

Country Status brief note on NAPs preparation

1. Relevant Regulatory Frameworks (act, decree, law)

Nepal has not enacted any legal instruments to address climate change impacts. However, there are several laws related to environmental management. Some of the laws that provide basis include Environment Protection Act (1996) and its Rules (1997), Forest Act (1993) and its Rules (1995), and Water Resources Act (1992) and its Rules (1993). Major policies and other instruments that focus on climate change are as follows:

- Sustainable Development Agenda of Nepal (SDAN), 2003
- Initial National Communication, 2004
- Everest Declaration (Kalapatthar Cabinet Meeting), 2009
- Climate change: status paper for COP15
- National Adaptation Program of Action to Climate Change, 2010
- Climate Change Vulnerability Mapping in Nepal, 2010
- Climate Change Policy, 2011
- National Framework on Local Adaptation Plans for Action, 2011
- Status of Climate Change in Nepal, 2011
- Low Carbon and Economic Development Strategy (LCEDS) draft
- Environment Friendly Local Government Framework, 2013 (EFLG)
- Agriculture Development Strategy, 2015
- Thirteenth Plan (TP) (2013/14-2015/16)
- Nepal Biodiversity Strategy and Action Plan (NBSAP), 2014
- Forest Policy, 2015
- Second National Communication, 2015 (draft)
- Technology Needs Assessment, 2015 (draft)

2. Institutional arrangements for leading and executing work on NAPs

Ministry of Science, Technology and Environment (MoSTE), the focal ministry for climate change and environmental matters- acts as focal point to UNFCCC. It prepared NAPA and executing its implementation. MoSTE is also executing PPCR/SPCR and NCCSP. It is also taking a lead to formulate NAPs in Nepal. The NAPs preparation process will involve the following steps:

- Introductory workshop to initiate the NAP process (Launch of the NAP process)
- Consultations to bring concern of affected communities into NAP process
- Collection of data on impacts of climate change
- Review and documentation of sectoral achievement that the NAPA had planned and implemented through LAPAs and other projects
- Necessary preparation and arrangement for NAP implementation to bring it up to the door steps of the local people through bottom-up planning

3. Key components of your national development planning that would be important in prioritizing adaptation efforts

The Sustainable Development Agenda for Nepal (SDAN, 2003-2017), one of Nepal's key long term policy documents, included climate change as an issue to guide and influence national level planning and policies up until 2017. It envisions that integrating climate change concerns into development planning will continue.

The Three Year Plan (TYP) (2010/11-2013/14) of Nepal has the objectives of promoting green development, making development activities climate-friendly and resilient, mitigating the negative impacts of climate change and promoting adaptation. The key expected outcomes of the TYP are to prepare and implement a national framework on climate change adaptation and mitigation, disaster risk reduction, poverty reduction and to promote poverty environment initiatives for the poor.

The current **Thirteenth Plan** (TP) (2013/14-2015/16) has a vision of upgrading Nepal from the status of the least developed country to the developing country by 2022. One of the strategies of this Plan is to implement development programmes adaptive to the climate change. The Plan considers Environment and Climate Change a cross-cutting issue. The Plan has an objective of making human activities and development process environment-friendly and adaptive to the adverse effects of climate change within the broader concept of 'green development'. It emphasises for sustained conservation and management of natural resources by continuing activities related to disaster risk reduction, poverty reduction and environmental promotion and climate change adaptation. Furthermore, the Plan approaches to mobilise hydrology and meteorology services reliable to minimise the effects of climate change.

The working policies as included in the Thirteenth Plan focuses, *inter alia*, on: (i) implementing NAPA through LAPA at the local level to reduce poverty; (ii) coordinating environment conservation and climate change activities; (iii) ensuring coordination and collaboration amongst the donor agencies, non-governmental organisation, local bodies, community-based organisations and other organisations related to the environment and climate change; and (iv) emphasising infrastructure development that are environment-friendly and adaptive to climate change. The Plan equally focuses on internalising the concept of 'greening the economy' into all economic development sectors.

