Nationally Determined Contributions in Asia: Are Governments recognizing the rights, roles and contributions of Indigenous Peoples?

Country reports from Bangladesh, India, and Nepal
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Cover photo: A girl from Chakma community collects water from a dug well and stream, the only sources of drinking water to many indigenous communities. Climate change is impacting water collection: during the dry season, the streams dry up, which brings in severe hardship to indigenous women to collect water for the families. Juropanichora village in Khagrachari Sadar Upazila (sub-district), Khagrachari Hill District. Photo Credit: Sujash Chakma
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<tr>
<td>AIPP</td>
<td>Asia Indigenous Peoples Pact</td>
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<tr>
<td>BCCSAP</td>
<td>Bangladesh Climate Change Strategy and Action Plan</td>
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<td>BIPNetCCB</td>
<td>Bangladesh Indigenous Peoples’ Network on Climate Change and Biodiversity</td>
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<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CEDAW</td>
<td>Convention on the Elimination of All Forms of Discrimination Against Women</td>
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<td>CHT</td>
<td>Chittagong Hill Tracts</td>
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<td>CIPD</td>
<td>Centre for Integrated Program and Development</td>
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<td>COP</td>
<td>Conference of the Parties</td>
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<td>DAE</td>
<td>Direct Access Entity</td>
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<td>FPIC</td>
<td>Free, Prior and Informed Consent</td>
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<td>FRA</td>
<td>Forest Rights Act</td>
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<td>FTPP</td>
<td>Framework for Tribal Peoples Plan</td>
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<td>GCF</td>
<td>Green Climate Fund</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GHG</td>
<td>Greenhouse Gas</td>
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<tr>
<td>ICCPR</td>
<td>International Covenant on Civil and Political Rights</td>
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<td>ICERD</td>
<td>International Convention on the Elimination of All Forms of Racial Discrimination</td>
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<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IP</td>
<td>Indigenous Peoples</td>
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<td>IWGIA</td>
<td>International Work Group for Indigenous Affairs</td>
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<td>LCIPP</td>
<td>Local Community and Indigenous Peoples Platform</td>
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<td>MoFE</td>
<td>Ministry of Forest and Environment</td>
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<td>NAPA</td>
<td>National Adaptation Program of Action</td>
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<td>NAPCC</td>
<td>National Action Plan for Climate Change</td>
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<td>NAP</td>
<td>National Adaptation Plan</td>
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<td>NDC</td>
<td>Nationally Determined Contribution</td>
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<td>NEFIN</td>
<td>Nepal Federation of Indigenous Nationalities</td>
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<td>NRCC</td>
<td>National REDD+ Coordination Committee</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>NRSC</td>
<td>National REDD+ Steering Committee</td>
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<tr>
<td>PAMs</td>
<td>Policies and Measures</td>
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<tr>
<td>PESA</td>
<td>Provisions of the Panchayat Extension to Scheduled Areas, 1996</td>
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<tr>
<td>REDD+</td>
<td>Reducing Emissions from Deforestation and Forest Degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks</td>
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<td>SAPCC</td>
<td>State Action Plan for Climate Change</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNDRIP</td>
<td>United Nations Declaration on the Rights of Indigenous Peoples</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>VCF</td>
<td>Village Common Forest</td>
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Bangladesh

Traditional resource users,
Sundarbans 2010
Photo Credit: FPP

Ashok Kumar Chakma
Trinamul Unnayan Sangstha (TUS)
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Summary of Findings

Bangladesh is a country of low-lying plains with a population of 160 million, most of whom are Bengalis. The indigenous population is around 1.6 million, comprising 54 Indigenous Peoples who have languages, cultures and religious beliefs distinct from those of the Bengalis. Indigenous Peoples are scattered all over the country, with the largest concentration being in the Chittagong Hill Tracts region in south-eastern Bangladesh. Bangladesh faces more frequent climate-induced disasters such as cyclones, floods, waterlogging, droughts, soil erosion, and intrusion of saline water in coastal areas. These disasters place extra burdens on Indigenous Peoples who are already marginalized in all aspects.

In this report, we review and analyse how the rights of Indigenous Peoples have been addressed in the key national climate change policies and programs in Bangladesh, such as the Nationally Determined Contribution, the National Adaptation Program of Action, the Bangladesh Climate Change Strategy and Action Plan, the Bangladesh National REDD+ Strategy, and relevant environmental laws.

What we found is that all of the policymaking processes and practices have been highly dominated by so-called experts. None of the national climate change policies directly recognize Indigenous Peoples’ rights. Nor do they address the gender-specific needs of indigenous women, youth and persons with disabilities. Due to non-recognition of customary land rights, Indigenous Peoples are progressively losing their lands. Consequently, they have been suffering on two counts—from the loss of their lands and from the impacts of climate change.

To address these burning issues, we make the following recommendations on the current national REDD+ strategy and beyond.
Recommendations

A. The national REDD+ strategy

1. Ensure the participation of Indigenous Peoples

- Include in the National Steering Committee representatives from Chittagong Hill Tracts (CHT) institutions, traditional institutions, and two self-selected representatives from each of the CHT and the Plain regions.

- Include in the REDD+ Stakeholders Forum representatives from CHT institutions, Indigenous forest users, Village Common Forest communities, associations and networks, Khasi Punji communities, and others. When selecting representatives for the forum, give special attention to ensuring representation from Indigenous women, youth and persons with disabilities.

- Ensure representation of Indigenous Peoples in all existing and future technical working groups, as appropriate.

- In the event of mediation, arbitration or dispute resolution while working together with Indigenous Peoples, recognize the best practices of indigenous dispute resolution mechanisms, which draw on customary law and procedures.

2. Build capacity and raise awareness

- Enhance the capacity of Indigenous Peoples and the Indigenous People’s organizations on REDD+. All capacity-building programs must ensure the participation of indigenous women, youth and persons with disabilities.

- For government officials from relevant sectors, build their capacity, sensitize them and make them aware of: REDD+; the best practices in forest conservation and management; and the sustainable use and rights of Indigenous Peoples and other forest-dependent people and communities.

- Translate relevant UNFCCC and REDD+ documents into national, indigenous and local languages.

3. Develop Free, Prior and Informed Consent (FPIC) guidelines

- The Ministry of Environment, Forest and Climate Change should develop the FPIC guidelines with the full and effective participation of Indigenous Peoples, including the marginalized, such as women, youth and persons with disabilities.

- The guidelines should be developed in line with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the guidelines of United Nations treaty bodies.
4. Reform laws, policies and programs

The following laws, policies and programs should be reviewed and harmonized in partnership with Indigenous Peoples, and in accordance with applicable international laws and standards:

- the Forest Act 1927 (including reform of Social Forestry Rules & Forest Transit Rules and formulation of Village Forest Rules); the Wildlife (Preservation & Security) Acts; the East Bengal State Acquisition & Tenancy Act 1950; and the CHT Land Disputes Resolution Commission Act 2001

- the National Forest Policy; the Environment Policy; the Land Policy; the Climate Change Strategy and Action Plan; and the National Women’s Development Policy

- national programs that include: (a) mono-plantations of eucalyptus, pulpwod and softwood, which are harmful to biological diversity; (b) social forestry programs that are harming biodiversity and excluding Indigenous Peoples and local communities; (c) the continuance of leases of forest lands to non-functional tea estate companies; (d) leases of forest lands in the CHT to non-local companies and individuals.

B. Beyond REDD+

- Set up a forum on forests with the Minister of Environment, Forest and Climate Change, to include members from the Ministry of Chittagong Hill Tracts Affairs and the CHT institutions, and representatives of Indigenous Peoples from the Plains, the CHT and other forest-dependent communities.

- Amend the structure of the Wildlife Protection Forum to include representatives of Indigenous Peoples and other forest-dependent communities.

- Take steps to implement the provisions of international treaties ratified by Bangladesh (including the Convention on Biological Diversity; the International Covenant on Civil and Political Rights; the International Covenant on Economic, Social and Cultural Rights; the International Convention on the Elimination of All Forms of Racial Discrimination; the Convention on the Elimination of All Forms of Discrimination Against Women; and ILO Conventions No. 111 and 107), and incorporate them in national laws and policies.

- Implement all unimplemented provisions of the CHT Accord 1997, particularly the provisions related to land and forests.

- Recognize the best practices of Indigenous communities, such as the village common forests and the pan punjis (betel leaf agroforestry), and indigenous knowledge for biodiversity conservation.
Purpose of this report

In this report, we review and analyse how the rights of Indigenous Peoples have been addressed in the key national climate change policies and programs in Bangladesh. Data and information were collected through a literature review and interviews with key informants. Given the COVID-19 pandemic, we tried to reach as many people as possible by telephone and by email. To get in-depth analysis and opinions on the indigenous issues, we interviewed representatives of AIPP member organizations, civil society leaders, the United Nations Development Programme (UNDP) focal person, an ethno-botanist, and women representatives from the CHT and Plain regions. Relevant literature was reviewed, particularly the Nationally Determined Contribution (NDC), the National Adaptation Program of Action (NAPA), the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), the Bangladesh National REDD+ Strategy, and relevant environmental laws and policies. Research reports and news articles were also reviewed.

We make several recommendations to the government of Bangladesh to ensure participation of Indigenous Peoples in formulating and implementing climate change and other national policies and programs.
General status of Indigenous Peoples in Bangladesh

Bangladesh is by and large a homogeneous country—religiously, ethnically and linguistically. Its total land area is 147,570 square kilometres (56,980 sq. miles), with an estimated population of 160 million. About 90 per cent are Muslims, about 7 per cent are Hindus, and the rest are Buddhists and Christians. Almost 99 per cent of the total population speak Bengali, and they are known as Bangalis. The rest are mainly the Indigenous Peoples, who have distinct languages, cultures and religious beliefs.

There is no clear agreement on the exact size of the indigenous population in Bangladesh. One estimate is 1.6 million,1 with over 54 Indigenous Peoples,2 representing 1.8 per cent of the total population of the country. However, Indigenous Peoples claim that their population is over 3 million.3

Indigenous Peoples are scattered all over Bangladesh. However, the largest concentration is found in the Chittagong Hill Tracts (CHT) region in southeastern Bangladesh. Elsewhere, they are found in four major regions, namely: North-west region (Rajshahi division), North-east region (Sylhet Division), Central region (Greater Mymensing and Dhaka), and Coast region (Khulna, Chittagong and Barisal division).4 See Figure 1 for locations and names of Indigenous Peoples in Bangladesh.

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1 8th Five Year Plan (2020–2025), Ministry of Planning, Government of Bangladesh, p. 767
2 IGWIA (2021), The Indigenous World 2021: Bangladesh.
Indigenous Peoples collectively identify as *adibashi/avadi*; while government documents use *upajati* (tribal) and *khudra Nri-gosti* (small ethnic minorities) interchangeably. Terms used in various national laws and policies include ‘indigenous’, ‘aboriginal’, *adivasi*, ‘ethnic minority’, ‘hillmen/hillpeople’ and *upajati* (subnation/tribe/tribal). Through the latest constitutional amendment, a cluster of terms—“tribes, minor races, ethnic sects and communities”—has been inserted in the Constitution to refer to the Indigenous Peoples of Bangladesh. However, through this 15th Constitutional amendment, only cultural aspects of Indigenous Peoples have been recognized. For instance, under section 23A of the Constitution, the state has promised “to take steps to protect and develop the unique local culture and tradition” of Indigenous Peoples.

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**Figure 1.** Ethnic and cultural diversity in Bangladesh

**Source:** Framework for Tribal Peoples Plan (FTPP), 2017
Other urgent issues related to economic, political and collective land rights, among others, have not been directly addressed in the Constitution. Moreover, this provision of the Constitution is not a mandatory obligation for the government to comply with. It is simply an expression of commitment, and its implementation is contingent upon the political will of the government in power.

The key challenges faced by Indigenous Peoples in Bangladesh—those living either in the hills or the plain regions—are the denial of indigenous identity by the government, continuous land alienation, deprivation of access to basic services, lack of political representation, and non-implementation of the CHT Accord 1997. Due to the non-recognition of collective rights of Indigenous Peoples in the national legal framework, their traditional livelihoods and rights over land and natural resources are continuously threatened. They often face severe human rights violations resulting from land alienation. Land grabbing is widespread in the hills and plain regions of Bangladesh. Key land grabbers include the Bengali settlers; influential people, such as former civil and military bureaucrats; and private companies, which take land in the name of rubber plantations and tourism. Many studies and reports published in the news media confirm that former civil and military bureaucrats took hundreds of acres of land in the CHT region in the name of commercial plantation (Chakma 2010; Adnan and Dastidar 2011; Hajang 2020). A recent example of land grabbing is by the Sikder Group, a private company in the country, which plans to build a 5-star hotel in the Chimbuk-Thanchi hills in the Bandarban hill districts. Due to this 5-star hotel project, the Mro indigenous communities are under threat of displacement. As per the daily newspaper reports, the Sikder Group is trying to grab 1,000 acres of jum land (hilly land traditionally used for shifting cultivation). Six Mro villages will be directly affected, while some 70 to 116 villages of the community will be indirectly affected by the said project.

With a demand for autonomy for the CHT region, the PCJSS (Parbattya Chattagram Jana Samhati Samity), a political party representing the Indigenous Peoples, started a movement in the 1970s. Later it resorted to an underground movement and continued until 2 December 1997, when an agreement commonly known as the ‘CHT Accord 1997’ was signed between the government of Bangladesh and the PCJSS. This accord ended the decade-long armed conflict in the CHT region. It has also ensured political representation of Indigenous Peoples through the formation of the CHT Regional Council, three hill district councils and a special ministry—the Ministry of Chittagong Hill Tracts Affairs—under the leadership of indigenous persons. Although the CHT Accord was signed 23 years ago, most of its key provisions remain unimplemented. As a result, the regional and hill district councils have not been able to execute their power for overall development and wellbeing of the Indigenous Peoples in the CHT region.

Under government sponsorship, between 1979 and 1984 approximately 200,000 to 400,000 landless Bengali persons were transferred from the plains to the CHT region. Known as ‘Bengali settlers’ to the Indigenous Peoples, these Bengali settlers are alleged to have forcefully occupied the lands of Indigenous Peoples under the direct support of the military and security forces across the CHT region. As of today, most of the conflict and human rights violations result from land grabbing by the Bengali settlers. See Rajkumari Chandra Roy (2000) Land Rights of the Indigenous Peoples of the Chittagong Hill Tracts, Bangladesh, IWGIA, Copenhagen.

Of the government agencies, the Department of Forest has a bad reputation for taking land from indigenous communities in the name of creating protected areas, such as reserved forests and eco-parks, both in the hills and plain regions. In a recent example of the Forest Department forcefully taking land from Indigenous Peoples, a Mandi woman’s banana plantation in Madhupur, Tangail, was savagely destroyed (Box 1).

Box 1. The savage destruction of the banana garden on Basanti Rema’s land by the Bangladesh Forest Department in Madhupur, Tangail

Basanti Rema is a Mandi indigenous woman of Pegamari village in the Sholakuri Union of Madhupur Upazila (sub-district) in Tangail district. She planted bananas on three acres of land that is traditionally owned by her family. On 14 September 2020 the Forest Department, led by Assistant Conservator of Forest Jamal Hossain Talukder, ranger Abdul Ahad and a local ruling party leader named Jahangir, destroyed the banana garden of Basanti Rema. As reported in the media, around 500 banana plants were destroyed by the forestry officials. The officials claimed that this ‘land rescue drive’ was carried out following a directive from the government. But it was carried out without giving prior notice to the owner. The Mandi Indigenous People claim that these lands are their ancestral lands, which their people have been using for generations. Hajang (2020) argues that this so-called drive of rescuing the “grabbed” land by the Forest Department is a violation of international law i.e. ILO Convention 107, 1957 (which Bangladesh has ratified) and UNDRIP 2007.
Indigenous Peoples and climate change in Bangladesh

Due to its geographic location in a low-lying plain, Bangladesh is one of the world’s most vulnerable countries to climate change. Every year, the people of Bangladesh face common climate-induced disasters such as cyclones, floods, waterlogging, droughts, soil erosion, and intrusion of saline water in coastal areas. However, the suffering of Indigenous Peoples has different dimensions than those of most of the population due to their different ethnic, social and cultural backgrounds and economic system.

As mentioned, Indigenous Peoples live in five major regions of the country. Geographically, they are found in three main areas: hilly areas (CHT region, Sylhet), plain lands (Rajshahi and greater Mymensing) and coastal areas (Patuakhali and Cox’s Bazar).

