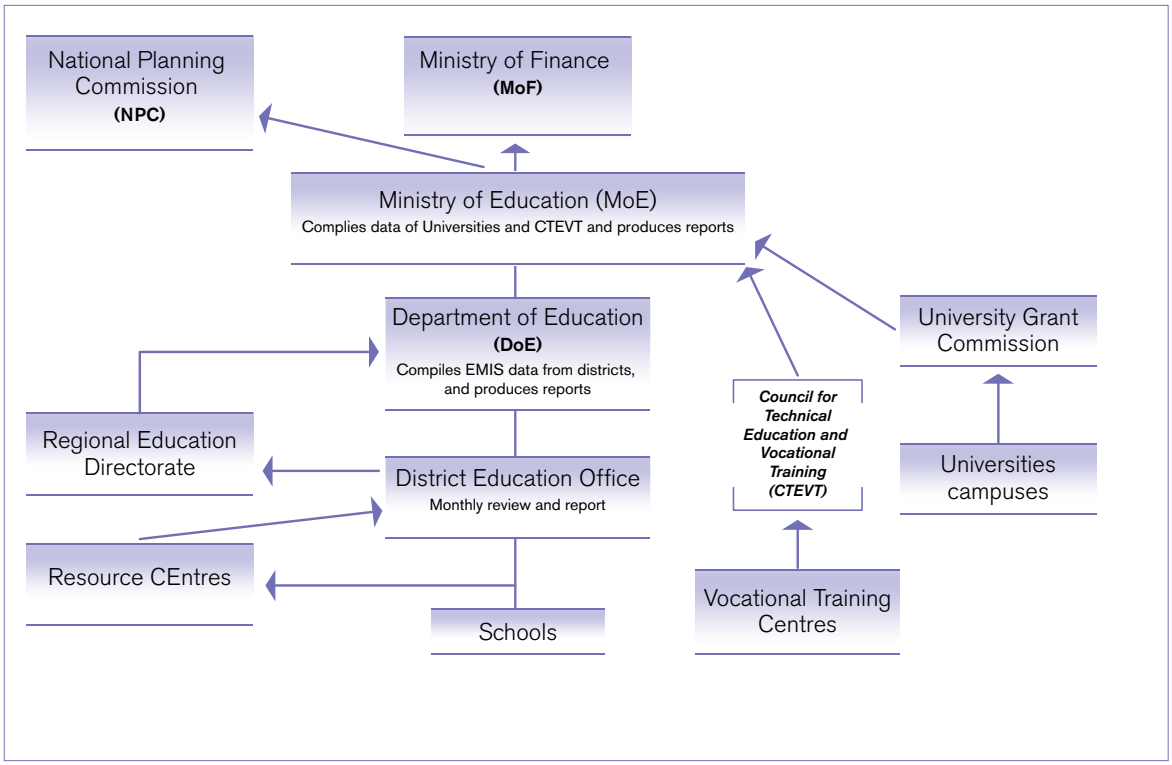


4.1.2 Ministry of Education

Another example of stronger results-based management within government administration is the MoE, which has made considerable investments in monitoring outputs. Like the Ministry of Health, the MoE has an extensive network in all 75 districts of Nepal, down to the community level, and has a decentralised statistical system, the Education Management Information System (EMIS). EMIS has been gradually evolving and demonstrably improving from the perspective of information collection, interpretation, presentation and application. EMIS helps to identify whether the education system is functioning well and indicates special areas where greater attention is needed. Information is collected on primary and secondary education, from schools, university campuses, and technical training colleges.

The Council of Technical Education and Vocational Training (CTEVT) are the apex body for technical education and vocational training in the country, and in addition to universities, they provide hard copy information to the Department of Education. Information from schools is reported to either District Offices or Regional Resource Centres. Within the Ministry, there is an M&E Section within the Monitoring, Evaluation and Supervision Division, which is headed by the Joint Secretary (as is typically the case in other ministries), and the DoE within the ministry has its own M&E functions. A flash report based on data provided by District Education Offices is published twice a year.

Figure 9: Monitoring and Reporting System within the Ministry of Education



Indicators for monitoring education programmes across the country come from Education for All (EFA), the MDGs, and other indicators developed by the GoN.

