

From Pledges to Action: NDC 3.0 for Poverty Reduction and Climate Justice in Nepal

Arbind Chaudhary, Suresh C. Babu, and Bibek Chaudhary

Introduction

Located in the heart of the Hindu Kush Himalaya (HKH) region, Nepal plays a vital geopolitical and ecological role in South Asia's climate landscape. Although the country contributes less than 0.03 percent to global greenhouse gas emissions (MoFE 2020) and has extensive forest cover of 46 percent (MoFE 2025), it faces disproportionate risks from climate-induced disasters, such as glacial lake outburst floods (GLOFs), erratic monsoons, and prolonged droughts. The HKH region spans eight countries and hosts 10 major river basins and more than 87,000 square kilometers of glaciers, delivering water and ecosystem services to more than 1.9 billion people downstream (ICIMOD 2025a). Within this complex hydrological system, Nepal's rivers—including the Koshi, Gandaki, and Karnali—not only sustain local livelihoods but also feed millions in India's Bihar and Uttar Pradesh, and even parts of China.

Climate justice is imperative in this context: Nepal's low emissions profile stands in stark contrast to its high vulnerability (CVF 2024), requiring urgent attention to equity, adaptation finance, and inclusive development pathways. This policy note discusses Nepal's role in climate justice diplomacy, examines the regional and country-level context of climate risk, and assesses Nepal's third Nationally Determined Contribution (NDC 3.0) to reframe climate action through a justice-centered lens.

Small State, Big Principles: Nepal’s Climate Justice Diplomacy

Despite its modest economic and geopolitical weight, Nepal has emerged as an important advocate for climate justice in international negotiations. As a least developed country (LDC) with a negligible carbon footprint, Nepal strategically highlights its disproportionate climate vulnerability to emphasize its moral legitimacy (MoFE 2020). The country consistently upholds principles such as equity, common but differentiated responsibilities, and loss and damage (L&D) within key climate platforms, such as the United Nations Framework Convention on Climate Change (UNFCCC), the LDC Group, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC),¹ the South Asian Association for Regional Cooperation (SAARC),² and climate dialogues (UNDP 2025).

Nepal’s climate justice stance is anchored in its experience with climate hazards: GLOFs, droughts, and erratic monsoons threaten both ecosystems and livelihoods. Nepal’s constitution recognizes the fundamental right to a clean and healthy environment, thereby embedding climate justice within its national legal and political framework (Government of Nepal 2015). This also provides a strong basis for asserting environmental equity in global negotiations.

Nepal’s NDC 3.0 reflects this justice-centered approach. It not only outlines ambitious adaptation goals but also calls for fair access to international finance, technology transfer, and capacity-building—especially for vulnerable communities spanning from the Tarai (southern plain) to Himalayan regions (MoFE 2025). Moreover, Nepal’s diplomatic messaging emphasizes that mitigation ambition in the Global South must be met with concrete support from high-emitting countries, in line with global climate justice norms (UNDP 2025).

Nepal’s principled leadership allows it to frame climate change not only as an environmental crisis but also as a profound human rights and intergenerational equity issue. This positions Nepal as a moral voice for vulnerable communities living in both mountain areas and downstream.

Regional Context: Climate Justice in South Asia

Home to more than 2.09 billion people, or 25 percent of the world’s population, South Asia is among the world’s most climate-vulnerable regions. Intensifying heatwaves, floods, glacial melt, and erratic monsoons are creating a new “climate normal” that threatens communities and economies alike (World Bank 2025a). Well over 750 million people across its eight countries, including Nepal, have faced at least one climate disaster in the last two decades, with poor, Indigenous, and agrarian populations bearing the brunt of this new normal (Aryal et al.

¹ <https://bimstec.org/>

² <https://www.saarc-sec.org/>

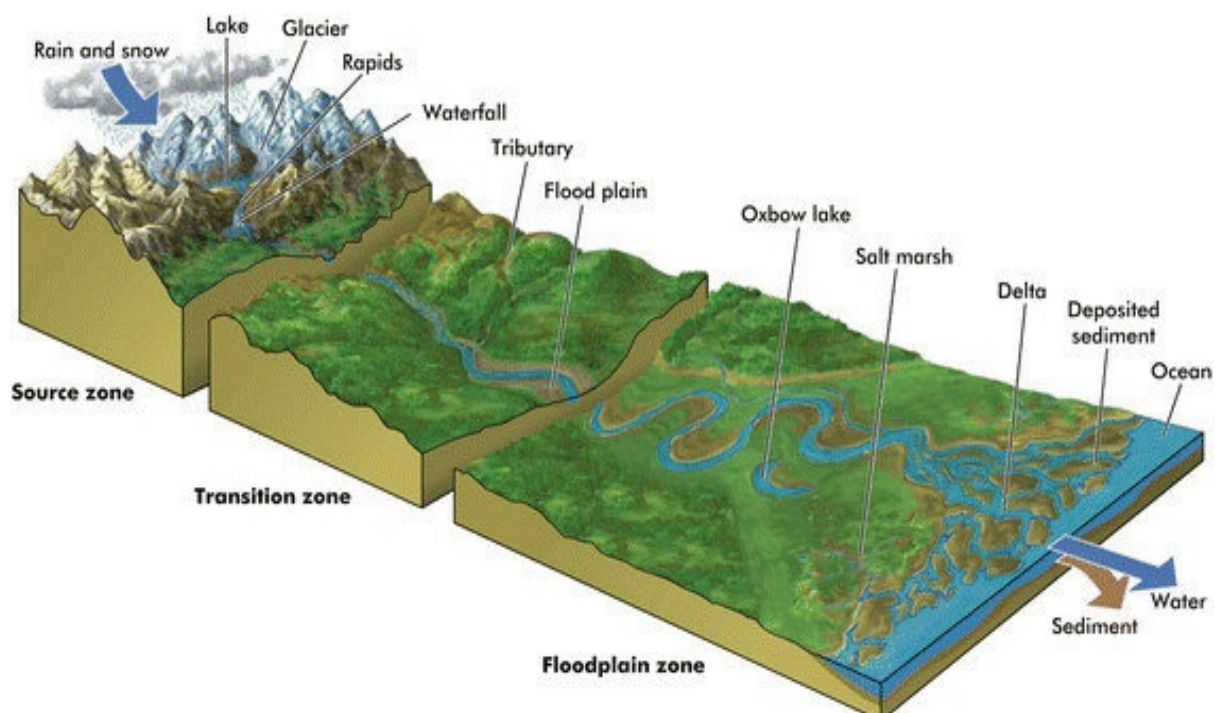
2020). These impacts reflect not just environmental risks but also deep structural inequities in access to resources, infrastructure, and political power.