The impacts of climate change felt by Indigenous Peoples, especially in terms of livelihoods, vary depending on their geographic locations. For example, in the hilly areas, Indigenous Peoples are largely dependent on forest produce and *jum* (shifting) cultivation. It is notable that forest cover is necessary to cultivate *jum* i.e. the land without forest cover is not suitable for *jum* cultivation. With rapid degradation of forests due to over exploitation of natural resources, *jum* cultivation in the CHT region has greatly shrunk. Moreover, deforestation correlates with rainfall in the hilly areas. So the combined impact of deforestation and erratic or low rainfall is low productivity in *jum* and other agricultural crops. Under these circumstances, the livelihoods of the *jumias* (shifting cultivators) and those who collect non-timber forest products have become very uncertain.

During the dry season the watersheds dry up. At that time, the suffering of forest-dependent Indigenous Peoples knows no bounds. Every year, scarcity of drinking water in the hilly areas gets regular media coverage. Flash floods, soil erosion and droughts are also common climate-induced disasters in the hilly areas. In the coastal areas, due to rise of sea levels, agricultural crops and vegetable production are affected by increased salinity.
In addition, unplanned development programs—for example, government monoculture plantations and road construction projects; and tourism projects of both private companies and the Bangladesh military\textsuperscript{10}—are key drivers of deforestation and threaten the very existence of many indigenous communities across Bangladesh. In Bandarban and Madhupur, indigenous communities are under threat of losing land to private companies and the Forest Department in the name of development. Being alienated from their lands by various private companies and the Forest Department, Indigenous Peoples have seen their livelihoods become precarious on the one hand, while on the other hand climatic shocks such as droughts, flash floods and landslides have become more frequent.

Within indigenous societies, the brunt of climate change is borne differently by men and women. Traditionally, women are responsible for cooking, and collecting water and non-timber forest products. Along with the males, they participate equally in the *jum* or agriculture fields. As such, natural disasters such as floods and droughts place a double burden on Indigenous women. During the dry season, when the streams or water sources run dry, women have to spend more time collecting water further from home. As women and girls are the primary users of water for cooking, washing and other household chores, they are likely to be exposed to waterborne diseases before males if the water is contaminated. In other words, climate change-related natural disasters increase the workload of Indigenous women and girls, while also exposing them to health risks.

\textsuperscript{10} In the CHT region, alongside private companies, the Bangladesh military have been engaged in the tourism business. The most luxurious resorts were set up by the military at Rulul, Sajek, in Rangamati Hill District, and at Nilgiri, Thanchi, in Bandarban Hill District. See also Hana S Ahmed (2017) ‘Tourism and state violence in the Chittagong Hill Tracts of Bangladesh’, master’s thesis, The University of Western Ontario, Canada.
Climate policies

According to the Germanwatch Global Climate Risk Index 2017, Bangladesh was the sixth most vulnerable country in the world to climate change impacts. The estimated costs to Bangladesh of climate change could amount to an annual loss of 2 per cent of gross domestic product (GDP) by 2050\(^1\) and 9.4 per cent of GDP by 2100. Addressing climate change has always been a top national priority in order to achieve sustainable development in Bangladesh, and internationally the country has remained committed to play its role in global collective action to reduce greenhouse-gas (GHG) emissions. Bangladesh has affirmed its commitment to all key international conventions and agreements on climate change. To translate its commitments into national actions, Bangladesh has formulated several policy documents. Below, we review the most relevant climate change responses and how they respect Indigenous Peoples’ rights.

3.1 Recognition of rights in key climate policies in Bangladesh

Before the formulation of the NDC, Bangladesh prepared and implemented several national climate change policies, such as the National Adaptation Program of Action (NAPA), and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP). The following section gives an overview of these national climate change policies.

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\(^1\) In 2020, the GDP of Bangladesh rose to US$329.12 billion, with a GDP rate of 3.8%, although it was down from 8.15% in 2019. On average, the projected GDP rate is 7%. Based on an annual growth rate of 7%, the projected GDP of Bangladesh by 2050 is US$691.152 billion. The annual economic loss of 2% of the total GDP accounts for approximately US$1,382.30 million.
3.1.1 Nationally Determined Contribution

Bangladesh submitted its Intended Nationally Determined Contribution in September 2015, before ratifying the Paris Agreement on 21 September 2016. As per the commitments contained in the Paris Agreement, Bangladesh updated its NDC in 2020. The NDC has a two-fold strategy to address climate change impacts:

- Enhance adaptation capacities – increasing resilience to the impacts of climate change
- Achieve lower GHG emissions as well as more resilient development.

The key commitments of the NDC are:

- an unconditional reduction of GHG emissions by 5 per cent from business-as-usual levels by 2030 by using domestic resources
- a conditional 15 per cent reduction in GHG emissions from business-as-usual levels by 2030 if additional funding and technology support is ensured from the global community.

3.1.2 National Adaptation Plan and other policy measures

For a long time, Bangladesh has worked to enhance adaptation measures to address the country’s vulnerability to climate change impacts. In 2005 it adopted the NAPA, and updated it in 2009. Also aimed at increasing adaptability and resilience to climate change impacts, the BCCSAP was prepared in 2009.

Building on the lessons from the NAPA and the BCCSAP, Bangladesh initiated a process to develop a National Adaptation Plan (NAP) in 2019. So far, the country’s focus has been more on adaptation than mitigation. So the BCCSAP is also now being updated by government under the overall guidance of the Ministry of Environment, Forest and Climate Change.

In addition to these climate change policies, the government of Bangladesh prepares five-year plans, which set the key priorities for national development of the country. The previous (7th) Five Year Plan (FY2016–FY2020) and the current (8th) Five Year Plan (FY2020–FY2025) both incorporate climate change issues, focusing on a green growth strategy with a low-carbon development pathway.
In line with the commitments of the UNFCCC, Bangladesh prepared its National REDD+ Strategy in 2019. The strategy sets a vision: ‘to facilitate and catalyze transformational change in the forest sector to lower GHG emissions, enhance conservation of biodiversity and ecosystems, sustain community livelihoods and stronger long-term economic growth’ (Bangladesh Forest Department 2019, p.35).

It is the country’s first detailed strategy for the forest sector, laying out policies and measures (PAMs) to reduce emissions from deforestation and forest degradation and to increase the forest carbon stock of the country. As required under REDD+, during the readiness phase Bangladesh formulated: a) a national REDD+ strategy, b) a forest reference level and c) a national forest monitoring system. A plan to set up a safeguards information system has been developed and will be implemented in parallel with the REDD+ strategy implementation.

In alignment with the country’s sustainable development goals, the REDD+ strategy includes a target to achieve 16 per cent forest cover, up from the current 14.5 per cent, by 2030. To this end, the strategy is to protect and conserve 1,269,070 hectares (ha) of existing forest, reforest 637,259 ha and restore/enrich 173,498 ha of degraded forests. The strategy also promises to increase capacity for forest management, improve the livelihoods of forest-dependent communities, reduce illegal encroachment into natural forests, and reduce fuelwood collection and timber harvesting.

To achieve the vision and goals, and to effectively address key drivers of deforestation and forest degradation, 17 PAMs organized under two strategic areas and six themes have been identified. For details, please see Table 1.

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## Table 1. Policies and measures (PAMs) of the Bangladesh National REDD+ Strategy 2019

<table>
<thead>
<tr>
<th>Strategic area 1 – Reduce deforestation and forest degradation</th>
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<tbody>
<tr>
<td><strong>Thematic area 1 – Promote the supply of alternate energy, energy-efficient technologies and timber substitutes</strong></td>
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<tr>
<td>PAM 1</td>
<td>Promote improved cooking stoves &amp; other devices to households, small businesses and institutions</td>
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<td>PAM 2</td>
<td>As an emergency, supply LPG cookers for forcibly displaced Myanmar citizen camp</td>
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<td>PAM 3</td>
<td>Promote environment-friendly technology, including non-fired brick manufacturing to replace traditional brick kilns</td>
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<td>PAM 4</td>
<td>Ensure a sustainable supply of alternative fuel for curing tobacco</td>
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<td>PAM 5</td>
<td>Increase the use of processed timber, laminated wood, cane, bamboo and rattan products</td>
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<th>Thematic area 2 – Increase fuelwood supply in forested Districts</th>
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<td>PAM 6</td>
<td>Establish structures (nurseries &amp; tissue culture facilities) for increasing fuelwood seedlings stock</td>
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<td>PAM 7</td>
<td>Establish fuelwood plantations on marginal land under the social forestry programme</td>
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<td>PAM 8</td>
<td>Promote integrated homestead forestry models</td>
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<th>Thematic area 3 – Improve livelihoods of forest-dependent communities</th>
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<td>PAM 9</td>
<td>Scale up alternative income-generating activity for forest-dependent communities</td>
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<td>PAM 10</td>
<td>Promote collaborative and sustainable management of non-timber forest products</td>
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<th>Thematic area 4 – Resolve forest land tenure issues</th>
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<td>PAM 11</td>
<td>Modernize forest land management system</td>
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<td>Resolve forest land related cases</td>
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<td>PAM 13</td>
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<th>Thematic area 5 – Improve institutional capacity</th>
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<td>PAM 14</td>
<td>Increase the capacity of the Forest Department through recruitment and targeted trainings</td>
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<td>PAM 15</td>
<td>Reforest deforested lands and afforest newly accreted coastal lands</td>
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<td>PAM 16</td>
<td>Enrich plantations on degraded forest land</td>
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<td>PAM 17</td>
<td>Conserve existing forests</td>
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3.2 Issues and concerns for Indigenous Peoples in national climate policies

Pursuant to international obligations, and as noted above, Bangladesh has prepared several policy documents related to climate change and conservation, such as the NAPA, the NDC, the BCCSAP and the national REDD+ strategy. There are also many environmental laws and policies that have direct linkages with climate change issues and biodiversity conservation. Unfortunately, none of these national polices directly recognize the rights of Indigenous Peoples; in fact, there is not a single mention of Indigenous Peoples in these climate change policy documents. Denial of Indigenous Peoples’ rights by the policymakers is a common trend in the formulation of any national policy in Bangladesh. Given this fact, the cross-sections of indigenous communities, such as indigenous women, youth and persons with a disability, have been given no attention in the climate change policies.

In contrast to this disappointing policy environment, the Bangladesh National REDD+ Strategy 2019 (the current version) is a bit more accommodative. Although it, too, fails to recognize the identity of Indigenous Peoples as adibashi (Indigenous Peoples), it uses the terms ‘ethnic groups’ and ‘ethnic minority groups’ to refer to Indigenous Peoples in Bangladesh.

Compared to other national climate change policies, the REDD+ strategy is inclusive to the extent that it has created some space for Indigenous Peoples in national-level forest-governance structures. The strategy paves the way for inclusion of Indigenous Peoples in three ways:

- engagement of indigenous representatives during the strategy formulation process (see Section 3.3)

- reservation of one seat for Indigenous Peoples on the National REDD+ Steering Committee, one seat on the Technical Work Group, and seats for indigenous representatives in the REDD+ Stakeholders Forum

- provision of target beneficiaries from indigenous-inhabited regions, such as the CHT region (Figure 2).
Although indigenous representation is ensured at various levels, the strategy does not clearly outline how indigenous representatives will be selected. If selected indigenous representatives are not competent, they will not be able to play an effective role in raising indigenous issues in the decision-making processes related to climate change matters.

Another remarkable aspect of the REDD+ strategy is that it has set 17 PAMs to achieve its vision (Table 1), yet all but a few of them have no direct bearing on Indigenous communities. A few PAMs under Thematic Area 4 (Resolve forest land tenure issues) and Thematic Area 6 (Reforest/Afforest, restore and conserve) may involve Indigenous communities as stakeholders in the programs. For example, the REDD+ strategy (as per PAM 12 under Thematic Area 4: Resolve forest land related cases) has set a target to survey and demarcate 1,000,000 ha of forest land in order to resolve the forest land related cases. Hundreds of cases are pending in the courts against the forest villagers (mostly indigenous communities) in the reserved forest areas. If Indigenous Peoples are not properly represented in the survey and demarcation process, they are likely to be the losers in these forest cases. The strategy also sets a target (under Thematic Area 6) to achieve 16 per cent forest cover, up from the current 14.5 per cent, by 2030, in a bid to enhance forest carbon stock. It implies that the reforestation and afforestation programs will most likely be implemented in Indigenous Peoples’ areas; so this target will not be achieved without engaging indigenous communities.
Through the REDD+ strategy, the government has also promised to improve the livelihoods of ‘forest-dependent’ communities. To this end, some 500,000 households will be supported, with emphasis on the CHT region, through alternative income-generating activity; for example, communities in buffer areas will be linked with government programs and engaged in forest management through sustainable, integrated production of non-timber forest products.

As mentioned above, the REDD+ strategy is more accommodating than other national climate change policies. But it is a recent policy document, and has not yet been implemented. Nonetheless, Indigenous Peoples may have some say on climate change issues at the various decision-making levels thanks to the reservation of seats in different tiers of the governance structure.

Apart from the climate change policies, the current five-year plan (2020–2025) also commits to support “forest dependent communities” in the hill tracts. It promises to take necessary adaptation and mitigation measures to reduce climate change hazards. This is, to some extent, a positive development in national policy, although there is still much scope for the government and Indigenous Peoples to work together to identify actions that are in line with the priorities of Indigenous Peoples.

Many national laws and policies related to forest management and biodiversity conservation have direct bearing upon Indigenous Peoples in Bangladesh. Notable among them are the Forest Act 1927 (including reform of Social Forestry Rules & Forest Transit Rules and formulation of Village Forest Rules), the Wildlife (Preservation & Security) Acts, the East Bengal State Acquisition & Tenancy Act 1950, and the CHT Land Disputes Resolution Commission Act 2001. Because none of these laws and policies directly recognize the collective and customary rights of Indigenous Peoples over lands and forest resources, there are many cases of conflict between the Forest Department and local forest-dependent communities due to land being taken from these communities without their free, prior and informed consent.

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14 The CHT Land Disputes Resolution Commission Act 2001 has been enacted as per the provision of the CHT Accord 1997 signed with the government of Bangladesh. This Act is exclusively applicable to the CHT region to resolve longstanding land disputes there.

3.3 Participation of Indigenous Peoples in climate change policies

In general, national policy formulation processes in Bangladesh are non-inclusive and characterized by a top-down approach. All forest management and climate change policies—including the NAPA, the NDC and the BCCSAP—were developed by so-called experts hired by the government, and Indigenous Peoples had no say in their formulation. As the whole policy formulation process was highly dominated by these so-called experts, there was no deliberate effort on the part of the government to engage Indigenous women, youth and persons with disability in formulating these national policies.

Against this backdrop, the formulation of the national REDD+ strategy in 2019 represents a slightly more positive example of indigenous participation. After Bangladesh became a partner country of the UN-REDD Programme in August 2010, the government initiated a process for drafting the REDD+ roadmap, with technical support from UNDP and the FAO. Initially, Indigenous Peoples were not included in the formulation process. Indigenous representatives were invited to dialogues only after lobbying at high-level UN forums.\(^\text{16}\) Later, UNDP and other international organizations played a facilitative role in this regard. The UNDP-Chittagong Hill Tracts Development Facility supported the first consultation workshop for the CHT region in Rangamati in 2019. Later, four regional workshops were organized in Cox’s Bazar, Sylhet, Madhupur and Thakurgaon, with the representatives of Indigenous Peoples.

At the national level, with support from the UN-REDD Programme, a three-day national consultation was held in Dhaka on ‘UN-REDD and the rights of Indigenous Peoples of Bangladesh’.\(^\text{17}\) Indigenous representatives, traditional leaders, forest dwellers, non-governmental organizations, local government institutions, and representatives from hill district councils, the Forest Department and relevant government line departments were invited to these regional and national-level workshops.

The workshops sought views from Indigenous representatives on the underlying drivers of deforestation and forest degradation, and approaches to address the drivers. During the consultation, the Indigenous representatives stressed the urgent issues, such as recognition of Indigenous Peoples’ collective rights over land and natural resources; best practices in forest management and biodiversity

\(^{16}\) In an interview with Sudipta Chakma, a member of BIPNetCCB (Bangladesh Indigenous Peoples Network on Climate Change and Biodiversity), he said that when the REDD+ Readiness Phase began in Bangladesh, Indigenous Peoples were ignored in the dialogue process. Later, after lobbying the high-level UN forums, the government of Bangladesh took initiative to include Indigenous Peoples in the dialogue process.