Education for All is an international initiative to provide quality basic education for all children, youth and adults, and as such has six specific goals, two of which contribute to achieving MDG 2 (on universal primary education) and MDG 3 (on gender equality in education) (UNESCO, 2000). Table 5 shows examples of the goals measured in the Education for All Development Index (EDI), with corresponding indicators. However, capacity constraints remain a challenge, in particular the ministry is in need of improved IT equipment to manage the system efficiently.

Table 5: Goals and indicators measured in the Education for All programme

Goals	Indicators
Expand early childhood care and education	The total primary net enrolment ratio (NER), which measures the percentage of primary-school-age children who are enrolled in either primary or secondary school. NER of 100% means that all eligible children are enrolled in school.
Increase adult literacy by 50%	The adult literacy rate for those aged 15 and above, for example, can be used as a proxy to measure progress.
Achieve gender parity by 2005, gender equality by 2015	The gender-specific EFA index, the GEI, which is itself a simple average of the three gender parity indexes (GPI) for primary education, secondary education and adult literacy, with each being weighted equally.
Improve the quality of education	The survival rate to Grade 5 was selected for as being the best available proxy for assessing the quality component of EDI.

4.2 Good practices and the applicability of these to adaptation

Although MoSTE, MoHP, and MoE have similar obligations at a central level for M&E of their programmes, there are some factors that may constrain or support how M&E is done within each ministry. The key differences between the M&E of CCA and the systems in health and education are the priority given to the sector, the information infrastructure, the relationship between the ministries and the development partners and the district offices.

Given the importance of the health and education sectors to reducing poverty, they are both priority development goals at the national and international level. Nepal is committed to achieving the MDGs (and to reduce poverty) and external development partners provide support to achieve these goals. Monitoring of efforts within these sectors has therefore been a priority, as is evident through the number of initiatives (some of which are mentioned in section 5.1) to build capacity and systems enabling more robust M&E. As such, a similar level of political will is needed to create a similar system and level of capacity for M&E of CCA.

Another key difference is the information infrastructure that the Ministries of Health and Education have in place (i.e. HMIS and EMIS). Such a system for M&E of adaptation does not exist, making it difficult to archive information, conduct separate analysis in addition to M&E of programmes, and enable results from M&E to inform planning and policy processes. This allows the Ministries of Health and Education to more accurately monitor their performance, although there is still no strong evaluative component. The information management systems of both the Health and Education Ministries enable detailed monitoring and reporting at local, district and central government levels. Furthermore, these contain data and information that could potentially be used for M&E within other ministries, including for adaptation. MoSTE would greatly benefit from a central information system whereby they could obtain data from these (and other) systems, and so set baselines, develop measurable indicators, and monitor and evaluate their programmes in a systematic way.

The MoHP has a sector-wide approach to planning and implementing programmes, and development

partners who contribute to GoN's health services pool their resources with public financing for health programmes. This practice ensures that development partners adhere to government policies and priorities, as well as monitoring and reporting requirements. In addition, the task force (established during NHSPII) to advise on technical matters, and the joint committee (both of which comprise government officials, development partners, and other key stakeholders) is another way for GoN to ensure that development partners' contribution within the heath sector is in line with national priorities. In contrast, financing for CCA in Nepal comes from a variety of sources, and there is less collaboration or cohesion between these programmes and development partners. This potentially leads to duplication of effort, and creates an additional burden to MoSTE in terms of monitoring, reporting and evaluating programmes. MoSTE aims to coordinate adaptation efforts through the CCPCC but this type of sectoral coordination has not yet been realised, nor have the development partners been able to work fully within existing government systems in the short time frame since adaptation programming began. Both health and education sectors have seen long-term support from development partners in strengthening the internal systems for use by both the government and development partners in the sector-wide approach. It remains to be seen whether this type of long-term approach will strengthen the internal capacity of the M&E systems relevant to climate change.

Another advantage that the MoHP and MoE have over MoSTE is the national reach of their institutions and structures. Both ministries have regional, district and local offices throughout the country, and have mechanisms in place for systematic monitoring and reporting from ground level to national level. In comparison, many adaptation projects/programmes will be implemented at the local level, and will target various sectors. While MoSTE does not have a decentralised structure to enable them to oversee the programmes being implemented, it must rely on other ministries/departments or district offices to monitor their programmes and report secondary data to them.

