

Nepal and Climate Change

A Brief Overview of Policy Level Commitments and Actions



Nepal, categorized as a developing nation, faces significant vulnerability to the impacts of climate change, ranking as the 10th most affected country globally according to the [Climate Risk Index](#). Despite contributing a mere 0.027% to the total global greenhouse gas emissions, Nepal's susceptibility is highlighted by a study from the Asian Development Bank, projecting a 2.2% loss in its annual GDP due to climate change by 2050.

A recurring argument highlights that historically, developed countries bear greater share of cumulative greenhouse gas (GHG) emissions, that majorly increase the risks of global climate change, but its impacts are often most keenly felt by the developing nations. This stark imbalance underscores the necessity of addressing climate change as a global concern and providing support to regions and communities that are disproportionately affected by its effects. This heightened vulnerability is evident in Nepal's exposure to a broad spectrum of natural disasters, including both extreme and slow-onset climate-related hazards. The complexity of this vulnerability stems from factors such as the fragile mountainous terrain and ecosystems, erratic monsoons influenced by hydrological patterns, the proliferation of unplanned settlements, and a lack of resilient infrastructure. As reported by the [Ministry of Home Affairs \(2017\)](#), approximately 80% of Nepal's population faces risks associated with natural and climate-induced hazards, encompassing extreme heat stress, flooding, landslides, windstorms, hailstorms, fires, earthquakes, and Glacial Lake Outburst Floods (GLOFs). Over the past four decades, floods and landslides have emerged as the most frequent hazards, impacting the economy through reduced agricultural productivity, infrastructural damage, and the need for high energy imports during dry seasons, among other consequences.

Nepal's Obligations and Policies

Given this context, and recognizing its heightened vulnerability to climate change effects, Nepal has taken some proactive steps to address the issue. For instance, Nepal ratified the Paris Climate Agreement and submitted its initial [Nationally Determined Contributions \(NDC\)](#) in 2016, followed by a [second submission](#) in December 2020. In addition to these international commitments, Nepal has diligently established essential policy frameworks, including the National Climate Change Policy of 2019, the Solid Waste Management Policy of 2022, the Forest Regulation of 2022, and the Land Use Regulation of 2022. These policies underscore Nepal's commitment to environmental conservation and sustainable development. To enhance the responsiveness of local government entities, the Ministry of Finance published the [Climate Change Financing Framework \(CCFF\)](#) in 2017, facilitating policymakers in organizing and allocating funding.

Furthermore, Nepal has proactively developed a [National Adaptation Plan \(NAP\)](#) spanning from 2021 to 2050. This comprehensive plan aims to address and mitigate the adverse impacts of climate change, diminishing the country's vulnerability while enhancing resilience. The NAP's strategic framework outlines long-term adaptation goals up to 2050, supplemented by medium-term priority programs extending to 2040 and short-term priority actions scheduled for implementation by 2030. These targeted programs play a pivotal role in enabling the Government of Nepal (GoN) to fulfill the adaptation commitments articulated in its Nationally Determined Contribution (NDC) for the year 2020. Notably, the NAP functions as Nepal's formalized Adaptation Communication, fulfilling a crucial requirement stipulated by the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).

However, despite these commendable policy initiatives, plans, and international commitments, Nepal still faces significant challenges. These challenges encompass resource scarcity, limited capabilities within local and provincial governments, and a shortage of expertise in managing climate budgets at all level of governments. These hurdles hinder the effective implementation of reforms and the appropriate allocation of investments. Thus, there is a pressing need for improved execution and resource allocation to further advance Nepal's climate action agenda.

Nepal's 'Loss and Damage' Initiation and its Need

Nepal's [National Framework on Loss & Damage](#) in 2021 provides a comprehensive perspective on these intricate challenges that comes with the climate changes induced loss and damage. The extensive concept of loss and damage encompasses both economic and non-economic dimensions where the economic losses involve the depletion of resources, goods, and services, while non-economic losses extend to areas such as life, health, displacement, human mobility, territory, cultural heritage, indigenous/local knowledge, biodiversity, and ecosystem services.

In the current context, Nepal faces a grim reality where climate-induced disasters account for approximately 65% of annual deaths related to disasters. The economic ramifications are substantial, with an average annual loss from climate-induced disasters amounting to about 0.08% of the GDP, as per 2018/19 figures at the current price. In particularly disaster severe years, such as 2017 when Terai floods ravaged the region, the economic loss and damage from this singular event escalated to around 2.08% of the GDP, based on 2017/18 figures at the current price ([National framework on L&D, 2021](#)).