The **Thirteenth Plan** has a strategy of maintaining 40 percent of the total area under forests. The Policy also focuses on generating additional financial resources from REDD concept as a contribution of the forest areas on climate adaptation and climate change impacts mitigation due to carbon sequestration and storage. One of the expected outputs on forests is that climate adaptation plans for 500 community forestry user groups are prepared and implemented.

The **Plan** has recognised the challenges posed by climate change in the agriculture sector and has an objective, *inter alia*, of reducing the adverse effects of climate change by developing and expanding the use of environment-friendly agricultural technologies, also to reduce the adverse effects of climate change.

Nepal's National Adaptation Programme of Action (NAPA) represents the country's notable effort to assess and prioritize immediate and urgent needs to address climate change risks through a broad consultative process. According to NAPA, effects of increased climatic variability have been observed, some parts of Nepal show increasing erratic and intense rains, and such climatic trends combined with fragile topography, deforestation and eroded soils are leading to landslides and flash flood hazards. It has also been projected that rainfall intensity will increase across many areas of Nepal due to climate change and, therefore, vulnerable communities will have to increase their adaptive capacity to cope with climatic hazards. These hazards would also affect the availability of water resources particularly for household use and therefore water supplies need to be managed so they are climate proof.

Through intensive consultative processes, the NAPA has also brought priority adaptation options, in particular the most urgent and immediate adaptation programmes in key vulnerable sectors under the nine combined profiles as follows:

- Combined Profile 1: Promoting Community based Adaptation through Integrated Management of Agriculture, Water, Forest and Biodiversity Sectors;
- Combined Profile 2: Building and Enhancing Adaptive Capacity of Vulnerable Communities through Improved System and Access to Service Related to Agricultural Development;
- Combined Profile 3: Community Based Disaster Management for Facilitating Climate Adaptation;
- Combined Profile 4: Glacial Lake Outburst Flood (GLOF) Monitoring and Disaster Risk Reduction;
- Combined Profile 5: Forest and Ecosystem Management for Supporting Climate Led Adaptation Innovations;
- Combined Profile 6: Adapting to Climate Challenges in Public Health (management of ecosystems so that they do not breed vectors or pathogens);
- Combined Profile 7: Ecosystem Management for Climate Adaptation;
- Combined Profile 8: Empowering Vulnerable Communities through Sustainable Management of Water Resource and Clean Energy Supply (including groundwater); and
- Combined Profile 9: Promoting Climate Smart Urban Settlement (including groundwater).

The National Framework on Local Adaptation Plans for Action (LAPA) aims to promote the preparation and implementation of LAPA (s), and integrate adaptation options into local and national plans. The process of integrating climate adaptation and resilience into local and national planning is governed by four guiding principles which are: a) bottom-up, b) inclusive, c) responsive and d) flexible.

4. Key climate change risks and vulnerabilities for your country based on past assessment

In Nepal, being an under-developed country, the impacts are more serious that it has hit the major livelihoods base of common people. Nepal is fourth most vulnerable country in the world in term of impact of climate change. The NAPA explores ample opportunities to mainstream climate change into national development agenda and maximize the opportunities posed by climate change. As Nepal being a poor country, nationwide adaptation interventions requires high investment and mobilization of its own internal resource is very limited. Thus, identification and characterization of the vulnerable regions, communities, and sectors is a priority concern for

addressing the climate change adaptation in Nepal. So as to support NAPA to propose urgent and immediate adaptation actions based on vulnerability, conducted climate change vulnerability mapping of Nepal, which provides information on the areas that are most vulnerable to climate change impacts. The assessment was carried out by overlaying climate risk/exposure maps, sensitivity maps and adaptive capacity maps following the vulnerability assessment framework of IPCC. According to overall climate change vulnerability study out of total 75 district of Nepal, 9 districts lies under very high vulnerable rank, 17 districts under high vulnerable rank, 28 districts under moderate rank, 16 district under low rank while 5 districts under very low rank of climate vulnerability. The NAPA also identified major six areas that are impacted by climate change. These six areas are: Agriculture and food security, water resources and energy, climate-induced disasters, forest and biodiversity, public health, and urban settlement and infrastructures.