Inequitable infrastructure and planning exacerbate climate injustice throughout the region. The 2022 floods in Pakistan displaced 8 million people, putting a strain on state capacity (Akthar and Reid 2024), while Sri Lanka's fiscal crisis has hampered climate investments despite debt-for-nature exchange interest (Wignaraja and te Velde 2023). Bangladesh's Climate Change Trust Fund invests domestic resources in rural adaptation projects such as embankments, cyclone shelters, irrigation, and livelihood support to close the urban-rural climate gap (Bangladesh Climate Change Trust 2024). Meanwhile, India is testing just-transition financing in coal-dependent states to protect workers and communities as decarbonization progresses (Shrivastava 2024).

Geographies of Injustice: Caste, Class, and Climate Risk in Nepal

Nepal's exposure to climate hazards is deeply unequal and shaped by entrenched social hierarchies and geographic disparities. Although all parts of the country are vulnerable to climate change, the nature and severity of the impacts—as well as the capacity to respond—vary significantly across geography, caste, gender, and economic class. These disparities show that climate vulnerability in Nepal is not only environmental but also rooted in long-standing political and structural exclusion (Government of Nepal 2024).

Figure 1: Longitudinal zone of the Himalayan river basin



Source: ICIMOD (2025b).

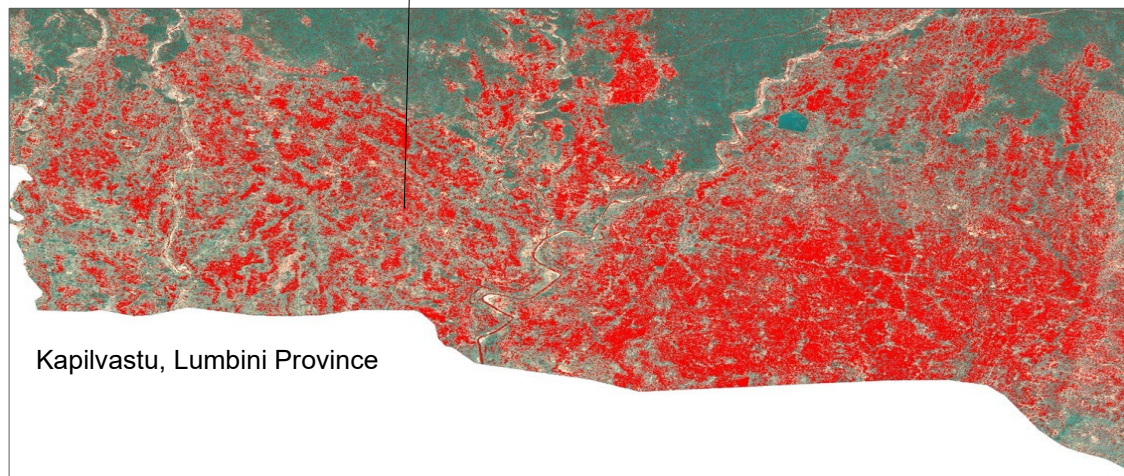
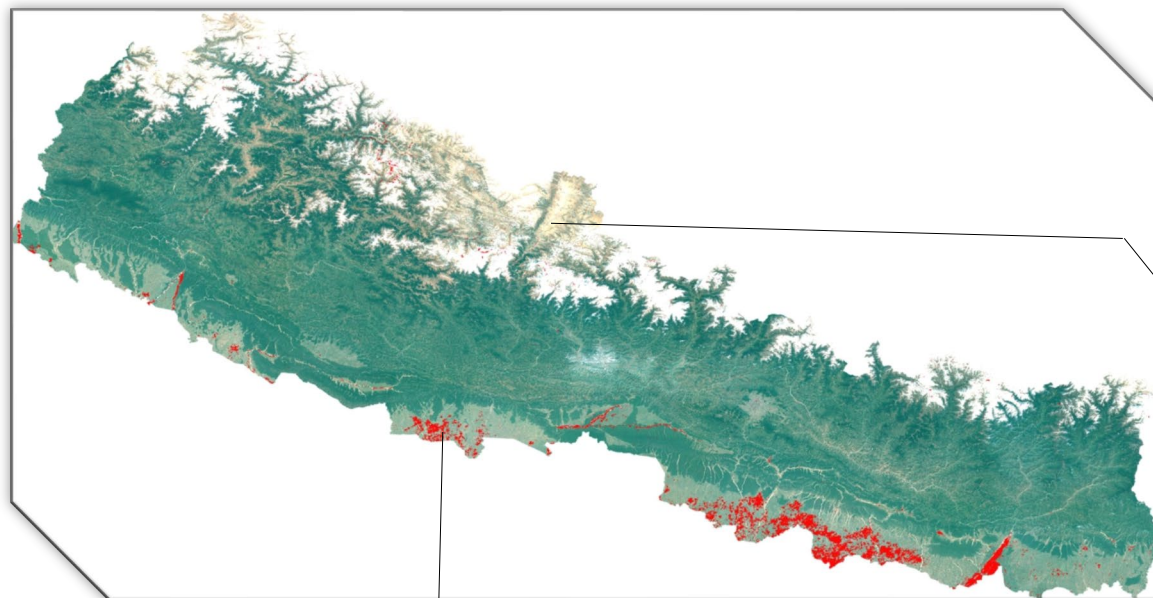
Rural provinces such as Sudurpashchim and Karnali exhibit poverty rates as high as 34.9 percent and 29.9 percent, respectively. Although Nepal's national Gini index stands at 0.30, deeper structural inequities persist, particularly among female-headed households and marginalized ethnic groups (Government of Nepal 2024). Dalits, Janajatis, and Madhesis—many of whom reside in high-risk areas—receive less than 10 percent of public adaptation funds, despite facing greater climate-related livelihood losses (Nepal SDG Forum 2025). Their underrepresentation in local climate governance severely limits access to early warning systems, recovery infrastructure, and adaptation planning.