5

Discussion: good practices and current limitations and challenges across the system

There are a range of examples of good practice and limitations in the Nepal M&E system and the current M&E of climate change. A set of guidelines and formats is becoming institutionalised across the ministries and offers a results-based approach, but is far from fully operational. Capacity is still a limitation, as well as data management and collection. There has been little political priority put on M&E across the government and the uptake and utilisation of data is still weak in some areas. The national M&E framework has so far focused on monitoring and identifying problems in project implementation rather than evaluating performance or feeding data back into planning and programmes. This continues to be the case in national requirements for the M&E of CCA. Development partners have, in consultation with the government, developed M&E frameworks for adaptation interventions that monitor and evaluate project performance, but it remains unclear to what extent this information will feedback into future adaptation programmes and government systems. The multiple adaptation programmes also present different models of M&E and do not, at present, offer a programmatic M&E framework for the NAPA priorities.

The government has gone to great lengths to institute M&E frameworks, guidelines and reporting formats and various development partners have supported the government in strengthening and improving existing systems and mechanisms. However, owing to methodological, capacity, data availability, financial resource and other constraints, the M&E system is not being fully implemented as intended and large challenges remain, particularly in the field of CCA.

5.1 Capacity for M&E across government ministries

Since 1993 there have been several initiatives to strengthen the M&E system, and capacity of related institutions and staff.

These projects have developed guidelines for establishing an M&E system, conducting monitoring and review meetings, developing indicators, preparing logical frameworks, and managing projects, including project monitoring. The SMES 1 project 'Strengthening Monitoring and Evaluation System in Nepal' (2006–2009), funded by JICA, developed M&E tools and guidelines for policy-makers and provided training for some public sector staff involved in planning, M&E and management information systems. It also developed guidelines for external evaluations. Phase II of this project (SMES 2) began in 2011 and will be implemented over 3.5 years (November 2011 to May 2015). This phase of the project intends to enhance both the national capacity for implementing the result-based M&E system, and information sharing and coordination among NPCS, five line ministries (Education, Agricultural Development, Federal Affairs and Local Development, Forestry and Soil Conservation; and Physical Planning, Works and Transport) and five districts involved in M&E.

In addition, large projects and programmes supported by the WB, ADB and other development partners also have a project component to provide M&E training for staff involved in project implementation.

Despite these efforts, capacity challenges for M&E remain. In relation to monitoring, capacity is limited and some indicators are difficult to measure. This may be a result of national level indicators being 'high level' and not specific to the local context. It may also be owing to a difference in interpretation of the indicators. Another problem identified by interviewees in MoSTE, and other ministries, is the often very high turnover rate of staff within M&E sections (due to political instability and other reasons). They mentioned that staff members are not usually trained in M&E when they start working in the M&E section, and are often transferred soon after they become familiar with the national system and procedures. They also suggested that M&E cadres be formed and trained in M&E methodologies and procedures so that when they are transferred to other ministries, they can apply their expertise within the M&E section of other ministries. District and sub-district level M&E staff also lack capacity at some levels. Some districts are still using outdated forms for reporting and local officials were unaware of changes in national policies (NPCS & JICA, 2012), resulting in potentially incomplete or unreliable data.

5.2 Data

Data limitations are considerable for Nepal, both in terms of availability, reliability and data management.

In terms of availability, there are national data sets such as the NLSS or the Nepal Demographic and Health Survey but these are collected or 'owned' by the CBS, not by departments or ministries. They are also collected every five years or more, are mainly socio-economic indicators and do not collect any climate vulnerability or adaptive capacity data. However, integration is beginning, e.g. the NekSAP household survey is integrating climate change vulnerability into food security indicators currently supported by the WFP and developed with the Ministry of Agricultural Development. As can be seen

from data collection and baseline surveys of CCA projects, much data is collected in project formats but then not centrally managed or retained. Several M&E experts commented that information is very scattered, and is often lost as there is no proper record management system. MoSTE has no district offices and so to obtain district level data for M&E of CCA activities, they must collaborate with other line ministries and implementing agencies, adding another layer of coordination for good M&E.