\(^{17}\) This national consultation was co-organized by Asia Indigenous Peoples’ Pact (AIPP) and the National Coordination Committee in consultation with the UN-REDD Programme. The National Coordination Committee was mainly composed of representatives from BIPNetCCB, Bangladesh Land and Forest Rights Movement, Maleya Foundation, Kapaeeng Foundation and Bangladesh Adivasi Forum.
conservation; institutionalization of Indigenous Peoples’ engagement in local forest management; and the need to strengthen CHT traditional institutions and hill district councils, which have direct mandates on forest management. Indigenous women and youth were also invited to the consultation workshops, but their participation was low and, in many cases, symbolic. Indigenous women tried to speak out, but were unsure whether or not their gender-specific issues and needs were incorporated into the national climate change policies.¹⁸

Notably, Indigenous Peoples’ formed a network in 2009 named Bangladesh Indigenous Peoples’ Network on Climate Change and Biodiversity (BIPNetCCB), which represents communities from various regions of Bangladesh. The BIPNetCCB has been instrumental in organizing for indigenous communities to lobby and engage with policymakers. For example, in 2016 it organized a dialogue with high level officials of the Forest Department where indigenous representatives were able to raise concerns and issues related to forest laws and policies. The Forest Department representatives agreed to continue the dialogues with BIPNetCCB and also to initiate dialogues with Indigenous Peoples on forest management issues at regional levels (in Rajshahi, Dinajpur, Sylhet, Bagura, Khulna, Barguna, Chittagong Hill Tracts, Cox’s Bazar, Mymensing and Tangail-Madhur).¹⁹

So far, indigenous representatives’ experience of engaging with the government does not mirror the promises on paper. Government officials have failed to communicate with indigenous representatives well in advance of any meeting; rather, letters of invitation were received at the eleventh hour. This lukewarm attitude of government departments has not been conducive to indigenous representatives providing informed and well-considered feedback on the relevant policy questions, as sought by the concerned government departments.

For the CHT region, specific laws such as the CHT Accord 1997, the CHT Regional Council Act 1998, and three Hill District Council Acts 1989 (Amendment 1998), have created space for representation of Indigenous Peoples in state affairs. Under the framework of the CHT Accord, the Ministry of Chittagong Hill Tracts Affairs—a ministry exclusively for the CHT region—was established under the leadership of an Indigenous person. According to the provisions of the CHT-specific laws, the government has a prerogative to consult the CHT Regional Council, and the three hill district councils, before making any law or policies that have a bearing on the region’s people. Similarly, the CHT Regional Council and the hill district councils can give the government their opinions on issues affecting the region.

¹⁸ Interview with Susmita Chakma, a practising lawyer and woman activist from Rangamati. She participated in a number of UNREDD+ consultations at local and national levels.

¹⁹ See BIPNetCCB minutes of meeting held at Ban Bhavan, Agargon, in Dhaka on 2 February 2016. That dialogue was attended by Md Yunus Ali, Chief Conservator of Forest of the Bangladesh Forest Department; Raja Devasish Roy, Chair of BIPNetCCB; three DCCFs of the Bangladesh Forest Department; and indigenous representatives, among others.
Given these CHT-specific laws, through the regional and hill district councils the Indigenous Peoples of the CHT region have the opportunity to negotiate with the government on climate change issues at local and national levels. The Ministry of Chittagong Hill Tracts Affairs is also influential in decisions about the implementation of the NDC, the REDD+ strategy and other climate-change-related policies and programs in the region.

In contrast to the CHT region, Indigenous Peoples in the plain regions are in a worse position in terms of participation in government decision-making processes. This is due to several factors, one of which is that they are spread sparsely across different areas, which makes it hard for them to get elected in the lower tier of local government bodies, let alone district or national-level bodies. As a result, Indigenous Peoples in the plain region are unlikely to be able to participate in climate change policy dialogues, unless the government takes affirmative measures.
The impact of current climate interventions on Indigenous Peoples

Like in other parts of the world, Indigenous Peoples in Bangladesh live in forest areas, which are regarded as their commons. They have distinct cultures, languages, economic systems and traditional governance structures. Traditionally, most of them have depended on shifting cultivation and forest resources. National policies such as the NDC, the NAPA and the REDD+ strategy do not take these issues into consideration. Without recognition of their customary rights over land and natural resources, Indigenous Peoples’ very existence as distinct peoples is at risk.

Of the national climate policies, the REDD+ strategy is the most recent, and it creates some space for indigenous representation in policymaking. However, it has yet to be implemented. Therefore, Indigenous Peoples in Bangladesh need to wait to see if its implementation will affect them positively or negatively.

That said, Indigenous Peoples of the CHT region and the plains have experience with the implementation of state laws and rules related to land and forest management, including, for instance, the Forest Act 1927, which is the key law for forest regime in Bangladesh. Their experience suggests that state forest laws and rules have not been conducive to biodiversity conservation. The following are some negative impacts resulting from the implementation of forest conservation policies and laws:

- Since the creation of ‘Reserved Forests’ and ‘Protected Forests’ under the British colonial rule, the customary rights of indigenous groups living in forests and on the plains have been denied by the state.

- The creation of new reserved forests by the Bangladesh Forest Department, as part of a plan to extend them, has not only resulted in the eviction of forest dwellers, but has also severely limited the access of forest-dependent people, both in the CHT and the Sal forest zone in the plain region of Bangladesh, to their source of foods and livelihoods. Expansion of existing reserved forest is underway. As per the report of the Movement for the Protection of Forest & Land Rights in CHT, the Forest Department has a plan to expand reserved forest by an additional 218,000 acres (88,221 hectares) in the CHT region. If this plan is implemented, around 200,000 people will be displaced from their ancestral lands.
• The politically motivated state-sponsored settlement of Bengalis on the forestland of the CHT region resulted in the alienation of a big chunk of Indigenous Peoples’ ancestral lands. It also exacerbated the conflicts between Indigenous Peoples and settlers, resulting in the marginalization of the former.

• For decades, indigenous communities in the CHT have experienced massive human-rights abuses, including large-scale massacres and violence against women, primarily for land and forest resources that they once possessed.

• The declaration and establishment of protected areas, which include eco-parks, national parks and game sanctuaries, has led to the eviction of scores of Indigenous Peoples from their lands.

• Due to state pressure, the forest-dependent communities in the plains have had to give up shifting cultivation, the mainstay of their livelihood.

• In the CHT region, following a full-scale commercial exploitation during the Pakistan and Bangladesh period, 70,729 acres (28,623 ha) of forestland were handed over to the Forest Department for monoculture plantations (teak, pulpwood etc.), resulting in ecological disaster. Plantations do not attract wildlife because the diverse plant species that support wildlife do not grow there.

• The topsoil in areas under monoculture plantation (e.g. teak) is exposed to rains and erodes quickly, causing landslides. In the Kaptai reservoir area, for example, the loose soil washed down into the reservoir is causing silting of its bed, which threatens electricity production and navigation.

• In the face of rapid shrinkage of forest cover, Indigenous Peoples have adopted innovative conservation practices, which later came to be known as ‘village common forests’ (VCFs), within or around the villages. These VCFs, which are traditionally managed by the villagers following customary rules, are now considered a reliable repository of biodiversity in the CHT region. Yet, they are not recognized by the state laws and policies, and so are under threat of alienation. As a result, the age-old indigenous culture, knowledge and practices related to forest management and conservation are in jeopardy.

• The risk of environmental destruction is increased due to top-down development initiatives as well as the illegal settlement of Bengali settlers in the commons of Indigenous Peoples.

• The forest dwellers and forest-dependent people are held responsible and sued in courts of law by forest officials for loss and destruction of forest resources that is, in reality, caused by state official corruption and theft.

• Indigenous women are severely affected because their access to forests for collecting food and fuelwood has been greatly reduced due to acquisition of lands in the name of reserved forest and protected forest.
Indigenous Peoples’ contributions to addressing climate change

There is a popular saying among the people, “Where there are Indigenous Peoples, there are the forests”. Most of the forest cover in Bangladesh is found in Indigenous Peoples’ areas—from the CHT region to Garo Hills and the Coastal region in Barguna. All over the world, Indigenous Peoples live in forest areas. Their ways of life, culture, belief systems, livelihoods and health-care systems are closely linked with nature. They have developed a symbiotic relationship with nature. As such, they know how to conserve and ensure sustainable use of natural resources to meet the needs of the present as well as for future generations.

Indigenous Peoples in Bangladesh have many good practices for biodiversity conservation, which draw on indigenous knowledge. Each indigenous community has certain customs, spiritual beliefs, rituals, taboos and sanctions, which are integral parts of their sustainable use of natural resources and conservation. There are some taboos; for example, during mating seasons, they do not hunt animals; on the full moon or the day of the new moon, they do not fish from the river; when practising jum (shifting) cultivation, they do not fell the big trees. All such taboos and practices are integral to their natural resource management systems. Below are two examples of good practices in natural resource management and biodiversity conservation by Indigenous Peoples—one from the CHT region and one from the Khasi community in the greater Sylhet region.
5.1 Village common forests – an innovation of agroforestry in the CHT region

Village common forests (VCFs) are community-managed natural forests located within the boundaries of mausas\(^{20}\) of the CHT region, outside of the reserved forests. They fulfil the daily needs of the villagers, but also serve to conserve biodiversity locally. Currently, there are around 420 VCFs across the CHT region.\(^{21}\) They range in size from a few acres to 300 acres or more.

The origin of VCFs dates to the British colonial period, in particular the first quarter of the 20th century (Baten 2010). When the CHT region came under the British colony, access to forest resources across a large tract of land was restricted in the name of ‘reserved forest’. In response to the shortage of natural resources, communities decided to establish VCFs by setting aside part of the mauza lands in and around their villages. All forms of settlement and cultivation are prohibited in the VCFs by the Indigenous communities. Factors giving rise to the community-managed VCFs include a) the increasing population, largely induced by the government settlement program; b) growing needs for establishment of homesteads, bazars, fruit plantations and orchards; c) the establishment of reserved forests, d) the establishment of rubber, teak and other commercial plantations; and e) road construction and other massive development projects (Roy 2015, 2017).

There are no written rules for managing a VCF. Each one is managed by the relevant indigenous community under the leadership and guidance of the mauza Heads, following the customary rules. Management rules vary from one indigenous community to another.

VCFs are recognized by researchers and academics as an innovative and sustainable forest management and conservation practice (Roy 2001; Roy and Halim 2003; Baten et al. 2010; Jashimuddin and Inoue 2012). As sustainable natural resource management system, the VCFs provide many benefits and services to the villagers and to society at large, for the following reasons:

- They are sources of food, water, house materials and fuelwood for the communities.
- They are sources of traditional medicinal plants.
- They contain headwaters of streams, natural springs and other aquifers that are sources of water for drinking and for agriculture.

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20 The traditional administrative system of Indigenous Peoples has three tiers—circle (headed by a chief, locally called Raja), mauza (headed by a mauza headman) and village (headed by a karbari, or village head). The CHT has three circles and some 350 mauzas.

21 Offices of the Rangamati, Bandarban and Khagrachari hill district councils, Chittagong Hill Tracts
• They are repositories of biodiversity.

• They mitigate the rapid pace of deforestation in the CHT region and Bangladesh as a whole.

• They are tightly connected to the communities’ cultural traditions, spirituals beliefs and social safety-net practices.

Several studies reveal that VCFs would be a sustainable model for maintaining a balance between conservation and exploitation of natural resources. In many places in the CHT, VCFs are the only remaining forest patches, and are sustainably used by the surrounding communities. The VCF model could be replicated in the mainstream forest management program to reduce the rate of deforestation and, thereby, mitigate climate shocks across the country.

Despite this potential of the VCF model, there are many challenges of protecting VCFs in the CHT region. Challenges include the pressure of a growing population on forest resources; new market facilities; tenure insecurity; and the poor policy support of the government. To reap the benefits of the VCF model, all these challenges must be addressed by the government.

5.2 Pan punji – the sustainable agroforestry practice of the Khasi community

The Khasia, also called Khasi, are a small indigenous community in the greater Sylhet region of Bangladesh. Their total population is approximately 30,000 in 85 Punjis (villages). Their livelihoods now largely depend on pan punji (betel leaf cultivation).

Pan punji, an innovative agroforestry practice of the Khasi community, is wholly based on indigenous knowledge passed down through many generations. Many studies have found pan punji to be economically and ecologically sustainable, as it meets the economic needs of the community while also conserving biodiversity (Riadh 2008; Haider 2013; Islam and Nath 2014). In this traditional agroforestry practice, betel leaf is the main cash crop for generating income for families, but they also grow betel nuts, pineapples, bananas, lemons, black pepper and other vegetables in their pan punji. The same studies indicate that 75.76 per cent of family incomes is from the sale of betel leaves.
From the perspective of biodiversity conservation, the pan punji system of betel leaf cultivation is unique. In this agroforestry practice, the farmers need to preserve natural forests i.e. they need to keep the standing trees, which are essential to support the climbing betel vines. To grow betel vines, they use no chemical fertilizers or pesticides. Instead, the leaves of the standing trees and creepers create a compost for the betel vines, so the soil fertility remains stable decade after decade. As such, the pan punjis are a good repository of biodiversity and a sanctuary for wildlife (Partha 2021). Haider et al. (2013) recorded 86 tree species with a stocking density of 1,452 trees per hectare, excluding seedlings and saplings; and Riadh (2008) recorded 167 plant species and 276 animal species in a punji at Lawachara.

Because the forest cover remains intact, environmental disasters such as landslides and soil erosion are rare in the pan punjis. And due to the dense forest cover, the watersheds and aquifers contain water all year round. The streams flowing down the panpunji never get polluted and remain flowing, which is very important for agriculture and water supply to the community.

The Khasi community is a matrilineal society, where women play an important role in decision-making and natural resource management. With the betel leaf cultivation, men do the farm work and harvesting, while women process and market the betel leaves.

From economic, environmental and ecological aspects, the pan punji is considered one of the best agroforestry practices. It can be considered a ‘gift’ to Bangladesh to fight the climate-induced disasters of the present times (Partha 2021). Unfortunately, the Khasi people are constantly facing threats of eviction from their pan punjis, mainly from the tea estates and from influential people. The underlying problem is ultimately the denial of the customary land rights of Indigenous Peoples by the state.

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22 The Khasi peoples are facing eviction by the authorities of tea estates and by influential people, who use miscreants to destroy pan punjis. The media frequently use the terms ‘dooskritikari’ (miscreants) and ‘Bangali dooskritikari’ (Bengali miscreants). Their identities very often remain unexposed. It appears that their main interest is to occupy, any way they can, the lands of the Khasi community for commercial purpose e.g. to set up an eco-park or eco-tourism.
Recommendations

From our review of the key national climate policies of Bangladesh—especially the NDC, the NAPA, the BCCSAP, the NAP and the REDD+ strategy—it is clear that indigenous representation was either totally absent or very minimal during the policy formulation stage. All of the policymaking processes and practices have been highly dominated by so-called experts. Women, youth and persons with disabilities were unable to participate, let alone Indigenous Peoples.

Due to the denial of Indigenous Peoples’ identity by the state policymakers, the good examples of natural resource management—such as village common forests in the CHT, and *pan punjis*—and the practices, rituals, belief systems and indigenous knowledge of the Indigenous Peoples related to forest management receive no recognition in the national policies and laws.

In Bangladesh, Indigenous Peoples are concentrated in forest areas, so they have a direct stake in the implementation of any climate change policies, including the national REDD+ strategy. Therefore, without ensuring full and effective participation of the Indigenous Peoples in all stages—from planning and implementation to monitoring and evaluation—none of these policies can be successfully implemented.

As such, indigenous representatives have made the following recommendations to the government to ensure the participation of Indigenous Peoples in formulating and implementing national policies related to climate change and its impacts.
6.1 The national REDD+ strategy

1. Participation

1.1 **National Steering Committee:** Include representatives from the CHT institutions (CHT Regional Council, one representative from hill district councils), one representative from traditional institutions (chief, headmen and karbaris) and at least two self-selected representatives from each of the CHT and the Plain regions.

1.2 **REDD+ Stakeholders Forum:** Include representatives from CHT institutions (Regional Council, Hill District Council, traditional institutions), Indigenous forest users, Village Common Forest communities, associations and networks, Khasi Punji communities and others. When selecting representatives, give special attention to ensuring representation from indigenous women, youth and persons with disabilities.

1.3 **Technical working groups:** Ensure representation of Indigenous Peoples in all existing and future technical working groups, as appropriate.

1.4 **Grievance mechanism:** In the event of mediation, arbitration or dispute resolution while working with Indigenous Peoples, recognize the best practices of indigenous dispute resolution mechanisms, which draw on customary law and procedures. The provisions of UNDRIP, particularly articles 25–30\(^{23}\), can serve as guidelines in the redress and other aspects of the grievance mechanism.