Figure 1 shows a river's journey from glacier-fed mountain headwaters (source zone), through a gentler transition with tributaries and floodplains, to broad lowland meanders that create oxbow lakes, marshes, and a sediment-rich delta where the river enters the ocean. Despite experiencing low levels of rainfall, Nepal's mountain districts, such as Mustang, are increasingly prone to GLOFs triggered by accelerated ice melt and climate-induced hydrological shifts such as floods (Figure 2, Upper Mustang). Meanwhile, the Tarai region (floodplain)—home to densely flood-prone districts such as Kapilvastu (Figure 2)—faces recurrent seasonal flooding from monsoon-driven river overflows, poor drainage, and unsustainable land-use changes. These ecological hazards have caused crop loss, displacement, and greater poverty and migration pressures in already fragile communities.

Gender-based exclusion further amplifies these vulnerabilities. Although women constitute 74 percent of Nepal's agricultural labor force (United Nations Nepal 2023), they own just 9.7 percent of farmland, limiting access to climate finance, insurance, and adaptive technologies (World Bank 2025b). Additionally, rural women, Dalits, and Indigenous people—many of them subsistence farmers—remain excluded from adaptation funds and national safety nets, despite shouldering the bulk of climate impacts (Nepal SDG Forum 2025).

Even well-intended climate interventions have reproduced inequality. Four major hydropower projects—Likhu, Tanahu, Upper Trishuli-1, and Upper Arun—proceeded without securing Free, Prior, and Informed Consent (FPIC) from Indigenous Peoples, resulting in displacement and rights violations (Accountability Counsel 2025). Similarly, Nepal's national green jobs programs report less than 12 percent participation from women, Dalits, or people with disabilities (ILO 2023). These patterns illustrate that without justice safeguards—such as equitable targeting, transparency, and community oversight—Nepal's low-carbon development could worsen existing divides. True climate resilience in Nepal must therefore address not only emissions and infrastructure but also the deeper social inequities that determine who suffers, who adapts, and who gets left behind.

Figure 2: Flood risks in Nepal



Kapilvastu, Lumbini Province

Upper Mustang, Gandaki Province



Source: Authors' analysis using Sentinel-1 data (2018).

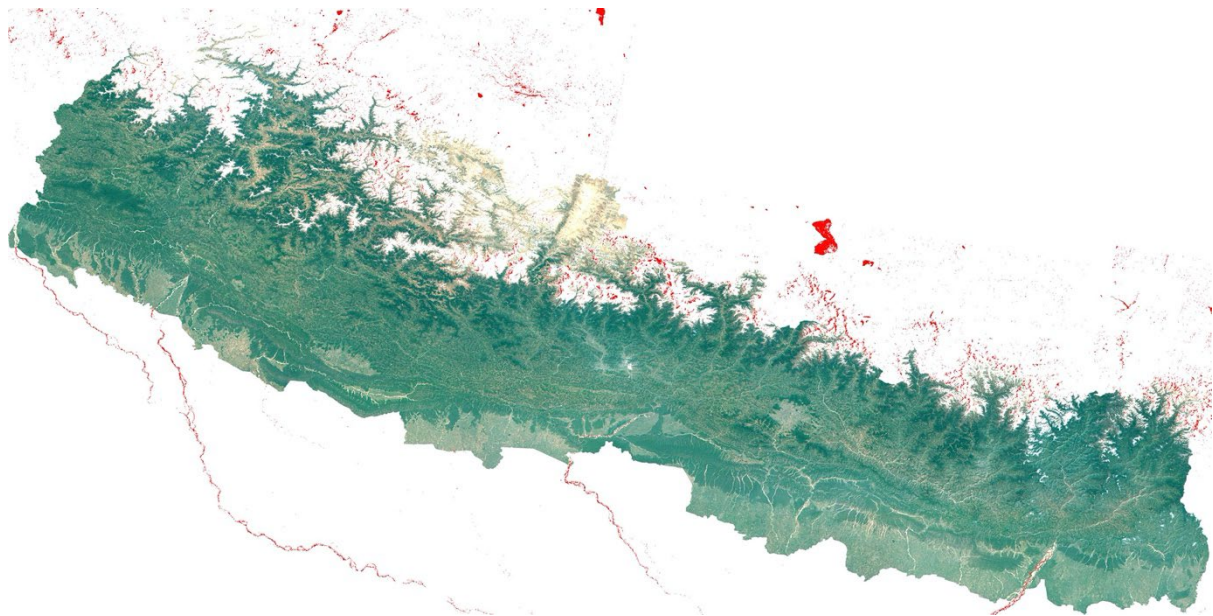
Note: Red shading indicates flood areas.

Dual Extremes, Diverse Landscapes: Tailoring Flood and Drought Policy

As with Nepal’s broader climate vulnerability, flood risk is shaped by sharp contrasts in geography (Himalayan headwaters vs. Tarai plains), climate (monsoon variability), and socioeconomic conditions, necessitating region-specific, adaptive policy responses rather than uniform strategies. In the Tarai plains, recurring monsoon floods are intensified by poor land-use planning, floodplain encroachment, and inadequate drainage. These areas are densely populated by marginalized communities—such as Madhesis, Dalits, and landless laborers—who often lack land tenure, durable housing, and access to recovery assistance (Nepal SDG Forum 2025).