One of the biggest challenges to M&E of programmes within the MoE is that aggregate data, which is of interest at central level (e.g. how many students within the school are less than 5 years old), makes completing the forms difficult, and causes an additional burden to those completing the forms (in this case, teachers). The MoE are currently in the process of revising the categories of data they collect, and the forms, so that information can be processed and analysed from primary data sets.

Another challenge in education and other sectors is baselines, due to a lack of information (e.g. there is no information on learning achievement). Whether indicators have been developed nationally, or are directly related to the Millennium Development Goals, a lack of baseline data remains, making it difficult to set targets and measure progress. There is a process to identify which baselines are missing and what needs to be done in terms of data collection at national level to be able to set baselines.[22]

In terms of reliability, indicators can be interpreted in different ways, particularly in the field of CCA. Experts commented that in some vulnerability assessments, indirect indicators were used owing to a lack of data, resulting in a large margin of error. Hariyo Ban staff also commented on this challenge of composite indicators and the need for extensive training of local staff. The core goal of both the SPCR and Hariyo Ban is to increase adaptive capacity, or the ability to cope with the adverse effects of climate change; concepts that are hard to define and measure.

Also related to data is the issue of verification of the information collected. MoE are not able to standardise the information across geographical regions, and there is no system or culture of checking the accuracy of information, verifying and prioritising it. Without verification of the information collected, it is not possible to link it to a reward and punishment system.

Ther are some good examples of data management in the government. HMIS is a well-functioning information management system in the Health Ministry that monitors progress against national and sectoral targets and indicators (outlined in section 4.1). The information is used to review the progress of the SWAp or report to the NPC, but is not well integrated with other national systems or other surveys across government. Information is also lacking on human resources within the health sector or private sector health care services. Use of information by managers, policy-makers and external development partners is therefore limited. HMIS is not used as a monitoring tool for local and district governments because the focus is to aggregate data for record-keeping and central government reporting. The HMIS is not yet web-based, and while it remains partly paper-based its usability at different levels and across ministries is limited. Similarly, PMAS has the potential to be a good national example of data management on poverty but is also not used as a monitoring tool of performance.

22 *Interview with Ministry of Education official, January 2012.*

The GoN is moving towards establishing a number of data information systems but many obstacles remain, such as insufficient manpower to manage the data, a lack of capacity, human resources, equipment and electricity to run any such system.

5.3 Political priority and uptake of results

Whilst there are several guidelines and institutions in place, M&E does not seem to be prioritised across the government system, although some sectors and projects have focused specifically on this area. Interviewees commented that M&E sections within the ministries are very 'low profile', and although NPC, the Ministry of Finance and the Prime Minister's Office recognise the importance of M&E, a high level commitment at policy level is yet to be realised. The current Three Year Plan (TYP) aims to make the M&E system result-oriented, reliable and regular, and to use results in programme formulation and implementation. However, results from the M&E system on formulation and implementation of development plans and projects at central and district levels is a continuing challenge. There are individuals who have been and are personally committed to M&E and able to instigate good practices in their sector, but they are often the exception. Interviewees suggest that officials prefer to be in ministerial sections where there is sufficient financial resources and decision-making power, which is usually related to expenditure, and this is not currently the case with M&E sections.

It is difficult for individuals and ministries to act on the M&E to improve future performance, as indicators are not always linked to interventions (such as PMAS), and much monitoring is output- and activity-based. In CCA programmes, M&E is often put into a silo rather than being developed by those designing the programme and the managers overseeing its implementation. This relates to the discussion in section 3, on how and when government officials engage with the M&E indicators. This division between the M&E framework development and the management and implementation of the programme was identified as a barrier to effective M&E by an interviewee involved in this process.

5.4 Human Resources and coordination

One of the major challenges MoSTE and other ministries face in doing rigorous M&E of adaptation and development programmes is that they lack the human resources to monitor projects, coordinate activities and verify information adequately. It was suggested that a separate section for M&E of climate change or environment within MoSTE would help address this problem.[23]

In the case of MoSTE and other ministries, the coordination of ministries and other decentralised government bodies (e.g. VDC, DDC, etc.) plays a critical role for M&E, and poor coordination was identified as another constraint for M&E. A case study by Bennet & Chapagain (2012) on the Strengthening Planning and Monitoring Capacity of the National Planning Commission (SPMC-NPC) Project revealed that both the MoE and Ministry of Health knew little about NPC's DPMAS or PMAS system, or how it was supposed to link up with their own MIS systems. This suggests a lack of coordination between data systems.