The NCCSP has been implementing adaptation actions in vulnerable district identified by NAPA's climate change vulnerability mapping for Nepal report. The programme further vulnerability assessment of VDCs, wards and communities in the course of preparation of Local Adaptation Plan for Actions (LAPA). Vulnerability was categorized as most vulnerable (V4), vulnerable (V3), low vulnerable (V2) and very low vulnerable (V1) and adaptation actions were implemented giving the priority to most vulnerable people.

5. Lists of projects and programmes being implemented, or planned including costs and sources of financing and specific adaptation actions being implemented

Nepal is one of the most vulnerable countries. Climate change has impacted all most all the development sectors. The climate risks and uncertainties are exerting additional pressure to communities across the country. So, the country is taking various initiations related climate change and adaptations. Most of the initiations have been leaded by the Ministry of Science, Technology and Environment (MoSTE) however other ministries and I/NGOs are also engaged in planning and implementing climate related interventions. Some major programe that are being implemented are as follows:

1. Nepal Climate Change Support Programme
2. Community-based flood risk and GLOF risk reduction programme
3. Ecosystem-based adaptation Programme (EBA) (Global Flagship Project)
4. Building Climate Resilient watersheds in mountainous ecoregions (SPCR1)
5. Building Resilience to climate related hazards (SPCR2)
6. Mainstreaming Climate Change Risk Management in Development (SPCR3)
7. Building Climate resilient communities through private sector participation (SPCR4)
8. Enhancing capacity, knowledge and technology support to build climate resilience of vulnerable developing countries
9. Hariyo Ban Project (with adequate focus on climate adaptation)
10. Multi-stakeholder Forestry Programme (adaptation co-benefits)

Nepal Climate Change Support Programme (NCCSP) is the first significant, Government led initiative to implement Nepal's NAPA with a focus on priority area -1 that is promoting community based adaptation through integrated management of agriculture, water, forest and biodiversity sectors. The programme aims to mainstream climate change into Nepal's national development agenda continue to poverty reduction, livelihoods diversification and community resilience. This ensures that the most urgent and immediate adaptation actions are implemented so that the poorest and the most vulnerable communities in Nepal are able to adapt to the effect

of climate change. Climate Change impacts are felt by most disproportionately by those that are the least able to adapt their access to resources. To address these disparities NCCSP has focused on the most poor, in Nepal's most vulnerable areas: 14 districts in the Mid and Far Western region of Nepal with a particular focus on poor and marginalized groups, including women. The program also aims to link bottom up (local) and top down (national) planning process.

The NCCSP also facilitated to prepare 100 Local Adaptation Plan for Action (LAPA) and is implementing these LAPAs which represent local priority on six major themes: agriculture, livestock and food security, forest management and biodiversity, water resources and energy, climate hazards and physical infrastructure, human resource, livelihoods and capacity development and human health. The some specific adaption actions under each theme are as presented below:

1 Agriculture, Animal and Food Security

- Animal health and development
- Animal health and Livestock management training
- Conducting animal health camp
- Village animal health training
- High-breed animal farming for income generation
- Distribution of goats and buffalo improve breeding for commercial animal development
- Distribution of goats improve breeding
- Plantation of fodder species and grazing land management
- Operationalization of Agriculture and Livestock Services Centre
- Commercial livestock development training
- Agriculture training- Seed storage, improved farming, cyclic/rotational farming system
- Off-season vegetable farming
- Support to construct irrigation pond
- Small irrigation activities such as irrigation canal, plastic irrigation pond, etc
- Shallow tube-well installation boring installation
- Crop diversification: drought resistant and flood resistant crop
- Homestead vegetable farming for women
- Commercial vegetable production training and support
- Horticulture promotion, training and seedlings of various fruits distribution



2. Forest management and bio diversity

- Nursery management training and nursery establishment support
- Plantation support to the community
- Capacity development programme for Community Forest Users Groups
- Plantation in embankment to control soil loss
- Community based biodiversity conservation activities



- Forest management training to community forest users groups
- Agro forestry management activities