2. Capacity building and awareness raising

2.1 Build the capacity of Indigenous Peoples on REDD+ to increase the resource pool of Indigenous Peoples who can participate fully and effectively (disaggregated by region, age, gender, ethnicity). Also, build the capacity of Indigenous Peoples’ organizations on REDD+, with support from the government and other donor agencies, UN bodies, civil society organizations and relevant NGOs. All capacity-building programs must ensure participation of people from cross-sections of society, including Indigenous women and youth.

2.2 For government officials from relevant sectors, build their capacity, sensitize them and raise their awareness on REDD+, including the best practices in forest conservation and management, and the sustainable use and rights of Indigenous Peoples and other forest-dependent peoples and communities.

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\(^{23}\) Article 25, Article 26, Article 27, Article 28, Article 29 and Article 30 of the United Nations Declaration on the Rights of Indigenous Peoples
2.3 Translate relevant UNFCCC and REDD+ documents into national, indigenous and local languages.

3. **FPIC guidelines**

3.1 The Ministry of Environment, Forest and Climate Change should develop FPIC guidelines only through consultation, ensuring the full and effective participation of Indigenous Peoples, including those more marginalized, such as women, youth and persons with disabilities.

3.2 The FPIC guidelines should be developed in line with UNDRIP and the guidelines of UN treaty bodies.

4. **Reformation of laws, policies and programs**

The following laws, policies and programs should be reviewed, in partnership with Indigenous Peoples, and in accordance with applicable laws and standards, including the Constitution of Bangladesh and international human rights and environment-related treaties ratified by Bangladesh, including the International Covenant on Civil and Political Rights (ICCPR); International Covenant on Economic, Social and Cultural Rights (ICESCR); International Convention on the Elimination of All Forms of Racial Discrimination (ICERD); Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW); Convention on Biological Diversity (CBD), UNFCCC, and ILO Conventions No. 111 and 107.

4.1 **Laws:** The most important of the national and local laws mentioned above are the Forest Act 1927 (including reform of Social Forestry Rules & Forest Transit Rules and formulation of Village Forest Rules); the Wildlife (Preservation & Security) Acts; the East Bengal State Acquisition & Tenancy Act 1950; and the CHT Land Disputes Resolution Commission Act 2001.

4.2 **Policies:** The most important of the relevant national policies are the National Forest Policy; the Environment Policy; the Land Policy; the Climate Change Strategy and Action Plan; and the National Women’s Development Policy.

4.3 **Programs:** The most important of the relevant programs are: (a) monoplateations of eucalyptus, pulpwood and softwood, which are harmful to biological diversity; (b) social forestry programs that are harming biodiversity and excluding Indigenous Peoples and local communities; (c) the continuance of leases of forest lands to non-functional tea estate companies; (d) leases of forest lands in the CHT to non-local companies and individuals.
6.2 Beyond REDD+

1. **Forests Forum**: Set up a forum on forests headed by the Minister of Environment, Forest and Climate Change, to include members from the Ministry of Chittagong Hill Tracts Affairs; the CHT Regional Council; hill district councils and traditional institutions of the CHT; relevant line ministries and departments, and representatives of Indigenous Peoples from both the Plains and CHT and other forest-dependent communities.

2. **Wildlife Protection Forum**: Amend the structure of the Wildlife Protection Forum, headed by the Minister of Environment, Forest and Climate Change, to include representatives of Indigenous Peoples and other forest-dependent communities.

3. **International treaties**: Take steps to implement the provisions of international treaties ratified by Bangladesh (including the CBD, ICCPR, ICESCR, CERD, CEDAW and ILO Conventions No. 111 and 107), and incorporating them in national laws and policies.

4. **The CHT Accord 1997**: Implement all unimplemented provisions of the CHT Accord, including on land and forests. This includes amending the Land Commission Act, transferring forest to the hill district councils, and rehabilitating internally displaced Indigenous People.

5. **Indigenous knowledge and best practices**: Recognize in the national forest management and climate change policies the best practices of indigenous communities—such as the village common forests and *pan punjis* (betel leaf agroforestry)—and indigenous knowledge for biodiversity conservation.
References


Hana S Ahmed (2017). Tourism and state violence in the Chittagong Hill Tracts of Bangladesh - a thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts, The University of Western Ontario, Canada.


Indigenous Peoples’ Statement issued at ‘National Consultation of Indigenous Peoples on REDD+’ held at Bishwa Sahitya Kendra in Dhaka on 18 June 2014.


Annex 1: Indigenous Peoples in Bangladesh

The Indigenous Peoples of Bangladesh have been identified in various forums, laws and census data.

A. Bangladesh Adivasi Forum, 2005

The Bangladesh Adivasi Forum (Bangladesh Indigenous People’s Forum) identified the following indigenous communities across Bangladesh:


B. East Bengal State Acquisition and Tenancy Act (EBSATA), 1951


C. Small Ethnic Groups’ Cultural Institution Act (SEGCIA), 2010

D. Bangladesh Indigenous Peoples’ Rights Act drafted by Parliamentary Caucus on Indigenous Peoples and formulated by the National Human Rights Commission of Bangladesh


At the end of the proposed draft, the following five communities are included under the category, “under consideration”: 1. Bin/Bind 2. Karnidas 3. Nunia 4. Rabidas 5. Ruhidas
Ashok Kumar Chakma is an indigenous development practitioner based in Rangamati Hill District of Bangladesh. He belongs to the Chakma indigenous community in the Chittagong Hill Tracts (CHT) of Bangladesh. He has more than 18 years' practical working experience with the grassroots indigenous communities in the CHT region of Bangladesh. He worked at AIPP for some time on the issues of international financial institutions (IFIs) concerning implementation of IFIs’ indigenous safeguard policies in Indigenous Peoples’ areas in Asia. His areas of expertise are community development, residential care, education, policy research and social enterprise. He has wide experience in social research, project planning and management and designing business plans etc. He is now the Chairperson of Trinamul Unnayan Sangstha (TUS) in Khagrachari Hill District, and Executive Director at Moanoghar, a leading educational institution for the indigenous children based in Rangamati Hill District of Bangladesh.
India

Spice stall in a Traditional market in Belgahana village, Bilaspur, Chattisgarh 2004. Photo Credit: FPP

CR Bijoy
For Asia Indigenous Peoples Pact (AIPP), Thailand
Purpose of this report

This report presents the results of an analysis examining whether and to what extent India’s nationally determined contribution (NDC), REDD+ strategies, national adaptation plan, national and state action plans for climate change, climate policies and other policy responses consider, respect, incorporate and comply with the rights of Indigenous Peoples. Our analysis is in the context of the current legal status of Indigenous Peoples and their rights to governance, self-determination, autonomy, land and resources, and other key collective rights. We examine the impact of climate change on indigenous men, women, youth, and people with disabilities, and the extent to which these impacts are addressed in the policies, plans and programs responding to climate change. The extent of the engagement and involvement of Indigenous Peoples in formulating and executing these responses locally, regionally, nationally and internationally is also examined. Importantly, we describe in which way and to what extent the climate change responses, both mitigation and adaptation, benefit or negatively impact Indigenous Peoples. Their contribution and potential to contribute should inform the way forward.

Our analysis was aided by the prior knowledge on climate change issues and processes at the international and national level through an exhaustive study conducted some years ago,\(^1\) updated through input from experts who have continuously engaged in climate change issues.\(^2\) Further, the study is informed by and grounded in the Indigenous Peoples’ mass organizations in different parts of the country; the national level processes on critical issues of resource conflicts and rights, autonomy and self-governance; and studies carried out primarily on India’s Indigenous Peoples’ issues for a variety of Indian and international institutions.\(^3\)

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2. Primarily Soumya Dutta (Co-convenor, South Asian People’s Action on Climate Crisis (SAPACC); Former member, Advisory Board, UN Climate Technology Centre and Network; Founding member, India-Climate-Justice) and Suparna Lahiri (Climate Campaigner; All India Forum of Forest Movements and the Global Forest Coalition; Formerly associated with Community Conservation Resilience Initiative).
3. This refers to the author’s full time engagement with indigenous peoples organisations for over three decades. Being a continuous process, there are too many people to be named.
Summary of Findings

• Though the Indigenous Peoples of India—known as Scheduled Tribes, or tribal peoples—have special legal recognition to diverse and distinct territorial and governance rights, and protection of land and resource rights, these laws are subject to weak implementation and violations resulting in widespread disaffection.

• Being the least served by government services, tribal peoples, primarily those who are dependent on natural resources, are one of the most impacted and vulnerable sections of society in this highly climate-risk-prone country which is experiencing regular climate-change-related impacts.

• India’s NDC, REDD+ strategy, and national and state climate change adaptation plans and action plans alike view tribal peoples as poor, living in interior areas endowed with rich natural resources, but do not at any stage refer to tribal peoples, despite their special status in the Constitution, with special duty for protection by the governments.

• Tribal peoples, by virtue of their being mostly forest-dwelling communities with governance rights over most of the forests, should have been ensured a pre-eminent role in national climate policies and plans.

• Yet, tribal peoples, their governance structures, and the ministry and departments that deal with tribal affairs have been ignored, relegating the tribal peoples as mere recipients of benefits, and recipients of awareness and employment from climate change responses.

• Current and proposed climate interventions have intensified conflicts and violence in response to violations of land- and forest-related rights, violations that threaten people’s livelihoods and survival, the vast majority of whom are marginalized and many of whom are vulnerable, being resource-dependent.

• Ironically, tribal peoples’ historical contribution to carbon sequestration through their forest and land stewardship, along with their having contributed the least to the problem (they have the smallest carbon footprint), is neither made visible, acknowledged nor accounted for; significantly, neither is their prime role in carbon sequestration in the future.
Recommendations

• The forest-dwelling tribal peoples, armed now as the statutory authority to protect, conserve, manage and control the forests, should be a leading partner of the government in national and state climate actions.

• The autonomous statutory authorities—namely, the Gram Sabhas (village assemblies) in the forest and forest fringe villages, the Fifth Schedule areas and the north-east; the traditional institutions in the tribal-dominated north-east region; and the autonomous councils in the Sixth Schedule areas and those created under state laws in the north-east—should be the primary decision-making bodies for climate adaptation and mitigation policies, plans and programs at the local level.
General status of Indigenous Peoples in India

Bounded by the Himalayas in the north and the ocean and sea in the east, south and west, India is the world’s seventh largest country with a geographical area of 328.73 million hectares constituting 2.4 per cent of the global land area. It has the second largest population in the world and is home to the world’s largest indigenous population.

1.1 Legal status

The Scheduled Tribes (STs) of India are generally referred to internationally as Indigenous Peoples ( IPs). Adivasi, meaning the original inhabitants, is the term popularly used in peninsular India, while ‘tribes’ and more recently ‘Indigenous Peoples’ are popular in the north-east. Not all Adivasis are STs; neither are all STs Adivasis. In this report, the terms IPs, STs, Adivasis and tribal peoples are used interchangeably.

STs is a legal and administrative category and are “such tribes or tribal communities or parts of, or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this Constitution” [Article 366(25)]. The President of India issues notifications listing the STs in a particular state/union territory along with specific geographical areas within the state/union territory. These notifications can be modified subsequently to include or exclude peoples, but this requires an Act of Parliament. The area definition can also be modified.

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4 So far there have been nine notification, see https://tribal.nic.in/clm.aspx
India is a signatory to ILO Convention 107 (Indigenous and Tribal Populations Convention, 1957) and the UN Declaration on the Rights of Indigenous Peoples (2007), but not to ILO Convention 169 (Indigenous and Tribal Peoples Convention, 1989). Officially, the government holds that all Indians are indigenous to the country, arguing that the colonizers did not constitute the dominant population when India became a sovereign nation. The government categorically rejects the globally acknowledged equating of the STs with IPs even while abiding by the operational directives of bilateral and multilateral agencies with regard to IPs while operationalizing projects with their financial aid.

There are 705 tribal peoples in 28 states and eight union territories (2011) with a population of 104 million constituting 8.6 per cent of the total population. Of the 640 administrative districts in the country, STs constitute a majority in 110 districts, 20–50 per cent in 87 districts and 10–20 per cent in another 74 districts.

<table>
<thead>
<tr>
<th>Concentration of Scheduled Tribes population across blocks and villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of the 5,985 blocks (tehsils/talukas) in the country, STs are:</td>
</tr>
<tr>
<td>the majority in 1,063 blocks</td>
</tr>
<tr>
<td>20–50% in 700 blocks</td>
</tr>
<tr>
<td>10–20% in 626 blocks.</td>
</tr>
</tbody>
</table>

| Of the 597,483 villages in the country, STs are: |
| the majority in 110,118 villages |
| 20–50% in 45,902 villages |
| 10–20% in 29,800 villages. |

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5 ‘We regard the entire population of India at the time of our independence, and their successors, to be indigenous’, quote by Permanent Mission of India to the United Nations, India’s Approach to the 75th session of the UNGA, New York, 2020, https://www.pminewyork.gov.in/pdf/menu/submenu__554169307.pdf

Of the 640 administrative districts, 123 are 'scheduled areas'. These areas are notified under the Fifth and Sixth schedules of Article 244 of the Constitution, with special provisions for land and autonomy. The scheduled areas under the Sixth Schedule are also referred to as 'tribal areas'. About 13 per cent of the total geographical area of the country is within scheduled areas. The State of Nagaland, Fifth Schedule areas in the ten central Indian states, the ten Sixth Schedule areas of Assam, Meghalaya, Mizoram and Tripura, and the 14 autonomous councils in Assam and Manipur and the union territory of Ladakh, together with the areas recognized as rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (known as the Forest Rights Act, or FRA), constitute the total area, with varying degrees of autonomy, at least in law where most of the STs of the country reside along with non-STs.


8 Fifth Scheduled areas are notified by the government in 10 of the 28 States - Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telengana, see https://www.mea.gov.in/Images/pdf1/S5.pdf

9 The Sixth Schedule areas are incorporated through constitutional amendments, see https://made.mizoram.gov.in/uploads/files/the-sixth-schedule.pdf. Ten Autonomous District Councils have been constituted, three in Assam, three in Meghalaya, one in Tripura and three in Mizoram. State wise Autonomous District Councils with the year of formation:


10 These are constituted under State laws.

11 As on 31 December 2020, about 5.3 million ha of the minimum potential of ‘around 40 million ha of community forest resources’ in about 1.79 lakh villages have been titled for transfer to village level democratic institutions amounting to 13% of forest land. However, some of this area may fall within the Fifth Scheduled areas, the Sixth Schedule areas and the Autonomous Council areas of the north-east. For further details, see Bijoy, C.R. Democracy In The Forests: The Governance That Is To Be, 17/0 Law, Environment and Development Journal, http://www.lead-journal.org/content/a1702.pdf
1.2 Land and resource rights

Being territorially-bound communities, during the feudal era almost all tribal peoples in India were left to govern themselves through their customary and traditional governance systems and institutions. Colonial intrusion and subsequent resistance to the colonizing forces resulted in arrangements that allowed considerable self-governance, in varying degrees. These arrangements remain in the statute books, with modifications. However, the extent to which these laws have been useful is determined largely by the extent and impact of sustained political assertions of the tribal peoples on the state. In this, the north-east fares remarkably better than the peninsular region in all respects.

Key provisions:

- The Inner Line Permit under the Bengal Eastern Frontier Regulation of 1873 in Arunachal Pradesh, Mizoram, and hill areas of Manipur and Nagaland protects land and regulates entry of outsiders.
- The Santhal Pargana Tenancy Act of 1876 and the Chotanagpur Tenancy Act of 1908 protects the lands in Jharkhand.
- Nagaland and Mizoram state assemblies have exclusive power over land and its resources under Article 371A and Article 371G respectively.
- The Fifth Schedule and Sixth Schedule areas under Article 244 of the Constitution provide for protection of land and natural resources.