23 *Interview with Head of Planning and Monitoring Section of MoSTE, January 2013, Kathmandu.*

The MoHP recognises the importance of climate change impacts on health, and the Health Research Council has tried to conduct studies and vector surveys on these changes. As yet there has been no integrated approach, and MoSTE has not paid much attention to health-related climate change projects, or monitoring and reporting the impacts of climate change on health.

5.5 Relevance to climate change adaptation

This section has discussed good practice, limitations and challenges in the GoN's M&E system. Many of these are well known and have been identified in development partner reports, by national experts and those involved in this work within and outside government. However, they are all significant areas for adaptation. Whilst capacity constraints and data issues are relevant across all government operations, they are particularly pertinent in the newly emerging field of adaptation, where new types of data sets are needed on vulnerability and adaptive capacity. Even the international consultants leading M&E development are 'learning by doing' on measuring and evaluating the success of adaptation interventions. Equally, with so much investment in adaptation projects by the development partners there is a huge opportunity to address some of these data gaps through a coordinated effort to share data generated and to collect baselines in comparable ways.

6 Conclusions

6.1 Good practice and lessons learned from this case study

GoN has laid a solid foundation for M&E, including frameworks, guidelines and reporting formats. However, some ministries are more advanced than others in terms of available support tools (to enable robust monitoring, reporting and evaluation), or a country-wide reach and presence. In the absence of a data and information system that encompasses all 75 districts within the country, the potential to identify changes and prioritise areas where need is greatest will not be possible. This is particularly relevant for adaptation, as most interventions are happening at local level, and most information being collected is new.

The national M&E framework has so far focused on monitoring and identifying problems in project implementation rather than evaluating performance or feeding data back into planning and programmes. This continues to be the case in national requirements for M&E of CCA. It remains unclear to what extent this information will feed back into future adaptation programmes and government systems. The multiple adaptation programmes also present different models of M&E and do not, at present, offer a programmatic M&E framework for the NAPA priorities but instead are project-based assessments of particular approaches.

Stakeholder engagement in the M&E development of adaptation has been largely through government consultation and presentation of the frameworks at programme steering committees. Some frameworks have gone through local consultations and participatory processes, such as district consultations with the LAPA indicators and the community work in Hariyo Ban.

There are very few baselines for CCA beyond existing survey data, which is not collected annually. Some district sources can give background data on poverty and community characteristics but many projects collect their own baseline data disaggregated at the household level. No mechanism is in place for baseline data collected in different projects and programmes to be centrally managed for use by others.

The M&E adaptation frameworks all seek to demonstrate the project impact on vulnerability and an increasing number of households able to cope with the adverse consequences of climate change.

However, there are multiple pressures on those developing the frameworks to reflect global priorities and indicators, local realities and concerns, and the development partners' need to demonstrate results in fairly short periods of time. These are in addition to the need to facilitate learning around CCA and measuring effective reductions in climate vulnerability. It is too early to say what effect these pressures will have on the emerging frameworks and how much learning will remain a priority as the projects develop and M&E is finalised.

Evidence from the rest of the Nepal M&E system suggests that data from the M&E system has not been used to change the course of development planning and there are no suggestions that this will be different in adaptation. Mechanisms are being set up to bring adaptation results together and apply them to the framework of the NAPA priorities, but how lessons learned will be incorporated into future adaptation programming by MoSTE and other relevant ministries remains unclear.

What priority climate change and M&E will have in the future political context in Nepal remains to be seen, but a real opportunity exists to learn from the current initiatives and feed this back into future national and international initiatives.

6.2 Challenges and limitations and how they might be addressed

Addressing some of the challenges and limitations mentioned above will require strong political will and reallocation of financial resources. In addition to the capacity challenges for M&E, recognition at the highest political level of the importance of M&E for advancing development and improving planning will impact the attitude and motivation of those conducting M&E, address some of the issues in relation to allocated of human resources for M&E, and lead to the development of a strong cadre for M&E in Nepal.