The Tarai region faces a dual climate threat: devastating floods and prolonged droughts, especially in districts such as Kapilvastu, Rupandehi, Banke, and districts of Madhes Province (Figures 2 and 4). These extremes undermine food security, strain infrastructure, and weaken the already fragile local economy—impacts that fall hardest on marginalized communities and smallholder farmers. In contrast, the Himalayan region experienced intense flooding in early 2025, with major rivers such as the Karnali, Koshi, and Gandaki swelling beyond capacity (Figure 3).

Figure 3: Flooding in Nepal, 01/2025–07/2025

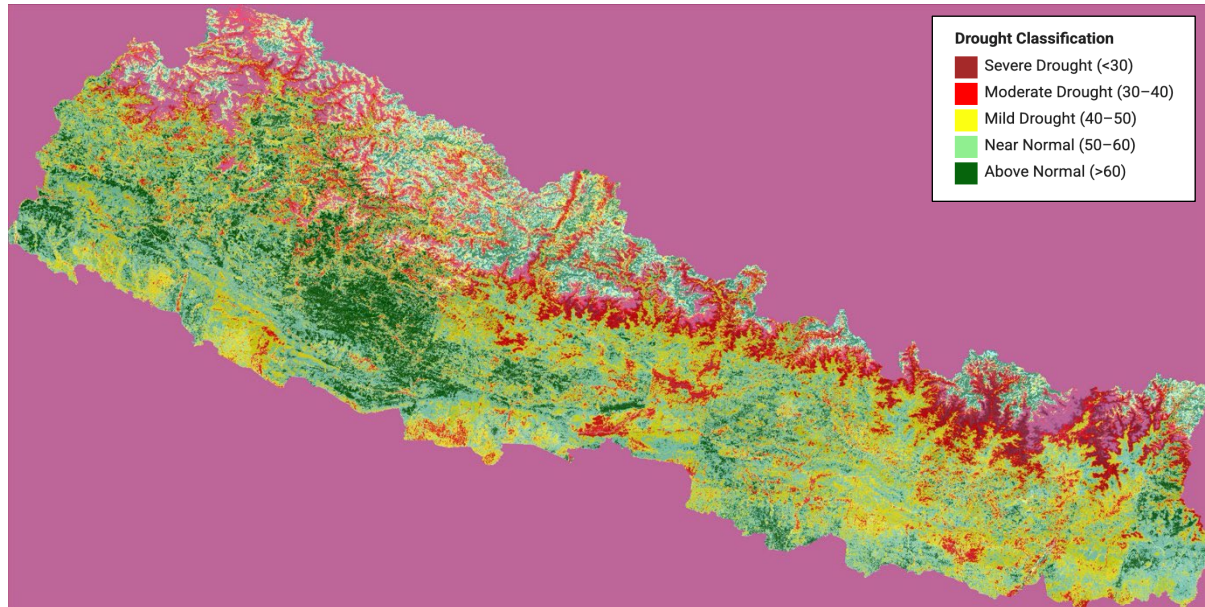


Source: Authors’ analysis, global flood database (MODIS).

While global emissions are the root cause, the burden falls heavily on Himalayan communities—particularly Indigenous groups in regions such as Mustang—who now face both heightened flood risks and increasing drought stress (Figures 2 and 4). This underscores the need

to address international climate justice at global platforms such as the Conference of the Parties and UNFCCC meetings. At the same time, the recurring floods in the Tarai underscore the importance of internal climate justice and effective domestic climate governance.

Figure 4: Drought conditions across Nepal, 01/2025–08/2025



Source: Authors' analysis, Sentinel-2 and Landsat 8 database (2025).

In this context, Nepal's NDC 3.0 commitments are imperative and must be touchstones in fairness, with well-defined, inclusive plans and targeted programs to ensure that climate adaptation and mitigation efforts reach the most affected communities.

What's New in Nepal's NDC 3.0?

Nepal's NDC 3.0 represents a strategic step forward in its climate commitments: more structured, more socially responsive, and better aligned with the country's net zero targets and the Sustainable Development Goals. NDC 3.0 is built around a refined sectoral ambition (Table A1, Appendix A). It has recalibrated key targets in energy, transportation, agriculture and food security, forestry, health, loss and damage, disaster risk reduction, and climate finance and governance for greater precision and transformative impact.

Energy and Transportation

Nepal's clean energy and transport transition risks reinforcing structural inequality, as current policies prioritize emissions targets over equitable access. Although it aims for 70 percent clean electricity and 25 percent public transport electrification by 2030, these efforts remain urban-centric, leaving rural regions such as Karnali and Sudurpashchim with unreliable power and poor infrastructure. The focus of the state and donors on large-scale hydropower sidelines

decentralized solutions such as micro-hydro and solar, which are better suited to remote communities. In transport, EV subsidies have largely benefited urban elites, while low-income operators of tempos, rickshaws, and minibuses remain excluded from financing and infrastructure (Kathmandu Post 2025). Cities concentrate on charging stations, and there is no meaningful plan to decentralize services. Without targeted investment and inclusive planning, Nepal's climate agenda risks deepening existing disparities under the guise of progress.

Forestry

Nepal's reaffirmation of its forest cover target in NDC 3.0 draws on its globally acclaimed community forestry model. While the approach appears commendable, it conceals persistent inequities in forest governance and benefit distribution. Although the strategy promotes participatory forest management and REDD+ expansion, it lacks clarity on how carbon revenues will reach Indigenous peoples, Dalits, Madhesis, women, and land-poor agroforestry farmers. The rhetoric of community engagement often masks elite dominance within community forest user groups (CFUGs), where decision-making power remains concentrated.