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12 See https://www.dimapurpolice.in/Acts%20And%20Rules/Bengal%20Eastern%20Frontier%20Regulation,%201873.pdf
13 Section 20, the main protective clause in the Act, prohibits any transfer of a raiyat’s (any person holding the land for the purpose of cultivation and who has acquired the right of occupancy according to the tenancy law or rules) land by sale, gift, mortgage, will, lease or any other contract or agreement, either expressed or implied unless the right to do so has been recorded in the record of rights. See https://www.indiacode.nic.in/bitstream/123456789/8120/1/santhal_parganas_tenancy_laws_full.pdf
14 Section 46 of the Act states very clearly that under the raiyati, land belonging to a tribal can only be transferred to another tribal living under the same police station area. Similarly, a raiyati land belonging to a person of the Scheduled Caste or Backward Caste can only be transferred to another person of the Scheduled Caste or Backward Caste respectively within the same district. See http://www.bareactslive.com/JH/JHR055.HTM
15 Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (FRA) for instance, has not been extended to these States yet, precisely because these constitutional provisions, along with political assertions, have safeguarded their control over their territories.
16 See https://indiankanoon.org/doc/371998/
17 See https://indiankanoon.org/doc/1184172/
18 The Governor can prevent, or apply with modification (laws apply unless prevented or modified), any law in the Fifth Schedule areas and make regulations for peace and good government especially regarding transfer and allotment of land.
• Autonomous councils\(^{19}\) created through state laws in Manipur, Assam and Ladakh provide for protection of land.

• The Provisions of the Panchayat Extension to Scheduled Areas 1996\(^^{20}\) (PESA) provide the Gram Sabhas (village assemblies)\(^{21}\) the authority to prevent land alienation, restore illegally alienated lands, own minor forest produce, and control minor water bodies and minor minerals within their territorial jurisdiction.\(^{22}\)

• The tribal homelands and the forests are almost coterminous. India has notified 23.34 per cent (767,400 sq km) of its lands as forests. The government policy is to have 33 per cent of the total land as forests. The Indian Forest Act 1927\(^^{23}\) provides for declaring Reserved Forest (all rights are banned unless granted), Protected Forest (rights permitted unless banned) and Village Forest (Reserved Forest assigned to villages), and regulates them. The Wildlife (Protection) Act 1972\(^^{24}\) has created a protected area regime consisting of national parks, wildlife sanctuaries, conservation reserves, community reserves and tiger reserves across the country. With the enactment of the FRA,\(^^{25}\) all restrictions on forest rights, except hunting, were removed on all forest lands.\(^^{26}\) Gram Sabhas can access forest lands\(^{27}\) in all states and all union territories where the law is applicable; determine their rights; and define their geographical jurisdiction to protect,

19 Autonomous Councils have been created, six in Assam, six in Manipur and two in the union territory of Ladakh. Assam: (1) Rabha Hasing (South Kamrup & Goalpara districts, 1995); (2) Sonowal Kachari (Dibrugarh, Tinsukhia, Dhemaji, Lakhimpur, Sibasagar & Jorha districts, 2005); (3) Mising (Dhemaji, Sonitpur, Lakhimpur, Dibrugarh, Tinsukhia, Sibsagar, Jorhat & Golaghat districts, 1995); (4) Lalong (Tiwa) (Morigaon, Nagaon & Kamrup districts, 1995); (5) Deori (Lakhimpur, Dhemaji, Dibrugarh, Tinsukhia & Sibsagar districts, 2005) and (6) Thengal Kachari (Jorhat, Sibsagar, Dibrugarh & Lakhimpur, 2005)

Manipur: (1) Senapati; (2) Sadar Hills; (3) Ukhrul ; (4) Chandel; (5) Churachandpur and (6) Tamenglong


21 Assembly of all adult members of a village or habitation.

22 However, rules to operationalise the state amendment to the panchayat raj act incorporating the PESA provisions were delayed, notified in six states and are yet to be notified in Chhattisgarh, Jharkhand, Madhya Pradesh and Odisha.


24 See https://www.indiacode.nic.in/handle/123456789/1726

25 See https://tribal.nic.in/fra.aspx

26 Applies to ‘land of any description falling within any forest area’ and includes unclassed forests (the largest category of forests customarily under community control in the north-east), undemarcated forests, existing or deemed forests, protected forests, Sanctuaries, National Parks and Tiger Reserves, and any area recorded as forest in the Government record.

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conserve, access, use and manage. Gram Sabha consent is mandatory for forest diversion, demarcation of inviolate forest areas and relocation.

- No land records exist in Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, hill areas of Manipur, and parts of Assam due to people’s resistance. Rather than clear legal protection, de facto customary law applies.

- Most states, including in the north-east, have land laws specifically to prohibit tribal land alienation and restoration of illegally alienated lands. Tamil Nadu and Karnataka are the exceptions.

- The Land Acquisition Act 1894, which was enacted for the state to acquire land for public purposes, displacing many millions of tribal peoples, was replaced by the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013. Prior consent and better compensation is specifically provided for STs.

- The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act 1989, which makes wrongful occupation or dispossession of tribal land a crime, now includes forest rights recognized under the FRA.

Despite all these provisions, tribal land alienation has been increasing, a result of the weak implementation of the laws and the absence of strong judicial intervention. In 2011, STs constituted the social group with the highest level of poverty, with 43 per cent of STs living below the poverty line, compared to the national figure of 21.9 per cent.

28 FRA, Sec.3 (1)(i): rights to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use; FRA Sec.5: (b) ensure that adjoining catchments area, water sources and other ecological sensitive areas are adequately protected; (c) ensure that the habitat of forest dwelling Scheduled Tribes and other traditional forest dwellers is preserved from any form of destructive practices affecting their cultural and natural heritage;


30 Amendments were made to weaken the law as in Kerala in 1991 where alternate lands were to be given instead of the original land in certain cases. There were repeated attempts to dilute the Regulation 1/70 of Andhra Pradesh, and Chota Nagpur Tenancy Act 1908 and the Santhal Pargana Tenancy Act of 1876 of Jharkhand which were thwarted by massive protests. On the positive side, the Governor of Maharashtra issued a notification in 2016 (See https://cdnbbsr.s3waas.gov.in/s3c8758b517083196f05ac29810b924ac/uploads/2019/11/2019112096.pdf) using the Governor’s powers under the Fifth Schedule amending the Maharashtra Revenue Code, 1966 preventing the District Collector from approving transfer of land from tribal to non-tribal without the previous sanction of the Gram Sabha.

31 8.5 million tribal peoples were displaced by 1990 for mega developmental projects like dams, mining, industries and conservation of forests etc. Many more millions were displaced since then. Tribal peoples constitute the bulk of those displaced despite them being only 8.6% of the total population.

Indigenous Peoples and climate change in India

Climate-sensitive agriculture, fisheries and forestry constitute the livelihoods of the bulk of people in India, including tribal peoples, with 42.6 per cent of the land under agricultural production and 24.39 per cent as forests. Indigenous Peoples are mainly dependent on natural resources, mostly inhabiting forested and mountainous regions. The regions with high concentrations of Indigenous Peoples are also the regions likely to be most impacted by climate change.

Protected areas
- 24.27% of forests (171,921 sq km or 5.03% of total land area)
- 104 national parks (43,716 sq km or 25.43% of PAs) – no rights
- 566 wildlife sanctuaries (122,420 sq km (71.21% of PAs)
  – restricted rights
- 97 conservation reserves (4,483 sq km) – uninhabited government land accessed by people
- 214 community reserves (1,392 sq km) – includes private land.

Marine protected areas
- 10 national parks, 115 wildlife sanctuaries, 4 conservation reserves and one community reserve covering 8,716.98 sq km
- 1,864.84 sq km are in the island region where the most vulnerable and least contacted tribal peoples live; the rest is in peninsular India.

Tiger reserves
- 50 tiger reserves carved out of national parks and wildlife sanctuaries covering 71,027.10 sq km
- 40,340.12 sq km critical tiger habitat or core area and 30,686.98 sq km buffer area
- Inhabited by 57,386 families
- 18,493 families in 215 villages relocated
- 41,086 people in 496 villages still remain.
India is ranked 29 out of 191 countries by the 2019 INFORM Risk Index, with very high exposure to flooding (riverine, flash, and coastal) and to tropical cyclones, with their associated hazards and droughts. The country is ranked 44 out of 191 countries for vulnerability due to its high levels of socioeconomic deprivation. A World Bank commissioned study found that India is already experiencing climate-change-related impacts. It also predicts changes associated with an increase in temperature of between 2 ºC and 4 ºC.

Another index, the Global Climate Risk Index 2021 ranked India as the seventh most affected country in 2019 (fifth in 2018) with a score of 16.67, 2,267 fatalities (0.17 fatalities per 100,000 inhabitants). Surplus rain in 2019 caused floods leading to 1,800 deaths across 14 states, displacing 1.8 million people, affecting 11.8 million people, and with an economic loss of USD 10 billion. There were eight tropical cyclones in the northern Indian Ocean; six of them were ‘very severe’. Flood risk has increased significantly all over India during recent decades. There were 431 major natural disasters during the period 1980–2010. The frequency of dry days has also increased during the period 1901–2010. The annual mean temperature during the period 1901–2017 increased by 0.66 °C per hundred years. These changes have resulted in more flooding and drought, and less groundwater recharge.

33 See https://climateknowledgeportal.worldbank.org/country/india/vulnerability
34 The 16th edition of its annual analysis of some important climate related impact and the associated vulnerabilities of 180 countries from quantified impacts of extreme weather events in terms of fatalities and economic losses based on the data from the Munich Re NatCatSERVICE. See https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf
Tribal peoples in India have poor access to government services such as education, health care, welfare, and development resources such as land, natural resources, credit and infrastructure, generally resulting in sub-optimal economic productivity, and poor social and physical infrastructure. As a result, their social and human development is low, and they are prone to malnutrition and endemic diseases. The consequences are often worsened by impacts from climate change, which include the following:\(^{35}\)

- **Extreme heat:** Frequent spells of hot weather over larger areas affect the west coast and southern India, impacting agriculture significantly.\(^ {36}\)

- **Rainfall:** An overall decline in monsoon rainfall and more frequent unpredictable heavy rainfall events are seen. Increased flooding over larger parts is predicted from the northwest coast to the south-eastern coastal region, as are extreme precipitation events in south India and in the Himalayas in the north.\(^ {37}\)

- **Droughts:** Generally drier weather with an increase in the number of droughts is expected, especially in north-western India, Jharkhand, Odisha and Chhattisgarh, which is the main Indigenous Peoples’ region in the country.

- **Groundwater:** Agriculture, which is mainly rain-fed, will depend more on the already overexploited groundwater, which will lead to falling water tables.

- **Glacier melt:** The melting of most Himalayan glaciers and snow cover would mainly destabilize the glacier-fed rivers of north India, the Indus and the Brahmaputra rivers, and, to a lesser extent, the Ganges. Increased flows in spring and much reduced flows in summer will likely result, adversely affecting river basins in the Himalayan and sub-Himalayan regions, home to the largest number of indigenous communities.

- **Sea-level rise:** Increased coastal flooding, riverine flooding, and saltwater intrusion affecting groundwater are expected.

- **Tropical cyclones:** These would adversely impact agriculture, drinking water, and health, particularly on the east coast.

- **Energy security:** Long-term decreases in river flows negatively impact hydropower and thermal power generation. There are increased threats from landslides, flash floods, glacial lake outbursts, and other climate-related natural disasters.


\(^ {36}\) Mean annual temperature will rise by 1.89°C (1.11°C to 2.84°C) in 2040-2059 and about 4°C by 2080-2099. See https://climateknowledgeportal.worldbank.org/country/india/climate-data-projections

\(^ {37}\) Annual precipitation will rise by 51.56mm (-234.40mm to 370.88mm) in 2040-2059. ibid
• Water security: With falling watertables and erratic rainfall, particularly in central India, the Western Ghats and the northeastern states with substantial populations of Indigenous Peoples, people will face water shortages. Largely starved of piped drinking-water supply and irrigation, Indigenous Peoples will be impacted disproportionately as they depend on natural runoff, streams, rivers and wells.

• Agriculture and food security: The above impacts of climate change have led to a decline in yields of staple foods38 such as rice and wheat, and, as demands and prices increase, food security is jeopardized.

• Health: Heightened food insecurity, increasing malnutrition and related disorders, vector-borne diseases and diarrhoeal infections are likely to spread. Injuries from extreme weather events are likely to increase. Furthermore, tribal regions are the least served by public and private health in the country.

• Migration and conflict: Migration of people from disaster-affected areas and social tensions arising from this could increase. Labour migrations of tribal peoples are on the increase from the central Indian belt and from Assam in the north-east. Such migrations are almost absent in the remaining north-east states where secure resource rights and autonomy results in a better score on the human development index.

• Island regions: The island regions of Andaman and Nicobar and the tropical archipelago of Lakshadweep are ecologically unique and fragile; the former are inhabited by some of the least contacted tribal peoples, who are under threat of extinction, while the latter is almost wholly dominated by tribal peoples. Climate events such as rising sea levels, coastal erosion and cyclonic storms are increasing threats.

Among the tribal peoples, those most excluded are the more marginalized in general; those who live in unruly terrains and deep in the forests; and those who are internally displaced, whose lands have been taken over for development and conservation projects, for extractive industries or as conflict zones. In general, the disabled and the women suffer the most, particularly in the aforementioned areas. The youth in these destabilized regions are forced to forgo their education and migrate in search of meagre wages, often becoming subject to semi-bondedness.

38 A third of land area is used for cereal production, about 300 million tonnes per year (2016), See https://climateknowledgeportal.worldbank.org/country/india/impacts-agriculture
Climate policies

India signed the UN Framework Convention on Climate Change (UNFCCC) on 10 June 1992 and ratified it on 1 November 1993. It also signed and ratified the Kyoto Protocol on 26 August 2002.

The National Environment Policy 2006 provides the broad policy framework on environment and climate change. The National Action Plan on Climate Change (NAPCC) and state action plans on climate change (SAPCCs) are the guiding documents for mainstreaming climate change concerns in sectoral plans and policies, both at national and state level. The Ministry of Environment, Forest and Climate Change has been the focal point for climate change issues in India since 2009. A number of national programs have a bearing on climate change action plans; these include:

- the National Policy for Farmers, which focuses on sustainable development of agriculture
- the National Agroforestry Policy, which deals with agroforestry issues
- the Pradhan Mantri Krishi Sinchayee Yojana, which extends irrigation coverage and improves water use efficiency
- the National Watershed Development Programme which comprises three area-based watershed programs for developing wastelands / degraded lands, namely the Drought Prone Areas Programmes, the Desert Development Programme and the Integrated Wastelands Development Programme
- Neeranchal, which adds focus to watershed development
- the Mahatma Gandhi National Rural Employment Guarantee Act 2005, which provides at least 100 days of guaranteed wage employment in a financial year to every household for improving rural infrastructure, augmenting land and water resources, and enhancing the livelihood resource base of the rural poor.
3.1 Nationally determined contribution

India submitted its Intended National Determined Contribution to the UNFCCC on 2 October 2015, just before the Paris Climate Summit. India ratified the Paris Agreement on 2 October 2016. The first NAPCC was proposed in 2008, followed by eight national climate missions closely tied to the pledges in the NDC. The state governments came up with their own SAPCCs in 2014–2015 and these are now being revised by most states.

The goals of India’s NDC for the period 2021–2030 are as follows:

1. Put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.

2. Adopt a climate friendly and a cleaner path than the one followed hitherto by others at a corresponding level of economic development.

3. Reduce the emissions intensity of GDP by 33–35 per cent by 2030 from 2005 levels.

4. Achieve about 40 per cent cumulative electric power installed capacity from non-fossil-fuel-based energy resources by 2030 with the help of transfer of technology and low-cost international finance, including from the Green Climate Fund.

5. Create an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent (CO2-eq) by 2030 through additional forest and tree cover.

6. Better adapt to climate change by investing more in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, the Himalayan region, coastal regions, health, and disaster management.

7. Mobilize domestic funds, and new and additional funds from developed countries, to implement the above mitigation and adaptation actions in view of the resources required and the resource gap.

8. Build capacities, and create a domestic framework and an international architecture for quick diffusion of cutting-edge climate technology in India and for joint collaborative R&D for such future technologies.

The type of contributions, the greenhouse gas (GHG) targets and the non-GHG targets are provided as Annexure A.

39 See https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/India/1/INDIA%20INDC%20to%20UNFCCC.pdf

40 See https://www.climatewatchdata.org/countries/IND#ghg-emissions
3.2 REDD+ strategy

India’s NDC committed to create an estimated carbon sink of 2.5 million tonnes of CO2-eq through additional forest and tree cover by 2030.