Additional (and frequent) training in M&E methodologies and procedures, especially at sub-national level, is required to address some of the limitations in capacity and to ensure that monitored and reported information is complete and accurate. This training should continue even after the revision of guidelines and reporting formats. It is also key to ensure that information gathered through the information systems of national surveys is used not just to monitor progress, but to feed back into planning and form part of an evaluation.

A robust information management system is critically needed for data management, record-keeping, and to address some of the issues of data availability. Ideally, this would be a web-based system including national census and surveys, project data, information from the PMAS, HMIS, EMIS and others. Such an integrated information system would institutionalise (and archive) the data and information collected, and enable information to be used at all levels and across ministries. It would also enable M&E officials at the central level to analyse disaggregated data, aggregate data and extract information specific to policy-making and planning.

Finally, MoSTE and development partners need to consider how to manage the competing pressures of demonstrating results in short timeframes with the real need to learn from these early adaptation experiences. This is important in learning from and evaluating different approaches to adaptation and

resilience, and also in finding different ways to measure their effectiveness in reducing community vulnerability.

6.3 Ways forward

Monitoring and evaluating adaptation is a relatively new and emerging area everywhere, not just in Nepal. Many frameworks for M&E of adaptation are in their infancy, so particular emphasis should be placed on discovering the lessons learned and sharing them with other ministries, development partners and other stakeholders involved in M&E, as well as with other countries. Several interviewees mentioned that Nepal has taken a 'learning by doing' approach to M&E, and this offers a great opportunity to capture and share those experiences.

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Annexes

Annex 1 List of stakeholders consulted

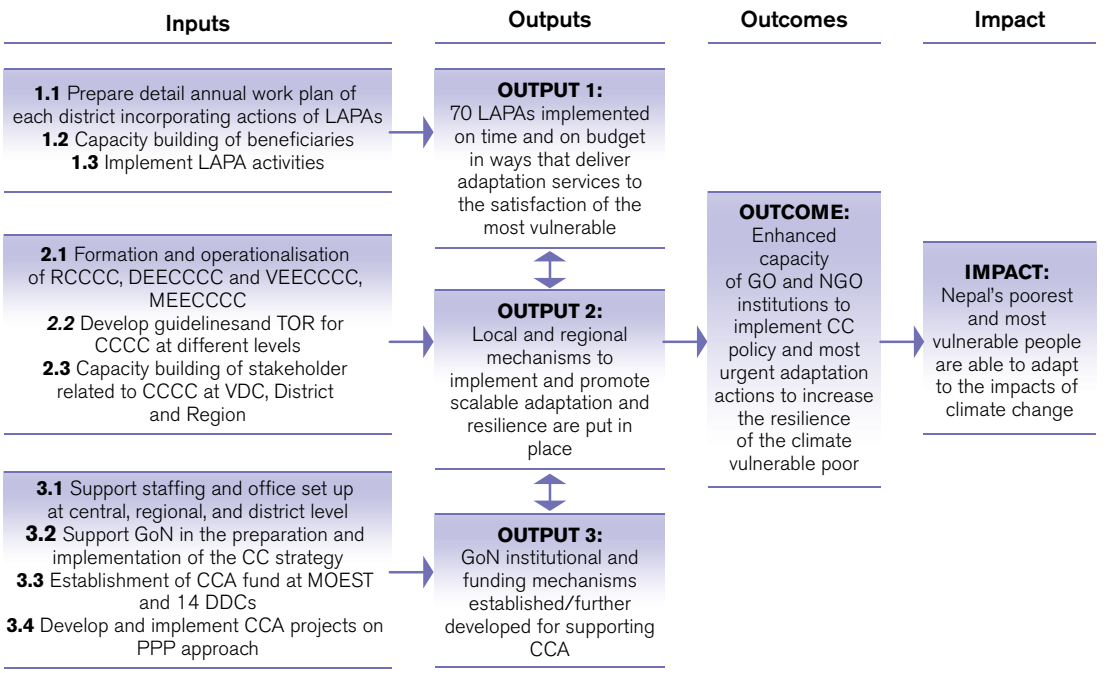
Date (2012/2013)	Name	Affiliation and Position
20 November	Mr. Prem Thapa	Practical Action, Head of Quality Assurance and M&E Section
28 November	Mr. Ganapati Ojha	M&E Expert (Freelance consultant)
28 November	Mr. Dil Prasad Shrestha	M&E Expert (Freelance consultant)
3 December	Mr. Rishi Sharma	Department of Hydrology and Meteorology, Director General
5 December	Mr. Baburam Marasini	Ministry of Health, Sector Coordinator
5 December	Mr. Ram Chandra Khanal	Ministry of Health, Senior Public Health Administrator (M&E Section), Member of Technical Working Group (TWG) on Health Sector Monitoring and Evaluation
7 December	Mr. Tarek Ketelsen	Part of a team providing TA support to MoSTE in developing a broad results management framework for the PPCR components and three other programmes within MoSTE's climate change portfolio
7 December	Mr. Martin Whiteside	TA Consultant working on the log frame for M&E of the NCCSP
7 December	Mr. Madhukar Upadhya	M&E Expert, currently an Advisor on the Poverty and Environment Initiative (UNDP), and working closely with the National Planning Commission Secretariat.
11 December	Mr. Arun Rijal	Ministry of Science, Technology and Environment, Member of Climate Change Council, M&E Expert
13 December	Mr. Ram Chandra Khanal	South Asian CDKN Representative, M&E Expert
19 December	Mr. Ganga Awasthi	Freelance Consultant, Former Secretary Ministry of Local Development
15 January	Mr. Hari Prasad Lamsal	Chief of Monitoring and Evaluation, Ministry of Education
16 January	Mr. Ritu Pantha	Director of Planning Section, MoSTE
31 January	Ms. Judy Oglethorpe	Chief of Party, Hariyo Ban Program, WWF
31 January	Mr. Sunil Kumar Regmi	Climate Change Adaptation Coordinator, Hariyo Ban Program, CARE Nepal
1 February	Ms. Cindy Malvicini	Senior Water Resources Specialist, Environment, Natural Resources and Agriculture Division (SAER), Asian Development Bank
4 February	Ms. Shanti Karanjit	Climate Change Policy Analyst, Environment, Energy & Climate Change Unit, UNDP
20 February	Mr Niranjan Dhakal	M&E consultant, NCCSP Start up Phase