To ensure forest-based climate action is both effective and just, Nepal must institutionalize safeguards that go beyond symbolic inclusion. This requires formal, transparent revenue-sharing mechanisms that prioritize marginalized forest-dependent households. Legal enforcement of FPIC should be mandatory for all forest-carbon initiatives. Additionally, users outside formal CFUG structures—such as private forest owners and agroforestry farmers—must be recognized in carbon accounting frameworks and granted access to technical support, monitoring training, and equitable incentives under both national and international finance schemes. Without such provisions, Nepal's forest strategy risks becoming a technocratic exercise that favors market actors while excluding the very communities whose stewardship sustains forest ecosystems.

Agriculture and Food Security

NDC 3.0 commits to advancing climate-smart agriculture through increased soil organic matter, orchard expansion, and reduced postharvest losses. These goals respond to growing climate pressures on Nepal's farming systems, yet overlook the systemic barriers faced by smallholders, tenant farmers, and Indigenous cultivators. Farmers continue to endure declining yields from erratic rainfall and pest outbreaks, with limited access to adaptive seeds, insurance, or climate-resilient practices.

The agriculture sector is Nepal's largest greenhouse gas emitter, with methane from flooded rice cultivation as a key source. Yet NDC 3.0 offers no assurance that low-emission transitions, such as crop residue management, will be affordable or accessible for poor farmers. Women, who make up more than 74 percent of the agricultural workforce, remain disadvantaged in land ownership, credit, and technology use. While the NDC refers to inclusive planning, it lacks concrete support for seed banks, climate services, or women-led adaptation. Without targeted action, these ambitions risk reinforcing inequality rather than advancing resilience.

Water and Infrastructure

NDC 3.0 prioritizes climate-resilient infrastructure and water, sanitation, and hygiene systems, but fails to address persistent regional disparities. The dry middle altitude Hills, mountains, and Tarai regions continue to face chronic water scarcity, and many water and sanitation systems are non-functional. Vulnerable communities, particularly those in landslide and flood-prone areas, continue to suffer from poor infrastructure. Despite commitments to climate-proof infrastructure, it is unclear how investments will be allocated equitably. Climate resilience risks becoming an urban-centered promise that ignores those most vulnerable, unless pro-poor infrastructure is prioritized and women and marginalized groups are included in planning.

Health

NDC 3.0 acknowledges the link between climate and health by proposing surveillance systems and early warnings, yet the actual health system remains underprepared and unevenly equipped. Recent surges in diseases, mostly dengue in hill districts, highlight growing vulnerabilities, while overstretched public health infrastructure cannot respond effectively, especially in remote or Indigenous communities. Although the NDC calls for localizing climate–health plans, it offers no strategy for ensuring equitable resource distribution or training health workers in climate-sensitive care. Without stronger investment in rural health systems and equity-based planning, climate–health risks will continue to fall hardest on those already underserved.

Disaster Risk Reduction

Although NDC 3.0 strengthens commitments to multi-hazard early warning systems and community-based preparedness, significant equity gaps remain unresolved. In practice, early warnings frequently fail to reach flood-prone rural Tarai areas, and relocation assistance is either delayed or unavailable. Marginalized groups, particularly Indigenous peoples, Madhesis, women, and Dalits, are frequently excluded from local disaster risk reduction planning and

decision-making. Without multilingual and accessible communication tools, as well as inclusive relocation and social protection strategies, Nepal's disaster response framework has the potential to exacerbate preexisting vulnerabilities.

Loss and Damage

NDC 3.0 marks progress by introducing a national L&D mechanism, yet practical support for affected communities remains absent. Families displaced by GLOFs and slow-onset droughts, especially in regions such as the Himalayan ranges and the Tarai plains, continue to receive little to no formal compensation or relocation support. Despite facing heightened vulnerability, landless and marginalized groups are often excluded from recovery processes. Without participatory and inclusive post-disaster frameworks, the L&D mechanism risks becoming symbolic, rather than serving as a transformative means to address real climate injustices.

Climate Finance and Governance

NDC 3.0 emphasizes institutional mainstreaming and local access to climate finance, yet systemic barriers persist. While most municipalities lack the technical capacity to develop climate proposals, planning and budgeting processes often sideline grassroots actors, particularly women's groups. Without dedicated funding channels for marginalized communities and mechanisms for gender- and caste-inclusive financing, the promise of equitable climate governance remains unfulfilled. Strengthening local pipelines and capacity must become central to Nepal's climate finance architecture.

Evaluating from a Climate-Justice Perspective

The International Court of Justice (2025) affirmed the right to a clean, healthy, and sustainable environment by ruling that all states have binding legal obligations to prevent environmental harm, reduce emissions, and protect present and future generations, thereby reinforcing this principle. This ground-breaking ruling establishes a more robust foundation for legal demands in global climate governance, as well as for moral claims, in countries such as Nepal. Examining NDC 3.0 through the lens of climate justice reveals significant progress while also highlighting persistent gaps. The Paris Agreement and the IPCC's Sixth Assessment Report both emphasize the importance of equity, historical responsibility, and capacity in national climate efforts (IPCC 2023). While NDC 3.0 rhetorically aligns with these principles, particularly by using just transition language and linking poverty reduction efforts, it falls short of operationalizing equity across implementation tiers.

Multi-stakeholder consultations were held during the NDC 3.0 planning process, but inclusiveness remains uneven. Many marginalized groups, including Indigenous peoples, Dalits, Madhesi, and people with disabilities, continue to be denied meaningful decision-making power at the national and provincial levels. Institutional arrangements remain largely top-down, and while local governments are legally empowered, they frequently lack the technical and financial capacity to shape climate priorities.

The focus on disaggregated monitoring and evaluation represents a significant improvement. The Measurement, Reporting, and Verification framework proposes indicators based on gender, caste, and geography, with the potential to improve transparency in determining who benefits from mitigation and adaptation programs. However, data availability and integration into budgeting and reporting systems remain limited, risking dilution of justice goals during implementation (MoFE 2025).