Table 1. Forest cover in India

<table>
<thead>
<tr>
<th>Forest</th>
<th>Area (sq km)</th>
<th>Geographical area (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>712,249</td>
<td>21.67</td>
</tr>
<tr>
<td>Tree cover</td>
<td>95,027</td>
<td>2.89</td>
</tr>
<tr>
<td>Total forest and tree cover</td>
<td>807,276</td>
<td>24.56</td>
</tr>
<tr>
<td>Forest cover in the tribal districts</td>
<td>422,351</td>
<td>37.54</td>
</tr>
</tbody>
</table>

Source: India State of Forest Report 2019

In 2019, the total carbon stock of forests (see Table 1) was estimated at 7,124.6 million tonnes, an increase of 42.6 million tonnes from 2017. This represents an annual increase of 21.3 million tonnes, or 78.1 million tonnes of CO2-eq. The carbon stock of both forest and tree cover was 28.12 billion tonnes of CO2-eq in 2005 and is projected to rise to 31.87 billion tonnes of CO2-eq in 2030, an increase of 3.75 billion tonnes of CO2-eq in 25 years. This leaves a shortfall of 0.25 billion tonnes of CO2-eq against the target of 2.5–3.0 billion tonnes, which is expected to be achieved through “activities such as restoration of open forests and afforestation on different kinds of available lands like wastelands, agroforestry along national and state highways, railway sidings, urban landscapes etc”.

The National REDD+ Strategy was launched in 2018 to facilitate implementation of the REDD+ programme. Fourteen physiographic zones were identified on the basis of topography, latitude and altitude, as well as climatic and soil properties broadly resembling the factors responsible for tree growth.

---

The following REDD+ activities were to commence on a pilot basis:

- reducing emissions from forest degradation
- conserving forest carbon stocks
- sustainably managing forests
- enhancing forest carbon stocks.

The government has also launched new initiatives for enhancing forest carbon stocks (See Annexure B).

3.3 National adaptation plan

Assessment of risks indicates vulnerability of varying degrees and priority. The impacts due to these vulnerabilities are to be taken up together with the adaptation and mitigation potential that exists. This will indicate what needs to be done to deal with the perceived risks. A summary of these risks is provided in Table 2.
Table 2. Summary of India’s climate risks by sector and region

<table>
<thead>
<tr>
<th>Climate risks</th>
<th>Key sources of vulnerability</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Changing patterns of temperature and precipitation</td>
<td>• Large-scale dependence on climate-sensitive livelihood systems such as agriculture, fisheries and livestock</td>
</tr>
<tr>
<td>• Increased frequency of climate extremes across geographies such as glacier-fed river basins, semi-arid regions, and delta regions</td>
<td>• Sociopolitical and cultural factors</td>
</tr>
<tr>
<td>•</td>
<td>• Rapid and unplanned urbanization in many parts of the country</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vulnerable sector</th>
<th>Illustrative potential impacts on vulnerable sector</th>
<th>Illustrative adaptation priority / measures by sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>• Reduction in crop yield; for example, grain yield of rice declined by 10% for each 1 °C increase in the growing-season minimum temperature</td>
<td>• National Initiative on Climate Resilient Agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improved and efficient agricultural practices such as climate-smart Agriculture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Risk-transfer mechanisms such as the National Agricultural Insurance Scheme, which is the largest crop insurance scheme in the world</td>
</tr>
<tr>
<td>Water</td>
<td>• Decline in water quantity as well as quantity because of increased evapotranspiration and extreme weather events</td>
<td>• National Water Mission, as part of the National Action Plan for Climate Change (NAPCC)</td>
</tr>
<tr>
<td>Cities</td>
<td>• Greater exposure of coastal cities to risks such as cyclones and sea-level rise, and associated risk of flooding and infrastructure damage</td>
<td>• National Mission on Sustainable Habitats, as part of the NAPCC and ongoing Smart Cities initiatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Preparation of a city resilience strategy for many cities</td>
</tr>
<tr>
<td>Health</td>
<td>• Increased incidence of waterborne diseases</td>
<td>• Proposed National Mission on Health as part of the NAPCC</td>
</tr>
<tr>
<td></td>
<td>• Increased incidence of vector-borne diseases such as malaria and dengue</td>
<td>• Specific actions such as the Ahmedabad Heat Action Plan to cope with extreme heat waves.</td>
</tr>
<tr>
<td>Coastal livelihoods and fisheries</td>
<td>• Decline in fish catch in inland and coastal fisheries due to changes in sea temperature and hydrological changes in major river systems</td>
<td>• Various actions under the coastal zone management plan, including livelihood support to coast-dependent communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proposed new mission on coastal resources under the NAPCC</td>
</tr>
<tr>
<td>Mountain systems</td>
<td>• Temperature changes causing snow to melt and glaciers to retreat in many parts of the Himalayas</td>
<td>• Specific mission on sustaining the Himalayan ecosystem and other programs</td>
</tr>
<tr>
<td>Particularly vulnerable regions</td>
<td>Particularly vulnerable groups</td>
<td>Status of climate governance (policies, institutions)</td>
</tr>
</tbody>
</table>
- Himalayas in the north, and northeast regions
- Snow- and glacier-fed river basins of the Ganges, Indus, and Brahmaputra
- Arid and semi-arid regions, mostly those of western India
- Coasts and coastal regions
- Deltas
- Island ecosystems

- Small and marginalized farmers
- Different groups of tribal populations, who are primarily resource-dependent
- Women and children, because of existing sociopolitical structures

- Sector- and region-specific adaptation action plan in place since 2008
- Highest political priority accorded to India’s climate change action plan
- Sub-national climate change action plan prepared and endorsed by the federal agency
- National Adaptation Fund for Climate Change established in July 2014

Source: 2016 Review of Current and Planned Adaptation Action in India\textsuperscript{45}

According to the ND-GAIN Country Index\textsuperscript{46} of the Notre Dame Global Adaptation Initiative, a measuring tool that examines the risk by climate change, India ranked 122 overall among 181 countries, with a score of 41.9 (higher scores are better)\textsuperscript{47}. India ranked 134 in vulnerability with a score of 0.509, and 123 in readiness with a score of 0.347 (For details, see Annexure C).

3.4 National and state action plans on climate change

The NAPCC addresses the national adaptation goals along with the state-specific state action plan on climate change (SAPCCs). Launched in 2008, the NAPCC\textsuperscript{48} identifies measures to advance India’s development-related and climate-change-related objectives of adaptation and mitigation. It is based on the principles of (a) a climate-sensitive, inclusive sustainable development strategy; (b) ecologically sustainable growth that mitigates GHG emissions; (c) efficiency and cost-effectiveness; (d) appropriate technologies for adaptation and mitigation of emissions; (e) new innovative market regulatory and voluntary mechanisms for sustainable development; (f) linkage with civil society, local government and


\textsuperscript{46} See https://gain.nd.edu/our-work/country-index/rankings/

\textsuperscript{47} A country’s ND-GAIN index score is composed of a Vulnerability score and a Readiness score. Vulnerability measures a country’s exposure, sensitivity and ability to adapt to the negative impact of climate change. ND-GAIN measures the overall vulnerability by considering vulnerability in six life-supporting sectors – food, water, health, ecosystem service, human habitat and infrastructure.

public-private partnerships and (g) international cooperation for R&D and the transfer of technologies through funding and global technology-transfer-friendly intellectual property rights.

The NAPCC is to be carried out through eight national missions:

- Jawaharlal Nehru National Solar Mission\(^{49}\)
- National Mission for Enhance Energy Efficiency\(^{50}\)
- National Mission on Sustainable Habitat\(^{51}\)
- National Water Mission\(^{52}\)
- National Mission for Sustaining the Himalayan Ecosystems\(^{53}\)
- National Mission for a Green India\(^{54}\)
- National Mission for Sustainable Agriculture\(^{55}\)
- National Mission for Strategic Knowledge for Climate Change\(^{56}\).

The NAPCC also lists other mitigation initiatives (See Annexure D). It also dwells on international cooperation for technology development and transfer issues, and clean development mechanisms supporting renewable energy projects, energy efficiency projects, forestry and municipal solid waste.

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\(^{49}\) To increase the share of solar energy in the total energy mix along with other renewable and non-fossil options as nuclear energy, wind energy and biomass.

\(^{50}\) To enhance energy efficiency through Bureau of Energy Efficiency and designated State agencies facilitated by the Energy Conservation Act, 2001 targeting to save 10,000 MW by 2012, adopting market-based mechanism for cost effectiveness, using energy efficient appliances, financing and developing fiscal instruments.

\(^{51}\) To improve energy efficiency in buildings, management of solid waste and shift to public transport.

\(^{52}\) To ensure integrated water resource management systems to conserve water, minimize wastage and ensure more equitable distribution both across and within states.

\(^{53}\) To evolve management measures for sustaining and safeguarding the Himalayan glacier and mountain ecosystem, and to establish an observational and monitoring network for the Himalayan environment.

\(^{54}\) To enhance ecosystem services including carbon sinks with special importance on reforestation and afforestation.

\(^{55}\) To make agriculture more resilient to climate change through new technologies, integrating traditional knowledge, and employing new credit and insurance mechanisms.

\(^{56}\) To identify the challenges of, and the responses to, climate change through a global exchange in research and technology development.
State action plan on climate change

Initiated in 2009, India’s 28 states and eight union territories (administered by the central government) each drafted a state action plan on climate change (SAPCC) describing state-specific adaptation and mitigation measures providing for short-, medium- and long-term strategies. The plans, which were subsequently fine-tuned and revised, effectively describe the background; the profile of the region, including ecological, demographic, economic and sectoral profiles; the climate profile (trends and change), climate risks, threats and vulnerabilities; and the adaptation and mitigation strategies required and adapted in line with the national plan and its eight missions, including activities identified by sector, such as urban development, transport, energy, industries, mining, agriculture, water resources, habitat, forestry, biodiversity, coastal, tourism, health and disaster management. A committee consisting of key government functionaries steers the process.

A list of other sector-related policies and responses and their targets are provided in Annexure E. The laws and policies that have a bearing on climate change response are provided in Annexure F.

3.5 Recognition of rights in climate policies

India’s NDC, REDD+ strategy, NAPCC and SAPCCs alike portray tribal peoples as poor people living in interior areas endowed with rich natural resources, who lack basic facilities and depend on natural resources, especially forests. The policies also portray these people as having a natural-resource-intensive lifestyle, particularly due to the Jhum (shifting) cultivation practised mainly in the northeast and in parts of central India—a view that is outdated and false.57

Because of this view, the government response, through the above-mentioned climate change policies, is to facilitate coping capacities to weather variability; improve tribal peoples’ livelihoods through strategies for the sustainable management and marketing of non-timber forest produces; support livelihood activities; wean tribal peoples away from shifting cultivation,58 encourage agroforestry / farm forestry; establish tree plantations on their uncultivated lands; and provide employment through afforestation activities. Official documents portray tribal peoples as victims of various processes, both natural and externally induced human activities. Climate response plans depict them as mere beneficiaries of the planned responses.


Nowhere are tribal peoples seen worthy of having valuable insights on climate impacts, mitigation and adaptation, even when it comes to the ecosystems that they have sustained for generations.

The NDC, REDD+ strategy, NAPCC and SAPCCs do not at any stage refer to tribal peoples as having special status in the Constitution, particularly to (a) governance and autonomy with distinct territorial jurisdiction conferred at various levels, such as the habitation, village, district and, in two cases, the state level and (b) control over lands and forests. They ignore the fact that these provisions (described in Section 1) applicable to specific areas populated largely by tribal peoples are distinct and different from the rest of the country and its population. Neither do any of these documents refer specifically to tribal women, youth and persons with disabilities, either in terms of impacts, vulnerabilities or risks or participation in climate action plans. However, references are made to small and marginal farmers, resource-dependent tribal populations, and women and children in general as vulnerable sections of society. Given the emphasis on forest protection, afforestation and carbon sequestration in the national climate policies—efforts that will primarily be carried out on lands notified as forest and outside forests—it is a missed opportunity that the legally recognized authorities of tribal peoples who govern these lands are neither referred to nor considered as partners. Rather they are perceived as mere recipients of standardized programs that are developed at a national level.

While the constitutional provisions and the aforementioned laws that specifically empower tribal peoples are ignored, the major focus on carbon sequestration through carbon sinks from massive tree plantations—catalysed by international and national policy, plans and funding—has given a boost to the regressive and repressive provisions in forest laws that are no longer legally valid (overridden, as they are, by the FRA 2006 which nullifies their rights-restricting provisions and the governance authority of the forest bureaucracy). This has set in motion a process of dismantling laws that recognize the rights of tribal peoples at two levels. First, the Environment Ministry and its forest bureaucracy are resisting the FRA implementation on the ground, administratively and in the courts. Second, they are seeking to challenge and modify the law through administrative and legal means. These efforts are continuously being resisted by the tribal peoples in defence of the FRA. It is crucial that the FRA is recognised and acknowledged as a conservation-based, community-centric, eco-specific model, in contrast to the disastrous fortress conservation approach, as per the findings of conservation science. This is absolutely critical to combating the climate crisis, given that


tribal peoples make up 87 million of the 300 million people who derive “their livelihoods and sustenance from forests”. That is a massive 84 per cent of the tribal peoples in India whose forest rights are hardly recognized despite the passing of 13 years since the FRA was operationalized in 2008. Further, the large investment and land grab for tree plantations, besides violating forest rights, could be harmful ecologically, threatening biodiversity, groundwater and soil fertility.

3.6 Issues and concerns for Indigenous Peoples in national climate policies

The climate change impacts, be they floods or droughts, manifest on livelihood, habitat and ecology in different ways. Tribal peoples generally see them as just natural disasters. That their frequency and intensity have increased is also generally acknowledged as the vagaries of nature rather than any emerging climate crisis. Of course, they know that the climate has been changing. Their primary concern and cause of worry is how to cope with and survive the crisis and its aftermath, and reorganize their lives and livelihoods. The indigenous women, the persons with disabilities, the aged, the children and the youth are the ones who are in dire straits.

Tribal peoples and their organizations have been raising several issues that are at the core of climate action. Their homelands are mineral rich, particularly coal in parts of central India. Tribal peoples’ organizations, activists and trade unions have repeatedly resisted the auctioning of coal mines63 which leads to displacement and pollution. So too have there been protests against India-headquartered mining companies displacing Indigenous Peoples in other countries.64 Tribal peoples’ forest rights groups have been critiquing the exclusionary forest management and climate change policies and programs that violate the FRA, a crucial weapon in the fight against climate change.65

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63 Tribals in 3 states against Centre’s decision to auction coal mines, say it would displace them, Hindustan Times, 26 June 2020, https://www.hindustantimes.com/india-news/tribals-in-3-states-against-centre-s-decision-to-auction-coal-mines-say-it-would-displace-them/story-ZLVv7RbqO6iiU0qTCM.html
As mentioned earlier, the legal framework provides for legally sanctified institutional authorities at each of the hundreds of thousands of habitations who are competent to devise eco-specific, location-specific, sustainable climate-change mitigation and adaptation programs that also address issues of livelihood in a more efficient and cost-effective manner. This would not only be in harmony with the existing framework, but could progressively build capacity endogenously, paving the way forward for the emergence of good practices, blending the vast accumulated indigenous knowledge and potential. In the case of forests alone, over 40 million hectares could be brought under this conservation regime, covering over 10 per cent of the total lands in the country.

3.7 Participation of Indigenous Peoples in climate change policies

There were no large-scale consultations during the development of India’s NDC, NAPCC, SAPCCs and national REDD+ strategy. Discussions and consultations were limited to a small section of bureaucrats from the relevant ministries, departments, institutions and experts. Generally, there are provisions for involving civil society and local communities as participants in the programs initiated. However, the documents propound this “participation” primarily in the form of local community awareness and receipt of benefits, mostly in terms of employment generated with reference to tribal people, for instance in compensatory afforestation. 66

At the national level, the Ministry of Tribal Affairs is mandated to deal with all matters related to Scheduled Tribes. Since 2006, the subject of forest rights has been carved out from the responsibilities of the Environment Ministry and entrusted to the Tribal Ministry. Yet, the Environment Ministry ignores the Tribal Ministry, often drafting policies related to forests and climate change, and issuing orders in violations of the FRA, disregarding objections from the Tribal Ministry. Another government institution exclusively concerned with Scheduled Tribes is the National Commission of Scheduled Tribes, essentially a recommendatory body that seeks to address concrete issues and problems faced by tribal peoples anywhere in the country, which could include issues of adverse impacts on the lives and property of tribal peoples due to climatic events.

At the state level, the tribal department is the institution, with structures at the district and sub-district (block) levels that implement tribal development and welfare programs of the central and state governments. This is one of the departments that can be charged with delivering the various services envisaged under mitigation and adaptation programs, including the eight national missions.