Annex 2 Summary of large-scale adaptation interventions

Program	Scale of Investment	Key Objectives	Time Frame	Implementing Agencies / Donors
Hariyo Ban	$ 30 million USD in total Component 1: Improve Biodiversity Conservation $7.5 million Component 2: Ensure Landscape Sustainability $9.1 million Component 3: Increase Adaptation to Climate Change $11.9 million Monitoring and Evaluation $1.5 million	Reduce threats to biodiversity in target landscapes; build the structures, capacity, and operations necessary for effective sustainable landscape management, especially reducing emissions from deforestation and forest degradation; and increase the ability of target human and ecological communities to adapt to the adverse impacts of climate change. The three main components are (1) Improve Biodiversity Conservation, (2) Ensure Landscape Sustainability, and (3) Increase Adaptation to Climate Change.	August 2011 – August 2016	Support from United States Agency for International Development (USAID) Implementing: World Wide Fund for Nature (WWF) Cooperative for Assistance and Relief Everywhere (CARE), Federation of Community Forestry Users in Nepal (FECOFUN), National Trust for Nature Conservation (NTNC)
Pilot Programme for Climate Resilience (PPCR)	Component 1: Preparation: USD 900,000 Estimated Investment: 33 million Component 2 Preparation: USD 500,000 Estimated Investment: USD 31 million Component 3 Estimated Investment: 7.164 million Component 4 Preparation: 300,000 Estimated Investment: 8.7 million Component 5 Estimated Investment: 5 million	Improved access to and enhanced reliability of water resources; improved resilience through enhanced capacity to predict and respond to climate-related hazards; Nepal's development programmes, policies, and projects are safeguarded from the effects of climate change; enhanced food security through promoting climate resilient agriculture; reduced vulnerability of farmers and climate-proofing of selected vulnerable private infrastructure; and enhanced capacity, knowledge and incentives to improve climate resilience of critically endangered species by safeguarding their natural habitats against climate threats.	Component 1 1 year for preparation Actual implementation: 5 years Component 2 1 year for preparation Actual implementation: 5 years Component 3 1 years for preparation Actual implementation: 5 years Component 4 1 year for preparation Actual implementation: 5 years Component 5 1 year for preparation Actual implementation: 5 years	Component 1 Building Resilience of Watersheds in Mountain Eco-Regions (ADB) Component 2 Building Resilience to Climate-Related Hazards (WB) Component 3 Mainstreaming Climate Change Risk Management in Development (ADB) Component 4 Building Climate Resilient Communities through Private Sector (IFC) Component 5 Enhancing Climate Resilience of Endangered Species (WB)