Concerns remain about elite capture and uneven distribution of climate finance and benefits. For example, programs in renewable energy and climate-smart agriculture are frequently concentrated in better-resourced municipalities or areas where donor projects already exist, leaving structurally disadvantaged regions behind. Vulnerable farmers (women, ethnic minorities, and poor farmers) are less likely than wealthier and non-minority farmers to have access to climate finance subsidies (Kafle, Paudel, and Shrestha, 2022). Without enforceable safeguards or targeted redistribution mechanisms, NDC 3.0 may unintentionally exacerbate the inequalities it seeks to address.

Conclusion

As a critical nation in the HKH region, Nepal makes minimal contributions to global GHG emissions. Its extensive forest cover renders it disproportionately significant in national and regional climate balances. The country sequesters massive amounts of carbon, supports biodiversity, and maintains the economic well-being of millions of people, including downstream communities in Nepal and northern India. This policy note assesses Nepal's NDC 3.0 through a climate justice lens to ensure equitable, inclusive, and responsive climate action in local and transboundary contexts.

Nepal's NDC 3.0 has ambitious climate goals, but without structural reforms, these goals risk worsening inequality. Dalits, Madhesi, Indigenous peoples, women, and smallholder farmers are excluded from meaningful participation, equitable climate finance, and adaptation benefits. Accelerating glacial melt in the Himalayas causes GLOFs that devastate mountain communities, and prolonged droughts in the Tarai trap poor farmers in poverty, migration, and debt. Climate shocks are worsening historical injustices and socioeconomic disparities. Remote,

climate-vulnerable regions are neglected by the clean energy and electric vehicle agenda promoted by urban elites. Forest and agriculture strategies often prioritize technical solutions instead of governance and resource distribution. Climate finance is top-down and inaccessible to grassroots actors, while health, water, and disaster planning recognize emerging risks but lack inclusive and locally driven systems.

Nepal must go beyond symbolic inclusion by redistributing resources, empowering local institutions, and integrating equity into climate planning and implementation. Climate action must address emissions reduction and structural power imbalances that perpetuate vulnerability by prioritizing at-risk communities in international climate finance and adaptation. Nepal can also strengthen cooperation with neighbors through BIMSTEC, SAARC, or bilateral frameworks, which could improve early warning systems, climate-resilient trade, and flood governance.

Appendix A: NDC Commitments and Climate Justice Dimensions

Table A1: Comparative overview of Nepal's NDC 2 and NDC 3.0 commitments across key sectors and climate justice implications

Sectors	NDC 2 commitments (2020)	NDC 3.0 commitments (2025)	Actual experiences (as of 2024)	Climate justice implications
Energy	<ul style="list-style-type: none"> Install 15 gigawatts (GW) of renewable energy by 2030 Ensure 15% of electricity is supplied by clean energy by 2030 Promote electric vehicles and clean cooking (electrify 25% of households for clean cooking by 2030) 	<ul style="list-style-type: none"> Achieve 28.5 GW of renewable energy by 2035 Ensure 15% of total installed capacity from decentralized (off-grid) systems Achieve 60% clean cooking access by 2030 Ensure a 25% share of electric public vehicles by 2030 Reduce fossil fuel dependency by 50% by 2030 Introduce time-bound grid expansion and rural electrification. 	<ul style="list-style-type: none"> Urban electrification is nearing 90%, but rural areas such as Karnali and Sudurpashchim face frequent blackouts Off-grid micro-hydro and solar projects remain underfunded Electric vehicles and clean cooking solutions are concentrated in cities Traditional energy consumption (fuel wood and biomass) accounts for 63.87%, commercial energy for 33.03% (with 25.80% from fossil fuels and 7.23% from grid electricity), and renewable energy (wind, solar, biogas, and mini/micro and pico hydro-power) for 3.1% (WECS 2024). 	<ul style="list-style-type: none"> Decentralized renewable energy investment is needed for Indigenous and marginalized communities Clean energy and cooking access should prioritize affordability for the rural poor Time-bound subsidy reform must correct the current urban-elite bias in EV incentives
Agriculture & Food Security	<ul style="list-style-type: none"> Improve soil health: Raise soil organic matter to 3.95% by 2030 through composting and organic inputs Scale climate-smart farming: promote agroforestry, orchards, smart villages, and livestock waste management Revise Agriculture and Rangeland Policies to integrate climate priorities Ensure inclusion: expand access to climate technologies for women, Indigenous groups, and smallholder farmers Preserve seeds and reduce losses: support indigenous seed banks and reduce postharvest loss to 15% by 2035 	<ul style="list-style-type: none"> Assess the carbon sink potential of Soil Organic Matter (SOM) by 2030; increase SOM to 4% by 2035 Establish 5,000 hectares (ha) of orchards by 2030 and 10,000 ha by 2035 Reduce postharvest losses to 15% by 2035; support green enterprises for smallholders and marginalized groups Promote climate-friendly crop and livestock systems Conduct a crop residue burning baseline study by 2030; reduce burning by 2035 	<ul style="list-style-type: none"> Farmers face yield losses from erratic rainfall and pests Many farmers face limited access to adaptive (improved climate-resilient) seeds and to insurance. Tenant and small farmers lack resilience support Methane emissions are the leading source of greenhouse gas emissions, and the agriculture sector is the prime source of methane emissions from flooded rice fields (Chaudhary and Babu, n.d). 30%–35% of food is lost across Nepal's supply chain, with particularly high postharvest losses of 20%–40% in perishable items, such as fruits and vegetables (NPC 2021) 	<ul style="list-style-type: none"> Prioritize subsidies for small and tenant farmers Ensure food security for climate-vulnerable groups Target subsidies to smallholders and tenant farmers Support local seed banks and training programs Ensure food security for climate-vulnerable groups Address high methane emissions from flooded rice fields Provide support for climate-friendly farming practices to smallholders Ensure equitable access to low-emission technologies for poor and marginalized farmers
Forest & Land Use	<ul style="list-style-type: none"> Maintain 46% forest cover Promote sustainable forest management Expand community forestry Engage in REDD+ initiatives 	<ul style="list-style-type: none"> Reaffirm the 46% forest cover goal Strengthen REDD+ readiness and benefit-sharing Increase private, leasehold, and agroforestry areas Institutionalize FPIC in forestry actions 	<ul style="list-style-type: none"> Community forestry remains a global model, but REDD+ pilots face elite capture Women and Indigenous users are often underrepresented Benefit-sharing is unclear in carbon revenue flows 	<ul style="list-style-type: none"> Ensure fair revenue-sharing from carbon trading Operationalize FPIC Safeguard land tenure rights for marginalized groups