Where the tribal population is significant, the tribal department might be represented at the state-level steering committee on climate change. Statutory bodies have been constituted and activated at the habitation level under the FRA and in the Fifth Schedule area through PESA. There are the district autonomous councils in the Sixth Schedule Areas. Equally vibrant traditional institutions also coexist. Yet, instead of democratic institutions, the state bureaucratic machinery prefers and promotes bodies created by them and under their control, servile creatures of the administration as they are, to carry out the tasks that they allot.

For instance, to execute the programs under their mandate, the Forest Department prefers the village forest committees / joint forest management committees that it has created and controls, numbering “over 100 thousands involving around 20 million people managing over 22 million hectare of forest area”\(^{67}\) and the eco-development committees. The various statutory democratic institutions created by tribal peoples, the Gram Sabhas, are ignored because they are most likely to exhibit and assert authority and autonomy. Numerous committees are required to be constituted under various schemes and programs of various line departments, such as the self-help groups which too are considered bodies who would be engaged in the climate action. That said, some states do recognize that these statutory bodies are legal entities that have a legitimate role to play in climate action and whose cooperation is mandatory, especially where there is a history of sustained community assertion leading to the state authorities engaging with them. However, an explicit mechanism to involve tribal peoples in the climate action plan at the state level is not known to exist.

In reality, knowledge about and involvement in international-level climate efforts is limited to the very few non-government organizations implementing projects that relate to international processes. For the most part, these projects are alien and unknown to most of the tribal organizations, traditional institutions and statutory bodies of tribal peoples created by laws. There is hardly any interaction or communication between the former and latter. This phenomenon of working in silos is widespread.

\(^{67}\) Ministry of Environment, Forests & Climate Change, National Policy on REDD++ (Final Draft), Op Cit.
The impact of current climate interventions on Indigenous Peoples

4.1 Land conflicts

Solar power plants require large amounts of land, giving rise to many land conflicts with farmers, pastoralists and villagers. The number of conflicts is expected to increase due to India’s high target (100,000 MW) for solar power by 2022 compared to the currently installed capacity of 40,085 MW.68

4.2 Forest rights violations

The FRA became operational in 2008. Recognition of forest rights and Gram Sabha consent for forest diversion was made mandatory in 2009. Between 2009 and 2019, 253,179 ha were diverted for non-forestry purposes while another 182,817 ha were diverted for tree plantations to compensate the former diversion under ‘compensatory afforestation’. Of this 182,817 ha, 25 per cent was degraded forest. The rest was revenue land consisting of community land, agricultural land and homesteads.69 When forests are diverted for non-forestry purposes, an equivalent area of land outside the forest areas, or double the area of land if within the forest land, must be afforested. The fund for compensatory afforestation accrues from the user agencies for forest diversion. By 2019, of the INR748.25 billion thus received, INR653.78 billion had been disbursed to the states for compensatory afforestation.

FRA implementation and Gram Sabha consent for diversion were pre-conditions for admissibility of the forest diversion proposals. These provisions have been tweaked in the Rules of the Forest (Conservation) Act 1980. Now, the District Collector’s certificate certifying that these pre-conditions have been met are sufficient for approval for diversion, and that too only after in-principle first-stage clearance by the Environment Ministry, literally making the diversion a fait accompli. Even this procedure is not followed for forest diversion for

afforestation. Diversion for non-forestry purposes and consequent afforestation without recognition of rights or ignoring rights, and without consent, is not only illegal but also gives rise to conflict which often leads to violence.

In India, 179,230 villages, each having one or more hamlets, access forests. According to the Environment Ministry, at least 40 million ha of forests (56 per cent of the total forests) are accessed by forest-dwelling communities, primarily tribal peoples, and are to be transferred by the forest bureaucracy to the village-level institutions. However, FRA implementation has been very poor. By the end of 2020, only 5.3 million ha were titled, just 13.18 per cent of the potential area and 6.9 per cent of forests. The forest bureaucracy aggressively resists FRA implementation, especially in protected areas.

The significant Compensatory Afforestation Fund, along with the funds available under the National Mission for Green India—one of the eight missions outlined under NAPCC with INR46,000 crores for ‘greening’ 10 million ha over the next 10 years (as on 2012)—could pose a major threat to tribal peoples’ land rights and livelihoods. The Compensatory Afforestation Fund is also used for relocating tribal inhabitants from protected areas, especially tiger reserves. INR60 billion of this fund was released to generate employment for the tribal people as a relief measure for migrant workers forced to return home in large numbers due to COVID-19-related lockdowns. Afforestation in the way it is practised denies people rights to the lands afforested, deepens food insecurity and depletes biodiversity. Further, the funds have also been subject to corruption and scams.71

4.3 Land banks and violation of land rights

Government lands and lands acquired from communities for various projects that have later been shelved have been put together as ‘land banks’ and made available for new industrial projects. The land bank concept has been extended to include land for compensatory afforestation. The Environment Ministry asked the states in 201472 and again in 2017 for non-forest land and degraded forestland for creating a land bank for compensatory afforestation. Over 2.68 million ha were identified in Andhra Pradesh, Chhattisgarh, Madhya Pradesh, Jharkhand, Odisha, Tamilnadu, Rajasthan and Uttar Pradesh for inclusion in land banks.74

71 Rupavath, Prudhviraj. What happened to Rs.6,000 crore tribal employment generation under Atmanirbhar Bharat, News Click, 18 August 2020, https://www.newsclick.in/Rs%206%2C000-Crore-Tribal-Employment-Generation-Atmanirbhar-Bharat
72 See http://forests clearance.nic.in/writereaddata/public_display/schemes/686571466&guide.pdf
73 See http://forests clearance.nic.in/writereaddata/public_display/schemes/553905943%120 423%202011.pdf
74 Bhasker Tripathi, As States Create Land Banks for Private Investors, Conflicts Erupt Across India, The Wire, 19 September 2017, https://thewire.in/banking/statescreate-land-banks-private-investors-conflicts-erupt-acrossindia
Land for compensatory afforestation is largely found in the tribal regions and is taken in violation of traditional rights, both formally recognized and unrecognized rights, and without the consent of the customary land owners.

4.4 Protected areas and violation of rights

Rich forests and wildlife are being brought under an expanding protected area regime, progressively pushing tribal peoples out even though this is no longer legal. At the same time, these areas are being secured as global ecotourism hotspots. They are under the general sway of the larger national trend which could now lead the state and businesses to increase their political control over tribal peoples’ livelihood resources and lives in the name of climate action through forest growth and conservation. Tribal peoples’ continuous assertion of their rights over their lands and natural resources continues to thwart these incursions.

Violation of traditional resource rights, whether recognized or yet to be recognized under extant laws, or those rights yet to be brought under the purview of any law, impacts tribal peoples differentially. Those who sustain themselves by foraging, most of whom are included under the official category of Particularly Vulnerable Tribal Groups,75 live precarious lives. Their rights are the least recognized, and they are the most neglected and unreached by government services. Any change in land use or exclusion from access to the lands they depend upon hits directly at the very source of their food. The pre-agricultural, nomadic and pastoral communities are the next most threatened by changes in land use or exclusion. The settled agriculturists too, for the most part inhabiting the forests and forest fringe areas, usually depend on forests and common lands to varying degrees for their livelihood. Often, agriculture is only a subsidiary source of livelihood. They are susceptible to being induced or forced to part with their land for a pittance; their access rights to common resources also get denied. And within all of them, the impact is felt differentially. Indigenous women whose role in food production is extensive are the worst effected, having to labour much more to achieve fragile food security of the community; they may even be forced to seek an alternative source of succour. People with disabilities, the old and infirm are faced with increasing hunger. The able-bodied youth become prey to bondage to labour contractors, and sent to far-off places for meagre wages for the hard labour and long hours of work extracted from them. None of these realities are considered and factored into the decision-making and planning of climate interventions.

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75 There are 75 Scheduled Tribes who are in this category. For State-wise list of Particularly Vulnerable Tribal Groups (PVTGs), see https://tribal.nic.in/DivisionsFiles/SwLPVTGs.pdf
Indigenous Peoples’ contributions to addressing climate change

Considering that the vast majority of the tribal peoples of India are forest-dwellers or forest-dependent peoples, it is important to recognize that forests constitute the critical cross-cutting geographical space for these peoples, the governments and climate change action plans. Of the 640 districts in 27 states / union territories, 218 are identified by the government as tribal districts under the Integrated Tribal Development Programme. These districts registered an overall increase of forest cover of 1,181 sq km between 2017 and 2019, although the officially recorded forest area shrank by 741 sq km. This implies that forest cover outside notified forests—i.e. land under the management of Indigenous Peoples—has increased.

India’s first National Forest Policy of 1952 declared that each state should strive to have 33 per cent of its land area covered by forest. By 2019, 13 of the 28 states had 33 per cent or more land area as forests. This included all eight states in the north-east. Over half of the north-east is forested. Of this, 55 per cent is not notified by the government as forests under the forest law and, consequently, the Forest Department does not administer these forests. Instead, they are governed by local communities and are categorized as unclassed forests in government records. Of the top five states with forests in India, four are north-east states where Scheduled Tribes make up the majority of the population. The forested areas in these states almost remained the same between 2017 and 2019 and dense forests increased. A similar trend is seen in the regions in central India that remain dominated by tribal peoples. Forests have more or less been retained while dense forests have expanded. And these regions are either not administered by the forest bureaucracy or are minimally administered for reasons of accessibility and other factors. In summary, the above shows that tribal peoples have steadfastly resisted and continue to resist forest diversion and destruction.

This historic contribution of forest-dwelling tribal peoples to carbon sequestration remains unaccounted for, unrecognized and unreckoned by the government despite Section 28 of the Indian Forest Act 1927 providing for forests to be assigned to villages. This needs to be addressed for two obvious reasons: the first is that it relates to the dignity of tribal peoples and the second is that it is crucial for successful climate action.

Indigenous Peoples are the least responsible for the climate crisis and have the world’s smallest carbon footprint. North-east India, except for the state of Assam, presents living examples of societies thriving with sustainable low-carbon lifestyles with an above-national-average human development index in most of the states where tribal people account for about a third or more of the state’s population. The north-east is also endowed with unique constitutional provisions that recognize community control over land and forests combined with political autonomy and considerable self-governance.

In stark contrast, in the central Indian tribal belt, despite the land and forests being rich in natural resources, the tribal peoples are the most deprived of all peoples in the country. Their traditional and customary rights to the land, forests and natural resources have been progressively undermined and denied in law. They have been termed encroachers on their own lands, displaced, driven out, and robbed of their land titles, with large tracts destroyed by extractive industries. Village autonomy—which largely falls within the purview of the Fifth Schedule and PESA, along with the FRA—is legally stronger here than in most parts of the country (excepting the north-east). But these statutory powers are suppressed and violated by the states. Political struggles for implementation of the extant laws that empower the tribal communities persist.

To facilitate the contribution that tribal peoples can make to climate change mitigation efforts, it is important to recognize and protect their rights, not only to land and resources, but also to autonomy and self-governance so that they are able to determine a sustained path towards low-carbon development.

In summary, being mostly forest-dwellers, India’s tribal peoples undeniably have historically contributed to the climate change ‘solution’ through carbon sequestration and their consistent forest stewardship, even though they invariably have contributed little, if anything, to the ‘problem’, with their relatively low carbon footprint or perhaps even carbon-negative lifestyle. Clearly, India places significant importance on carbon sequestration through afforestation—it is possibly the primary task in its climate action plan. Consequently, the forest-dwelling tribal peoples, armed now with the statutory authority to protect, conserve, manage and control the forests, should constitute a leading partner of the government in national climate actions.
## ANNEXURE A. Contributions and targets

<table>
<thead>
<tr>
<th>Contribution Type</th>
<th>GHG Target</th>
<th>Non-GHG Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigation</td>
<td>Target year: 2030</td>
<td>“To achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“To create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.”</td>
</tr>
<tr>
<td></td>
<td>Sectors covered: Not specified; various sectors mentioned for mitigation and adaptation strategies such as energy, industry, transportation, agriculture, forestry, waste.</td>
<td>“Wind energy has been the predominant contributor to the renewable energy growth in India accounting for 23.76 GW (65.2%) of the renewable installed capacity, making India the fifth largest wind power producer in the world. With a potential of more than 100 GW, the aim is to achieve a target of 60 GW of wind power installed capacity by 2022. Solar power in India is poised to grow significantly with the National Solar Mission as a major initiative of the Government of India. Solar power installed capacity has increased from only 3.7 MW in 2006 to about 4,060 MW in 2015, with a Compound Annual Growth Rate [CAGR] of more than 100% over the decade. The ambitious solar expansion programme seeks to enhance the capacity to 100 GW by 2022, which is expected to be scaled up further thereafter. A scheme for development of 25 Solar Parks, Ultra Mega Solar Power Projects, canal top solar projects and one hundred thousand solar pumps for farmers is at different stages of implementation. Government of India is also promoting solarization of all the 55,000 petrol pumps across the country out of which about 3,135 petrol pumps have already been solarized. Biomass energy constitutes about 18% of total primary energy use in the country and more than 70% of the country’s population depends on it. However, it is currently used in an inefficient manner with high levels of indoor pollution. A number of programmes have been initiated for promotion of cleaner and more efficient use, including biomass-based electricity generation. It is envisaged to increase biomass installed capacity to 10 GW by 2022 from current capacity of 4.4 GW.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India also lists the mitigation technologies that the country plans to implement which include “accelerated-driven systems in advanced nuclear fuel cycles” and “renewable energy.”</td>
</tr>
</tbody>
</table>

Target type: Intensity target

Adaptation included: Yes
ANNEXURE B. New initiatives for enhancing forest carbon stocks

Namami Gange

The National Ganga River Basin Authority, as part of depolluting and augmenting water flow in river Ganga, proposes to afforest 83,946 sq km of diverse forest areas in five Ganga Basin states—Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal—over the next five years.

Forestry interventions for other major river catchments

Includes protection, habitat management, afforestation, catchment treatment—soil and moisture conservation work, ecological restoration of vital riparian forest buffer, bioremediation, improved livelihood of forest-dependent communities and forest-dwellers, and alternative income-generation activities through regulated tourism and awareness for other major river catchments such as Brahmaputra, Yamuna, Narmada, Tapti, Godavari, Krishna, Kaveri and Mahanadi. Planting four columns of trees and shrubs alongside highways by developers as per the Green Highways (Plantation, Transplantations, beautification & Maintenance) Policy, 2015, earmarking one per cent of project covering about 140,000 km of national highways.

Innovative programs

Partnerships with people from all walks of life through public engagement.

Strategies to address the identified drivers

Providing free LPG connections to 50 million women belonging to the ‘Below Poverty Line’ families over a period of three years from 2016, reducing dependency on conventional fuels such as coal and firewood. Provided gas to 33 million families by September 2017. This can increase forest carbon stocks.
ANNEXURE C. ND-GAIN Country Index for vulnerability and readiness

Vulnerability: Ranked 134 score 0.509 (lower scores are better)

A country’s ND-GAIN index score is composed of vulnerability score and a readiness score. Vulnerability measures a country’s exposure, sensitivity and ability to adapt to the negative impact of climate change. The ND-GAIN Country Index measures the overall vulnerability by considering vulnerability in six life-supporting sectors – food, water, health, ecosystem service, human habitat and infrastructure.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Rank</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecosystem Services</td>
<td>147</td>
<td>0.547</td>
</tr>
<tr>
<td>Food</td>
<td>134</td>
<td>0.573</td>
</tr>
<tr>
<td>Health</td>
<td>143</td>
<td>0.620</td>
</tr>
<tr>
<td>Human habitat</td>
<td>62</td>
<td>0.462</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>60</td>
<td>0.312</td>
</tr>
<tr>
<td>Water</td>
<td>164</td>
<td>0.542</td>
</tr>
<tr>
<td>Adaptive capacity</td>
<td>109</td>
<td>0.596</td>
</tr>
<tr>
<td>Exposure</td>
<td>184</td>
<td>0.572</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>99</td>
<td>0.363</td>
</tr>
</tbody>
</table>

78 The score of Ecosystem services captures the vulnerability of natural capital to climate change, the ecological resources that humans rely upon to support lives and livelihoods. Indicators include: projected change of biome distribution, projected change of marine biodiversity, natural capital dependency, ecological footprint, protected biome, and engagement in international environmental conventions.

79 The Food score captures a country’s vulnerability to climate change, in terms of food production, food demand, nutrition and rural population. Indicators include: projected change of cereal yields, projected population growth, food import dependency, rural population, agriculture capacity, and child malnutrition.

80 The Health score captures a country’s vulnerability of public health to climate change, in terms of the spread of communicable diseases and provision of health services. Indicators include: projected change of deaths from climate change induced diseases (diarrhea and malnutrition), projected change of malaria hazard, dependency on external resource for health service, slum population, medical staffs, and access to improved sanitation facilities.