Nonetheless, despite the loss and damage borne by the least developed countries and developing countries to date, the idea for a loss and damage fund only materialized in Conference of Parties (COP)-27. In the UN Climate Change Conference (COP-27) in Egypt in November 2022, countries reached an agreement to establish a fund to compensate vulnerable nations for 'loss and damage' caused by climate-induced disasters and the COP28, organized in United Arab Emirates (UAE) in November-December 2023 marks a major [milestone](#) with the historic agreement to operationalize this fund, providing support to developing countries who are particularly vulnerable to the adverse effects of climate change. This agreement is a significant step forward in addressing the challenges of climate change and ensuring the welfare of vulnerable communities worldwide.

Given this context, it is imperative for government of Nepal to be a recipient of climate fund from the [Green Climate Fund](#) and Loss and Damage Fund, highlighting the urgent need to address the loss and damage that Nepal experienced due to the human-induced climate crisis. By emphasizing the real and tangible consequences faced by communities, the government must seek support for financial resources dedicated to climate resilience, recovery, and sustainable development. In this context, it is crucial for the Government of Nepal to take some proactive efforts to secure as many grants as possible through these funds. Once the government successfully acquires these grants, an efficient mechanism for the systematic and equitable distribution of resources should be established for areas affected by climate crises.

Nepal's Conflictual Situation

When Nepal initially submitted its first Nationally Determined Contributions (NDC) to the UN, it committed to boosting the share of electric vehicles to 20% by 2020 and expanding renewable energy to 20% by the same year. However, in its second NDC submitted the following year, the share of renewable energy in the country's energy mix had only reached around 3%. Electric vehicles accounted for approximately 1% of the market, as per the revised NDC document.

Adding to this challenge, Nepal aspires to achieve net-zero emissions by 2045, yet it is concurrently extending its petroleum pipelines from India and constructing additional storage facilities. Furthermore, over the past four years, there has been a significant surge in the overall consumption of fossil fuels, with gasoline use doubling during this period.

Compounding the situation, considerable confusion at the local government level exists. The Ministry of Federal Affairs and General Administration (MoFAGA) has issued directives for local governments to incorporate disaster management, including climate change mitigation and adaptation, under the Local Disaster and Climate Resilient Planning (LDCRP) framework. However, Nepal already has a pre-existing Local Adaptation Plans for Action (LAPA) national framework, last updated in 2019. This has left local government officials grappling with which framework to adhere to, given the overlaps and distinctions between the two.

COP 2023 and Nepal

The initiation of COP 2023 saw Nepal actively participating in the global discourse on climate change, with the Prime Minister of Nepal organizing a significant high-level side event titled "Call of the Mountain: Who Saves us from the Climate Crisis?" in Dubai, UAE, on 2 December 2023. During this event, United Nations Secretary-General António Guterres expressed a poignant message, highlighting the plight of Nepal and other vulnerable mountain nations, asserting that these "country do not [contribute to climate change but suffer the consequences](#)". Guterres emphasized the alarming loss of nearly a third of Nepal's ice in just over three decades, attributing it directly to the greenhouse gas pollution warming the planet. This follows Guterres' official visit to Nepal from October 29 to November 1, 2023, where he passionately called upon the global community to urgently cease the use of fossil fuels. His visit underscored the severe threats of climate catastrophe if

immediate and collective actions are not taken to mitigate the impacts of climate change.

In its capacity as the chair of the Least Developed Countries (LDCs), Nepal took a proactive stance, stressing the importance of a predictable, simplified, and adequate loss and damage fund tailored to the specific needs of LDCs and mountainous countries. The country also advocated for the initiation of a comprehensive dialogue on the intersection of mountain ecosystems and climate change.

Addressing the opening of 'National Statements,' a high-level segment of COP28, the Prime Minister of Nepal articulated concerns regarding the misalignment between the pledges and actions of developed countries. He urged developed nations to elevate their ambitions, fulfill their commitments urgently, and address the \$100 billion shortfall in climate finance. Furthermore, the Prime Minister called for a doubling of adaptation finance by 2025 and insisted on fair financial arrangements devoid of conditions, constraints, and compliances. He advocated for grants as a just response to the crisis, reiterating the need for a predictable, simplified, and adequate loss and damage fund specifically tailored for the LDCs and mountainous countries.

