

Climate Risk: Nepal's Perspective

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Climate situation and climate risks

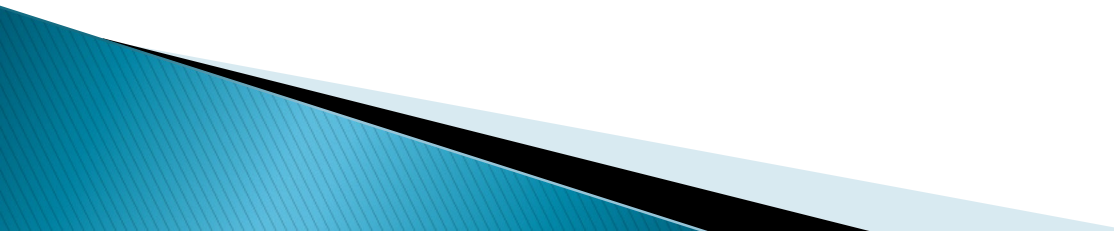
Nepal is one of the most vulnerable countries to climate change in the globe

- ▶ At current emission levels, temperatures in the Hindu Kush Himalayan Mountains are projected to rise by about 5°C by 2100 with the loss of glacier volume due to increased glacier melt reaching as high as 69% by 2100.
- ▶ Black carbon (BC) as one of the short-lived climate pollutants (SLCPs) and second strongest contributor to current global warming after CO₂ emissions – is estimated to be contributing about 50% of the warming on the Himalayan region.
- ▶ Now erratic rainfalls as well as increase in floods and droughts are more common and damaging.
- ▶ Very rich in biodiversity, Nepal is increasingly facing erosion or depletion of, among others, many species and plants.
- ▶ The impacts of climate change are multifaceted affecting agriculture, food security, forestry, water resources, energy infrastructure, ecosystem services, human life and health etc.

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- ▶ Increased variability and more extreme climatic events contribute to a loss of 2–3 per cent of GDP per year in the water management and agricultural sectors alone, with much higher losses in extreme years.
 - In monetary terms, the average loss has nearly doubled from 1983–2005 to 2010–2016.
 - In 7 years between 2010 and 2016, loss due to floods and land slides was estimated to be around NRs. 16.5 billion.
 - Due to massive floods in 35 districts in 2017, the monetary loss was NRs. 61.7 billion (about US\$ 0.6 billion) in a single year.

Policy initiatives and priorities

- ▶ Since 1996 Nepal has officially endorsed various international conventions on combating climate change impacts and has considered climate adaptation as a national agenda through various policy endorsements including Local Adaptation Plan of Action (LAPA) and National Adaptation Plan of Action (NAPA).
 - ▶ Now Government has adopted national climate policies and strategies on adaption, low-carbon development and Green House Gas (GHG) mitigation which are reflected in the SDGs as well.
 - ▶ Institutional architectures have also been established to respond to the commitments under the Paris Agreement on climate change—the United Nations Framework Convention on Climate Change (UNFCCC) and its National Determined Contributors (NDCs).
 - ▶ The Nepal Climate Change Financing Framework (CCFF) 2017 provides key measures in integrating climate change and climate finance into national planning and budgeting processes to increase government's capacity to mobilize, manage, and target climate finance at different levels.
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- ▶ There is increased emphasis on green growth
- ▶ With a system of separate climate budget in the overall budget added by indicative numbers in terms of likely direct and indirect benefits of proposed programs, there have been increased priorities in resource allocations as well.
 - For instance, in 2013/14 out of the total budget about 10.3% was allocated to the climate budget.
 - Its share rose to 19.2 % in 2016/17 and a big jump took place in 2017/18 at 30.8 % of the total.

Prioritization and funding

- ▶ As noted above Nepal Climate Change Financing Framework (CCFF) 2017 provides key measures in integrating climate change and climate finance into national planning and budgetary processes.
- ▶ Developed countries provide finance to Nepal via their own bilateral agencies and international organizations.
- ▶ Various UN agencies, the World Bank, and Asian Development Bank (ADB), among others, have also accessed finance to help build climate resilient Nepal.