Water & Infrastructure	<ul style="list-style-type: none"> Enhance water supply and sanitation Improve the resilience of physical infrastructure Build climate-resilient infrastructure 	<ul style="list-style-type: none"> Climate-proof infrastructure (roads, WASH, housing) Prioritize underserved areas Integrate climate risk into infrastructure planning 	<ul style="list-style-type: none"> WASH systems remain weak in the dry mid-hills and Tarai Rural communities lack access to safe water Frequent damage occurs from floods or landslides 	<ul style="list-style-type: none"> Target investments in climate hotspots Ensure inclusive design processes Enforce equity-based procurement policies
Health	<ul style="list-style-type: none"> Identify climate–health risks Include health in adaptation planning Strengthen disease surveillance 	<ul style="list-style-type: none"> Localize climate–health plans Establish climate-sensitive disease surveillance and early warning systems Strengthen rural health services 	<ul style="list-style-type: none"> Dengue rates are rising in the hills Rural populations lack climate-informed care Public health systems are overstretched 	<ul style="list-style-type: none"> Expand health infrastructure in vulnerable regions Train local health workers in climate-sensitive care Prioritize marginalized populations in health finance
Disaster Risk Reduction	<ul style="list-style-type: none"> Expand early warning systems Integrate disaster risk reduction (DRR) into development Promote ecosystem-based solutions 	<ul style="list-style-type: none"> Scale multi-hazard early warning systems Enable community-based preparedness Implement risk-sensitive land use planning 	<ul style="list-style-type: none"> GLOFs and flash floods are increasing Early warnings are inaccessible to rural areas Relocation support is delayed 	<ul style="list-style-type: none"> Ensure multilingual, accessible warnings Involve vulnerable groups in DRR Institutionalize inclusive relocation planning
Loss & Damage	<ul style="list-style-type: none"> Lack of a dedicated loss and damage (L&D) mechanism 	<ul style="list-style-type: none"> Establish a national L&D mechanism Address slow-onset and irreversible events (such as drought, GLOFs) Track non-economic losses 	<ul style="list-style-type: none"> GLOF-affected families (such as in the Mustang district) receive no formal relief Slow-onset drought displacement is unrecognized 	<ul style="list-style-type: none"> Recognize landlessness and identity loss Ensure participatory post-disaster recovery Prioritize displaced/marginalized families
Climate Finance & Governance	<ul style="list-style-type: none"> Seek external finance No subnational financing framework 	<ul style="list-style-type: none"> Promote locally accessible, inclusive finance Build a Measurement, Reporting, and Verification (MRV) system with disaggregated data Strengthen local institutional capacity 	<ul style="list-style-type: none"> Municipalities cannot access funds Women/Indigenous groups are sidelined MRV systems are underdeveloped 	<ul style="list-style-type: none"> Build local pipelines for climate finance Institutionalize participatory budgeting Track equity in disbursement channels

Source: MoFE (2020), Government of Nepal (2024), and MoFE (2025). **Note:** FPIC = Free, Prior, and Informed Consent; REDD+=Reducing Emissions from Deforestation and Forest Degradation; WASH = Water, sanitation, and hygiene.

ABOUT THE AUTHORS (Note Heading, bold 12pt, all caps)

Arbind Chaudhary (acsir21@gmail.com) is the Executive Chairperson of the Policy Research Foundation, Kirtipur-5, 44618, Kathmandu, Nepal. ORCID: [0000-0003-0036-232X](https://orcid.org/0000-0003-0036-232X)

Suresh C. Babu (s.babu@cgiar.org) is a Research Fellow Emeritus in the Director General's Office with the International Food Policy Research Institute (IFPRI), Washington, DC. ORCID: [0000-0002-8706-2516](https://orcid.org/0000-0002-8706-2516)

Bibek Chaudhary (bibekchaudharylaw@gmail.com) is a law student at the Faculty of Law, Banaras Hindu University (BHU), Varanasi – 221005, Uttar Pradesh, India.

ACKNOWLEDGMENTS

The authors thank a wide range of policymakers and advisors in the Nepal government, the National Planning Commission, sectoral ministries, and civil society organizations who were consulted in preparing this note. The authors alone are responsible for its contents.

REFERENCES

Accountability Counsel. 2025. "Nepal: Civil Society Report Alleges that Indigenous Peoples' Rights were Denied in Hydropower Project Development." July 4. <https://www.accountabilitycounsel.org/2025/07/nepal-civil-society-report-alleges-that-indigenous-peoples-rights-were-denied-in-hydropower-project-development/>

Akthar, T.M., and M.J.A. Reid. 2024. "The Urgency of Climate-Resilience in Pakistan." *International Journal of Public Health* 69. <https://doi.org/10.3389/ijph.2024.1607981>

Aryal, J.P., T.B. Sapkota, R. Khurana, A. Khatri-Chhetri, D.B. Rahut, and M.L. Jat. 2020. "Climate Change and Agriculture in South Asia: Adaptation Options in Smallholder Production Systems." *Environment, Development and Sustainability* 22: 5045–5075. <https://doi.org/10.1007/s10668-019-00414-4>

Bangladesh Climate Change Trust. 2024. "Locally Led Adaptation: National Strategy and Community Case Studies." <https://bcct.gov.bd/>

Chaudhary, A., and S.C. Babu. n.d. "Assessment of Methane Emission in Nepal (unpublished)." International Food Policy Research Institute (IFPRI), Washington, DC.