3. Alternative Energy

- Micro-hydro repair/ equipment support
- Improved Cooking Stove installation support, training, sensitization
- Improved Water Mill installation support, management training
- Solar Scheme installation and management training
- Protection of water sources
- Bio-gas production for cooking and lighting purpose



4. Climate Change induced hazards and physical infrastructure

- Awareness and sensitization program on climate change impacts and adaptation
- Community shelter / community building for disaster affected people
- Emergency materials and aid kit to affected people
- Check dam, gabion wall and bioengineering for landslide control
- Wall/spur construction for river cutting
- Bio embankment and river training
- Wooden bridge and culvert construction
- Construction of trails
- High raised community building, high raised tap, high raised toilet construction and in flood prone area
- Safe drinking water scheme, source protection
- community information centers
- Suspension bridge construction
- Support to construct and run women cooperative building
- Establishment of VDC level emergency and adaptation fund
- Rain water harvesting tank construction, plastic pond construction



5. Human Resource, Capacity Development and Livelihoods

- DDC and VDC's capacity development, equipment support
- Establishment and strengthening of information center, equipment and materials support
- IGA related activities such as sewing training and equipment support to women, blacksmith training and materials support
- NTFPs based handcrafts making trainings and material support
- Herbal medicinal plant farming and conservation for income generation



6. Human Health

- Capacity development related activities for community based sub health posts
- Support to strengthen community based maternity home
- stretcher and other emergency first aid kits distribution to the community
- Support to health post to organize health camp specially on women health

Nepal, through its respective ministries' initiation planning the following climate change and adaptation related programmes

1. Catalysing ecosystem restoration for resilient natural capital and rural livelihoods in degraded forests of Nepal
2. Reducing vulnerability and increasing adaptive capacity to respond to impacts of climate change and variability for sustainable livelihoods in agriculture sector in Nepal
3. Developing climate resilient livelihoods in the vulnerable watersheds in Nepal
4. Ecosystem-based adaptation for climate-resilient development in the Kathmandu Valley, Nepal
5. Adapting to climate induced threats to food production and food security in the Karnali region of Nepal

7. Monitoring and evaluation frameworks/strategy for adaption or other relevant national development planning process

Nepal Climate Change Support Programme (NCCSP) has established monitoring and evaluation framework and mechanism at various levels. At national level, a Programme Steering Committee has been formed which provide overall guidance and policy level decision making to gear up the programme. Similarly, Project Executive Board supervises and provides managerial input to the programme.

In order to assess the programme performance at all levels viz process, progress and result, MoSTE, MoFALD, Programme Central Office and donors carry out regular monitoring to ensure the quality, relevance and effectiveness of the project. The monitoring exercise is of consultative and participatory involving the DDCs, VDCs and the communities.

At district level, District Energy, Environment and Climate Change Coordination Committee (DEECCCC) under which formed Monitoring and Evaluation Sub Committee. These committees are responsible to provide the guidance for proper implementation of adaption activities in the district and monitoring and evaluation. Similarly such mechanism are in place in programme Village Development Committee and Municipalities namely Village Energy, Environment and Climate Change Coordination Committee (VEECCCC) and Municipality Energy, Environment and Climate Change Committee (MEECCCC) and under each coordination committee there is Monitoring and Evaluation Sub Committee as of DEECCCC. These Monitoring and Evaluation Sub Committees ensure smooth implementation of adaption actions in their respective VDCs and Municipalities. Ward Citizen Forum formed at ward level also monitor the adaptation activities at their community level.

8. A national roadmap for the process to formulate and implement NAPs (in whatever stages)

The MoSTE has outlined the possible steps of NAPs formulation. The major 6 Thematic Working Groups (TWGs) identified by NAPA and tourism, natural and cultural heritages will also be included in the NAPs. In addition to these 7 thematic areas two cross cutting themes- Gender and Social inclusion and Livelihoods and Governance will also be included. Altogether NAPs will comprise of 9 thematic areas as given below:

1. Agriculture and food security
2. Forest and biodiversity
3. Water resource and energy
4. Public health
5. Climate induced disaster
6. Urban settlement and infrastructure
7. tourism, natural and cultural
8. Gender and Social inclusion,
9. Livelihoods and Governance