The Prime Minister further emphasized the utilization of the Global Stock Take (GST) Report as a comprehensive roadmap for all nations, urging solidarity and swift action in response to the climate crisis. Finally, he reiterated the necessity of initiating a dialogue specifically focused on the intricate relationship between mountain ecosystems and climate change.

Nepal's active participation and advocacy during COP 2023 reflect a commitment to addressing the unique challenges faced by mountainous nations and LDCs, underlining the urgency for global cooperation and decisive action in the face of the climate crisis. However, despite Nepal's engagement in various topics in COP 28, some crucial issues were overlooked. Notably, there were gaps in discussions regarding the preservation and promotion of indigenous knowledge to address the climate crisis, the specific impact of climate change on women and marginalized communities, the urgent need for local capacity enhancement on climate change, and the potential repercussions of climate change on Nepal's heavily invested hydropower industry and infrastructure. Addressing these topics is vital for a more comprehensive and effective approach to climate action for countries like Nepal.

Challenges in Nepal Concerning Climate Change:

Climate change wields a direct and profound influence on local communities, particularly affecting Indigenous populations, women, and marginalized groups. Observable shifts in climate patterns have disrupted the accessibility of traditional food sources, leading to forced relocations, migrations, and habitat disruptions caused by water loss and alterations in precipitation patterns. In light of this context, each demographic encounters unique challenges thereby necessitating customized solutions for effective adaptation and mitigation measures.

Nepal, as a developing nation, grapples with the inevitable repercussions of climate change. It is crucial for Nepal to assertively highlight the urgency of the climate crisis, elucidate the formidable challenges encountered in mitigating its impact, and articulate imperative requirements, including enhanced international assistance, technological support, and developmental aid. Strengthening climate action initiatives is paramount.

Accessing climate finance poses a significant hurdle for local Civil Society Organizations (CSOs) and governments. While prominent actors within the donor community in Nepal have successfully obtained climate

COP28 highlights

- 97,000 delegates, including over 150 heads of state along with negotiators, business leaders and non-state actors.
- COP 28 concluded with first ever Global Stock Take (GST)
- UAE Consensus signed by 200-countries that focuses on, "Transitioning Away" from fossil fuels.
- Reiterates the target of a 1.5° C global warming limit with 43% emission cut by 2030 and 60% cut by 2035, relative to 2019
- Tripling of renewable energy by 2030.
- Loss and Damage Fund Creation

Key Highlight of Nepal's second NDC

- More ambitious in terms of its sectoral coverage (Energy; Industrial Processes and Product Use; Agriculture, Forestry, and Other Land Use; and Waste/Sanitation), and contribution, given the strengthened policy measures and updates on sectoral targets, which will contribute to cumulative emission reductions.
- Committed to achieving net-zero greenhouse gas emissions [by 2045](#).
- Nepal plans to develop an [Action Plan](#) for integrating Gender Equity and Social Inclusion in achieving NDC targets.
- All 753 local governments to prepare and implement climate-resilient and gender-responsive adaptation plans by 2030.

finance, communities directly impacted often lack awareness about climate change, perceiving the prospect of accessing such funding as unattainable. This inaccessibility hampers local efforts to implement climate change adaptation solutions, hindering the adoption of climate-smart technologies, awareness programs, nature-based solutions, and similar initiatives at the grassroots level.

The nation's mountain ecosystem heightens susceptibility to climate change, with the melting of ice caps and the potential outburst of glacial lakes posing significant risks to the population. These environmental challenges not only jeopardize the safety of communities but also have adverse effects on both the economy and livelihoods, presenting a dual threat to the overall well-being of the region.

Nepal, as a developing nation, faces challenges in combating climate change. While it can take steps like preserving forest coverage, imposing higher taxes on vehicles, and reducing emissions independently, achieving larger-scale climate goals necessitates more extensive actions. These actions encompass expanding renewable energy sources, enhancing infrastructure for climate-resilient development, implementing advanced technologies to monitor and mitigate climate-related risks, and elevating awareness and education on climate issues. To realize these ambitious objectives, Nepal requires substantial financial resources, access to advanced technical expertise, and infrastructural investments. In this regard, collaboration and assistance from the global community has become indispensable. While Nepal's policy efforts are indeed commendable, the support and cooperation of the international community are essential to ensure the success of its climate change mitigation endeavors.

Published by:

Centre for Social Change (CSC)

Kathmandu, Nepal

www.socialchange.org.np

contact@socialchange.org.np

Research and writing by:

Susmita Puri

Research Officer

Centre for Social Change



Centre for Social Change

सामाजिक परिवर्तन केन्द्र