The support of many donors comes through various Multilateral Climate Funds such as:

- GEF Trust Fund to help tackle most pressing environmental problems through financial contributions from the GEF 39 donor countries.

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- LDCF and SCCF – the former applicable to LDC for adaptation and vulnerability reduction while the later is open to all vulnerable developing countries.
- Climate Investment Funds (CIFs) to accelerate climate action in clean technology, energy access, climate resilience, and sustainable forests in developing and middle-income countries.
- GCF to channel climate finance with pledges of \$10.3 billion from 43 state governments.
- Adaptation Fund (AF) that provides an innovative direct access modality to access financing and manage projects directly.
- ▶ In terms of funding, in 2013/14 about 57% was funded through internal sources and rest 43% was funded through foreign aid (grant (21% and loan 22%).
- ▶ Such a ratio changed overtime with foreign aid share reaching 56% (loan 4% and 42% grant) in 2016/17.
- ▶ But there was sharp fall in foreign aid in 2017/18 and reduced to just 19% (loan 4 and grant 14%) indicating no predictable foreign aid behaviour even in highly vulnerable areas.

Major policy /funding problems

Despite climate change Financing Framework (CCFF) 2017 in place, still it lacks robustness in terms of comprehensiveness and coherency, strategies, policies, programs and institutional mechanisms for ensuring effectiveness in the implementation.

- Weak institutional capacity and inter-agency relationships as well as poor inter-sectoral coordinated policy actions to deal with cross-cutting issues are bigger problems.
- Though a separate climate budget is a positive development, it is primarily based on crude estimates and subjective judgments. Lack of model based policy and program analysis has added problems in assessing likely benefits.
- Private sector and community 's role is yet to be embedded more explicitly in the policies and programs.

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- ▶ Different small funds channelled through various donors also constrain implementing larger programs effectively and, as noted above, the erratic aid behaviour is complicating predictable and sustained funding.
- ▶ Studies show that by 2030 an additional US\$2.4 billion of investment will be required to build Nepal's resilience to climate impacts amidst likely 2 to 3 percent of GDP loss annually in foreseeable future. Thus, a big resource gap is looming.
- ▶ After graduation by 2022, the resource gap may widen further due to the end of access to LDCF.
- ▶ One of the major problems is that still policies, programs and funding requirements are envisaged narrowly undermining the likely very adverse wide-ranging impact of rise in temperature in Hindu Kush Himalayan Mountains and Black carbons (BC).

Policy lessons

- ▶ Climate finance would be a cornerstone of the implementation/achievement of all three post-2015 agendas for action – the Paris Agreement, the 2030 Agenda for SDG and the Sendai Framework for Disaster Risk Reduction (DRR) – for sustainable, low-carbon and resilient development.
 - Therefore, a more integrated approach with clarity on new and additional climate finance vis-à-vis development finance will be required at the global level for better tracking, reporting and monitoring.
- ▶ More coordinated efforts at both international and regional level will be needed to help highly climate risk /sensitive countries like Nepal to move toward a low-carbon economy and enhance its resilience capacity.
 - More targeted and focused policies and programs to address multiple problems emanating from rising temperature in Himalayas will be needed.
- ▶ Nepal's experience shows that both air quality management and climate change mitigation need to be simultaneously addressed in a coordinated manner for reduction of both CO₂ and Short Lived Climate Pollutions (SLCPs) to keep the average global temperature rise well below 2C degrees and as close as possible to 1.5C above pre-industrial levels.

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- ▶ Ending fossil fuel subsidies and putting price on carbon through emissions trading systems will be equally necessary .
- ▶ Harnessing huge untapped potential of hydro power and other renewable energy needs priority for building low carbon resilient economy.
- ▶ Nepal will need making climate adaptation and mitigation strategies as a part of overall development strategy along with drastic institutional reforms for the use of resources efficiently and effectively at all three government levels in a coordinated way with high priority on enhancing private sector and community's role simultaneously.
- ▶ In summary, Nepal will need larger inflow of aid to cope with higher climate risk and ensure sustainable graduation by 2022 and reach at the middle-income level by 2030 as targeted under SGDs.