CVF (Climate Vulnerable Forum). 2024. "About: Membership." <https://cvf20.org/membership/>

Government of Nepal. 2024. "Economic Survey 2023/24." Kathmandu: Ministry of Finance. <https://mof.gov.np/content/281/econo.Lk mic-survey-2023-24/>

Government of Nepal. 2015. "Constitution of Nepal 2015." Kathmandu: Government of Nepal. <https://lpr.adb.org/sites/default/files/resource/629/nepal-constitution.pdf.pdf>

ICIMOD (International Centre for Integrated Mountain Development). 2025a. "The Hindu Kush Himalaya." Accessed July 31, 2025. <https://www.icimod.org/who-we-are/the-hindu-kush-himalaya/>

ICIMOD. 2025b. "Regional Program: River Basins and Cryosphere." Accessed August 4, 2025. <https://www.icimod.org/regional-program/river-basins-and-cryosphere/>

ILO (International Labour Organization). 2023. "Decent Work Country Program for Nepal 2023–2027." Kathmandu: ILO. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@asia/@ro-bangkok/@ilo-kathmandu/documents/publication/wcms_912115.pdf

International Court of Justice. 2025. "Obligations of States in Respect of Climate Change: Advisory Opinion." The Hague: International Court of Justice. <https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf>

IPCC (Intergovernmental Panel on Climate Change). 2023. "Sixth Assessment Report – Summary for Policymakers." In *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II, and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, eds. H. Lee and J. Romero, 1–34. IPCC, Geneva, Switzerland. https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf

Kathmandu Post. 2025. "No Country for Poor People." September 25. <https://kathmandupost.com/columns/2025/05/23/no-country-for-poor-people>

MoFE (Ministry of Forests and Environment). 2020. "Second Nationally Determined Contribution (NDC)." Kathmandu: Government of Nepal. [https://unfccc.int/sites/default/files/NDC/2022-06/Second%20Nationally%20Determined%20Contribution%20\(NDC\)%20-%202020.pdf](https://unfccc.int/sites/default/files/NDC/2022-06/Second%20Nationally%20Determined%20Contribution%20(NDC)%20-%202020.pdf)

MoFE. 2025. *Nepal's Third Nationally Determined Contribution (NDC 3.0)*. Kathmandu: Government of Nepal. <https://unfccc.int/sites/default/files/2025-05/Nepal%20NDC3.pdf>

Nepal SDG Forum. 2025. "Nepal Country Inequality Report (CIR) 2025." Kathmandu: Nepal SDG Forum. <https://nepalsdgforum.org/publication/nepal-country-inequality-report-cir-2025>

NPC (National Planning Commission). 2021. "Nepal's Food System Transformation: Context, Pathways and Action." Kathmandu: Government of Nepal. <https://summitdialogues.org/wp-content/uploads/2021/08/Country-Report-Nepals-Food-System-Latest-version.pdf>

Kafle, K., J. Paudel, and S. Shrestha. 2022. "Are Climate Finance Subsidies Equitably Distributed among Farmers? Assessing Socio-demographics of Solar Irrigation in Nepal." *Energy Research & Social Science* 87: 102574. <https://doi.org/10.1016/j.erss.2022.102574>

Shrivastava, M.K. 2024. "Financing Just Transition: Synergies between NCQG and JTWP." *The Energy and Resources Institute (TERI)*, New Delhi. https://teri.in.org/files/Financing_Just_Transition_Synergizing_NCQG_and_JTWP.pdf

United Nations Nepal. 2023. "Bringing Agricultural Insurance to Climate-Vulnerable Farmers." March 29. <https://nepal.un.org/en/225296-bringing-agricultural-insurance-climate-vulnerable-farmers-unique-pilot-program-nepal-shows>

UNDP (United Nations Development Programme). 2025. "COP27 and Nepal." September 18. <https://www.undp.org/nepal/cop27-and-nepal>

WECS (Water and Energy Commission Secretariat). 2024. *Energy Sector Synopsis Report 2024*. Kathmandu: Government of Nepal. <https://www.wecs.gov.np/content/56/energy-sector-synopsis-report-2024--fy-2079-80/>

Wignaraja, G., and D.W. te Velde, eds. 2024. *Sri Lanka: From Debt Default to Transformative Growth*. ODI Essays. London: ODI. <https://odi.org/en/publications/sri-lanka-from-debt-default-to-transformative-growth/>

World Bank. 2025a. "Climate and Development in South Asia." September 14. <https://www.worldbank.org/en/region/sar/brief/integrating-climate-and-development-in-south-asia/integrating-climate-and-development-in-south-asia-region>

World Bank. 2025b. "Ownership of Land – Women Who Own Land Alone (% of Women Age 15–49)." Gender Data Portal. September 16 <https://genderdata.worldbank.org/en/indicator/sg-own-ld>

Funding for this work was provided by US Government. This publication has been prepared as an output of Comprehensive Action for Climate Change Initiative Project and has not been independently peer reviewed. Any opinions expressed here belong to the authors and are not necessarily representative of or endorsed by IFPRI.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

A world free of hunger and malnutrition

IFPRI is a CGIAR Research Center

1201 Eye Street, NW, Washington, DC 20005 USA | T. +1-202-862-5600 | F. +1-202-862-5606 | Email: ifpri@cgiar.org | www.ifpri.org | www.ifpri.info

© 2025 International Food Policy Research Institute (IFPRI). This publication is licensed for use under a Creative Commons Attribution 4.0 International License (CC BY 4.0). To view this license, visit <https://creativecommons.org/licenses/by/4.0>.