National Climate Change Support Programme (NCCSP)	£14.5 million	The purpose of NCCSP is to enable the Government of Nepal (GoN) to manage climate finance, to implement the National Adaptation Plan of Action (NAPA) and to mainstream CCA into local up to national development planning. It will build the capacity of Government Nepal to implement the Climate Change Policy and CCA actions in 14 districts of Mid-Western and Far-Western regions of Nepal (i.e. NCCSP will develop Local Adaptation Plans for Adaptation (LAPAs)). This will contribute to achieving the goal of ensuring that the poorest and most vulnerable communities in Nepal are able to adapt to the impacts of climate change.	September 2011 – March 2015	UK AID and European Union (EU) Implementing: UNDP
Ecosystem Based Adaptation in Mountain Ecosystems	Not known	The objective is to strengthen the capacities of Nepal, Peru and Uganda to strengthen ecosystem resilience for promoting ecosystem based adaptation (EBA) options and to reduce the vulnerability of communities, with particular emphasis on mountain ecosystems. The project has four components and aims to create new opportunities for experimental learning between regions and among countries within the same region.	August 2012 – December 2014	IUCN, UNDP and UNEP Supported by the German Federal Minister for the Environment (BMU)
Community-based Flood and Glacial Lake Outburst Risk Reduction.	$6 million	The project will reduce the risk from GLOFs in one hazardous glacier lake (either Imja or Tsho Rolpa); artificially reduce the lake level to decrease the risk of GLOF; and establish monitoring and early warning systems. In addition to hazards of GLOF in the mountainous region, the project will also support measures to reduce flood risks in the southern Terai areas which hold a high agricultural value to the country.	Awaiting start date	UNDP

Annex 3: Logic model for the NCCSP (draft Sep 2012)[24]



Annex 4: Global CIF indicators[25]

Core indicators:

(1) Numbers of people supported by the PPCR to cope with effects of climate change

(2) Degree of integration of climate change in national, including sector planning

(3) Extent to which vulnerable households, communities businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to CV&CC

(4) Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience

(5) Quality of and extent to which climate responsive instruments/ investment models are developed and tested

24 *NCCSP M&E framework, September 2012. Note this may be amended or updated.*

25 *Draft inception report from Component 3 of the SPCR, draft December 2012. This document may be amended or updated.*

Annex 5: Guidance on compiling the log frame from the NPC RBME guidelines (2010) and a sample log frame developed for the Soil Conservation and Watershed Programme (2007)

No	RF Indicator
1	Change in percentage of households (in areas of risk) whose livelihoods have improved (acquisition of productive assets, food security during sensitive periods of the year)
2	Damage/losses ($) from extreme climatic events
3	Number of people supported by the PPCR to cope with the effects of climate change
4	Percentage of people with year round access to water supply (domestic, agricultural)
5	Degree of integration of climate change in national planning e.g. national communications to UNFCCC, national strategies, PRSPs, core sector strategies
6	Changes in budget allocations of all levels of government to take into account effects of CV&CC
7	Vulnerable households, communities and businesses use improved tools, instruments, strategies, activities to respond to CV&CC
8	Evidence of strengthened government capacity and coordination mechanisms to mainstream climate resilience
9	X number of climate information products/services used in Y number of climate sensitive sectors in decision making at variable levels
10	X number of climate sensitive sectors adopted regulatory reforms that incorporate climate resilience
11	Leverage ratio of PPCR funding against public and private investments in climate sensitive sectors
12	Climate responsive financial instruments / investment models developed and tested

Colour denotes indicator measurable through existing M&E frameworks

Colour denotes indicator directly supporting implementation of the PPCR

Colour denotes indicator supporting NAPA implementation

Knowledge Products

Research Report

December 2013

Climate Change

Keywords:
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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