81 The score of Human habitat captures a country’s vulnerability of human living conditions to climate change, considering weather extremes, urban development, demography, and transport infrastructure. Indicators include: projected change of heat wave hazard, projected change of flood hazard, urban concentration, age dependency ratio, quality of transport and trade infrastructure, and paved roads.

82 The Infrastructure score captures the vulnerability of coastal and energy infrastructure to climate change, primarily general preparedness to climate-related natural disasters, coastal hazards, and energy supply challenges. Indicators include projected change of hydropower generation capacity, projected change of sea level rise impacts, dependency on imported energy, population living under 5m above sea level, electricity access, and disaster preparedness.

83 The Water score captures a country’s vulnerability of fresh water supplies to climate change. Indicators include: projected change of annual runoff, projected change of annual groundwater recharge, fresh water withdrawal rate, water dependency ratio, dam capacity, and access to reliable drinking water.

84 The availability of social resources for sector-specific adaptation. In some cases, these capacities reflect sustainable adaptation solutions. In other cases, they reflect capacities to put newer, more sustainable adaptations into place.

85 The nature and degree to which a system is exposed to significant climate change. A component of vulnerability independent of socio economic context.

86 The extent to which a country is dependent upon a sector negatively affected by climate hazard, or the proportion of the population particularly susceptible to a climate change hazard.
Readiness: Ranking 123; Score 0.347 (higher scores are better)
A country’s ND-GAIN index score is composed of a vulnerability score and a readiness score. Readiness measures a country’s ability to leverage investments and convert them to adaptation actions. The ND-GAIN Country Index measures overall readiness by considering three components – economic readiness, governance readiness and social readiness.

<table>
<thead>
<tr>
<th>Economic 87</th>
<th>Governance 88</th>
<th>Social readiness 89</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranking 142; Score 0.286</td>
<td>Ranking 107; Score 0.446</td>
<td>Ranking 97; Score 0.310</td>
</tr>
</tbody>
</table>

ANNEXURE D. Other mitigation initiatives

- GHG mitigation in power generation – supercritical technologies and integrated gasification combined cycle technology for improved efficiencies in coal-based power generation, natural-gas-based power plants and closed-cycle three-stage nuclear power programme, and efficient transmission and distribution, and hydropower

- Other renewable energy technologies programmes – biomass-based power-generation technologies, small-scale hydropower, solar and wind technologies, and grid-connected systems

- Disaster management response to extreme climate events – reducing risk to infrastructure through better design, strengthening communication networks and disaster management facilities

- Protection of coastal areas – coastal protection and early-warning systems

- Health sector – enhanced public healthcare services and assessment of increased burden of disease due to climate change

- Creating appropriate capacity at different levels of government – policy research, implement R&D activities; redefine goals and area of operation of state agencies.

87 The score of Economic readiness captures the readiness of a country’s business environment to accept investment that could be applied to adaptation in the form of business formation and maintenance. A simple multi-factor index, Doing Business Index from the World Bank is the measure of economic readiness.

88 The score of Governance readiness captures the institutional factors that enhance application of investment for adaptation. Indicators include: political stability and non-violence, control of corruption, regulatory quality, and rule of law. All come from the World Governance Indicators (WGI).

89 The score of Social readiness captures the social factors that enhance the mobility of investment to be converted to adaptation actions. Indicators include: social inequality, ICT infrastructure, education and innovation.
### ANNEXURE E. Other policies and responses

Targets in laws and policies[^90]

<table>
<thead>
<tr>
<th>Sector</th>
<th>Target type</th>
<th>Target</th>
<th>National laws and policies with targets available for India for the sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adaptation</td>
<td>Targets in Submitted NDC</td>
<td>Capacity Building And Knowledge Transfer</td>
<td>There are no adaptation targets found in laws and policies</td>
</tr>
<tr>
<td></td>
<td>Target type not defined</td>
<td>Provide skill training in various sectors including sustainable development to about 400 million people by 2022</td>
<td></td>
</tr>
<tr>
<td>2. Agriculture</td>
<td>-</td>
<td>No agriculture targets found in the NDC</td>
<td>No agriculture targets found in laws and policies</td>
</tr>
<tr>
<td>3. Buildings</td>
<td>-</td>
<td>No buildings targets found in the NDC</td>
<td>No buildings targets found in laws and policies</td>
</tr>
<tr>
<td>4. Coastal Zones</td>
<td>-</td>
<td>No coastal-zones targets found in the NDC</td>
<td>No coastal-zones targets found in laws and policies</td>
</tr>
<tr>
<td>5. Cross-Cutting Area</td>
<td>-</td>
<td>No cross-cutting-area targets found in the NDC</td>
<td>No cross-cutting-area targets found in laws and policies</td>
</tr>
<tr>
<td>6. Disaster Risk Management</td>
<td>-</td>
<td>No disaster-risk-management-drm targets found in the NDC</td>
<td>No disaster-risk-management-drm targets found in laws and policies</td>
</tr>
<tr>
<td>7. Economy-wide</td>
<td>Targets in Submitted NDC</td>
<td>Intensity target</td>
<td>No economy-wide targets found in laws and policies</td>
</tr>
<tr>
<td></td>
<td>Intensity target</td>
<td>Economy-wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>33% to 35% reduction in the emissions intensity of its GDP by 2030 compared to 2005 level</td>
<td></td>
</tr>
</tbody>
</table>

[^90]: See [https://www.climatewatchdata.org/countries/IND?sector=water#climate-vulnerability](https://www.climatewatchdata.org/countries/IND?sector=water#climate-vulnerability)
### Energy Targets in Submitted NDC

<table>
<thead>
<tr>
<th>Target type not defined</th>
<th>Renewable Energy: Wind 60 GW by 2022</th>
</tr>
</thead>
</table>

- **Targets found in Tariff Policy 2006**
  - **Fixed-level target**
    - Renewable Energy: Waste Mandatory percentage of energy from Waste-to-Energy plants by distribution licensees by 2017 against a 2016 baseline

- **Base-year target**
  - Energy Efficiency Objectives of smart meters mandates by 2017, 2019 against a 2016 baseline

- **Targets found in National Policy on Biofuels 2009**
  - **Fixed-level target**
    - Renewable Energy: Biofuels An indicative target of 20% blending of biofuels, both for biodiesel and bioethanol, by 2017

### Environment - No environment targets found in the NDC

#### 9.
- **No environment targets found in the NDC**
- **No environment targets found in laws and policies**

### Finance - No finance targets found in the NDC

#### 10.
- **No finance targets found in the NDC**
- **No finance targets found in laws and policies**

---

91 National Tariff Policy was passed in January 2006 by the Ministry of Power in continuation of the National Electricity Policy of 2005. It included certain provisions on renewable energy and cogeneration. The central and the state electricity regulatory commissions must purchase a certain percentage of grid-based power from renewable sources. Solar power is to comprise 0.25% of power purchases by states by 2013, and 3% by 2022.

In January 2011, the Tariff Policy was amended to align with the National Solar Mission strategy. State electricity regulators to purchase a fixed percentage of solar power. This will be supported by a Renewable Energy Certificate (REC) mechanism. See https://climate-laws.org/geographies/india/policies/tariff-policy-2006

92 A National Policy on Biofuels was announced in December 2009 with ethanol production and proposing an indicative target of 20% blending of biofuels by 2017, both for bio-diesel and bioethanol. Only fuels derived from non-edible plants, waste, degraded or marginal lands are to be produced in order to avoid a conflict between energy security and food security. The policy offers farmers and cultivators a minimum support price for non-edible oil seeds, as well as a minimum purchase price for fuel. Financial incentives are to be introduced to develop R&D for production and commercialisation of ethanol and jatropha and establish a national biofuel development board. The policy set a uniform price of INR21.50 (USD0.35) per litre for ethanol. Since October 2007, 5% blending of ethanol with petrol has been mandatory, increasing to 10% from October 2008. See https://climate-laws.org/geographies/india/policies/national-policy-on-biofuels
| 11. | Health | Targets in Submitted NDC | Target type not defined | Disease Surveillance And Control | No industry targets found in the NDC | No industry targets found in laws and policies |
| 12. | Industry | - | - | No industry targets found in the NDC | No industry targets found in laws and policies |
| 13. | Land use, land-use change, and forestry (LULUCF) | Target type not defined | Target type not defined | LULUCF/Forestry: General Additional carbon sink of 2.5 to 3 billion tonnes of CO2-eq by 2030 with forest and tree covers | No LULUCF targets found in laws and policies |
| 14. | Other | - | - | No other targets found in the NDC | No other targets found in laws and policies |
| 15. | Public Sector | - | - | No public-sector targets found in the NDC | No public-sector targets found in laws and policies |
| 16. | Residential and commercial | - | - | No residential-and-commercial targets found in the NDC | No residential-and-commercial targets found in laws and policies |
| 17. | Rural | - | - | No rural targets found in the NDC | No rural targets found in laws and policies |
| 18. | Social Development | - | - | No social-development targets found in the NDC | No social-development targets found in laws and policies |
| 19. | Tourism | - | - | No tourism targets found in the NDC | No tourism targets found in laws and policies |
| 20. | Transport | - | - | No transport targets found in the NDC | No transport targets found in laws and policies |
| 21. | Transportation | - | - | No transportation targets found in the NDC | No transportation targets found in laws and policies |
| 22. | Urban | - | - | No urban targets found in the NDC | No urban targets found in laws and policies |
| 23. | Waste | - | - | No waste targets found in the NDC | No waste targets found in laws and policies |
| 24. | Water | Targets in Submitted NDC | Target type not defined | Water Conservation And Reuse Enhance water use efficiency by 20% | No water targets found in laws and policies |
ANNEXURE F – Laws and policies

The following laws and policies have a bearing on India’s response to climate change.93

<table>
<thead>
<tr>
<th>Legislative actions</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Factories Act, 1948</td>
<td>Deals with the working environment of the workers, environmental and hazardous processes.</td>
</tr>
<tr>
<td>2</td>
<td>River Boards Act, 1956</td>
<td>Enables the states to enrol the central government in setting up an Advisory River Board to resolve issues in interstate cooperation.</td>
</tr>
<tr>
<td>3</td>
<td>Merchant Shipping Act, 1970</td>
<td>Deals with waste arising from ships along the coastal areas within a specified radius.</td>
</tr>
<tr>
<td>4</td>
<td>Wildlife Protection Act 1972</td>
<td>Provides for the protection of birds and animals lists out prohibited acts and penalties, and creates a protected area regime..</td>
</tr>
<tr>
<td>5</td>
<td>Water (Prevention and Control of Pollution) Act, 1974</td>
<td>Establishes an institutional structure to prevent and abate water pollution, sets standards for water quality and effluent, permits and regulates polluting industries discharge of waste into effluent bodies through the central and state pollution control boards.</td>
</tr>
<tr>
<td>6</td>
<td>Water (Prevention and Control of Pollution) Cess Act, 1977</td>
<td>Provides for the levy and collection of cess or fees on water consuming industries and local authorities.</td>
</tr>
<tr>
<td>7</td>
<td>Forest (Conservation) Act 1980</td>
<td>Regulates forest diversion and provides procedures for forest diversion and compensatory afforestation.</td>
</tr>
<tr>
<td>8</td>
<td>Air (Prevention and Control of Pollution) Act, 1981</td>
<td>Provides for the control and abatement of air pollution and makes the central and state pollution control boards the enforcement authority.</td>
</tr>
</tbody>
</table>

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| 9 | Environment (Protection) Act, 1986 | Obligates the central government to protect and improve environment, control and reduce pollution from various sources, and prohibit or restrict the setting and /or operation of any industrial facility on environmental grounds.  
- The Environment (Protection) Rules, 1986 lay down procedures for setting standards of emission or discharge of environmental pollutants.  
- The Hazardous Waste (Management and Handling) Rules, 1989 controls the generation, collection, import, storage, handling and treatment of hazardous waste.  
- The Manufacture, Storage, and Import of Hazardous Rules, 1989 constitutes an authority to inspect the industrial activity connected with hazardous chemicals and its storage facilities.  
- The Coastal Regulation Zone Notification, 1991 regulates various activities, including construction to protect the backwaters and estuaries.  
- The Environment (Siting for Industrial Projects) Rules, 1999 details provisions of areas to be avoided for siting of industries, precautionary measures to be undertaken for site selection and environmental protection that are to be incorporated during the implementation of the industrial development projects.  
- The Municipal Solid Wastes (Management and Handling) Rules, 2000 apply to every municipal authority responsible for the collection, segregation, storage, transportation, processing, and disposal of municipal solid wastes.  
- The Ozone Depleting Substances (Regulation and Control) Rules, 2000 Regulates the production and consumption of ozone depleting substances. |
<p>| 10 | National Environmental Tribunal Act, 1995 | Awards compensation for damages to persons, property, and the environment arising from any activity involving hazardous substances. |
| 11 | National Environment Appellate Authority Act, 1997 | Hears appeals with respect to restrictions of areas in which classes of industries etc. are carried out or prescribed subject to certain safeguards under the Environment Protection Act. |
| 12 | Energy Conservation Act, 2001 | Requires large energy consumers to adhere to energy consumption norms; new buildings to follow the Energy Conservation Building Code; and appliances to meet energy performance standards and to display energy consumption labels. Grants energy savings certificates to consumers whose consumes lesser energy than the prescribed norms which can be purchased by consumers who consumes more energy than the prescribed norms. |
| 13 | Biological Diversity Act, 2002 | Provides for the conservation of biological diversity, their sustainable use and fair and equitable sharing of the benefits arising out of its use and knowledge associated with them. |
| 14 | Electricity Act 2003 | Provides a comprehensive framework for power development consolidating laws relating to generation, transmission, distribution, trading and the use of electricity; promoting competition in the industry; and promoting efficient and environmentally benign policies. Recognizes the role of renewable energy in National Energy Policy and tariff policy and optimal utilization of resources such as coal, natural gas, nuclear substances or materials, hydro and renewable sources of energy. |
| 15 | The Disaster Management Act, 2006 | Organizes response to human-made and natural disasters, capacity-building, preparedness and mitigation of disasters. |
| 16 | The Finance Bill 2010-11 and the Clean Energy Cess Rules, 2010 | Proposes to create the National Clean Energy Fund to invest in entrepreneurial ventures and research in the field of clean energy technologies to be approved by an interministerial group. The Central Board of Excise &amp; Customs notified the Clean Energy Cess Rules, 2010. |</p>
<table>
<thead>
<tr>
<th>17</th>
<th>Compensatory Afforestation Fund Act (Act no 38 of 2016)</th>
<th>Creates National Compensatory Afforestation Fund Management and Planning Authority (CAMPA) with funds notably from Net Present Value of forest lands diverted for non-forestry purposes for compensatory afforestation. In 2020, the government announced allocation of INR60 billion to create jobs among indigenous tribes through afforestation.</th>
</tr>
</thead>
</table>

### Executive actions

| 1 | National Electricity Policy, 2005 | Promotes non-conventional energy sources, reduction of capital cost of projects based on non-conventional and renewable sources of energy; promotes competition among renewable projects; proposes progressively the share of non-conventional resources through competitive bidding process; emphasizes development of hydro-power, make thermal power cleaner by using low-ash coal, improving lignite mining, and through increased use of natural gas and nuclear power; promotes efficient technologies and more funding for R&D; emphasizes the need for conservation and demand-side management including a national awareness campaign. |
| 2 | Tariff Policy 2006 | Includes provisions regarding renewable energy and cogeneration. |
| 3 | Integrated Energy Policy, 2006 | Addresses all aspects of energy, including energy security, access and availability, affordability and pricing, efficiency and the environment. Requires power regulators to encourage utilities to integrate wind, small hydro, cogeneration and so on into their systems, link incentives to energy generated as opposed to capacity created. |
| 5 | National Policy on Biofuels, 2009 | Proposes a target of 20% blending of biofuels by 2017, both for biodiesel and bioethanol. |
| 6 | National Afforestation Program - Revised Operational Guidelines - 2009 | Decentralizes the project to expedite fund transfer to the joint forest management committees and eco-development committees, and promotes livelihoods of its members with value addition and marketing of forest products. Promotes sustainable development and management of forest resources; increase forest and tree cover; rehabilitate degraded forests through decentralized/participatory forest management. |
| 7 | National Electricity Plan (Generation), 2012 | Aims to ensure reliable access to electricity with initiatives and measures for GHG mitigation, and aims to keep CO2 intensity declining while massively expanding rural access and increasing power generation to meet the demands of a rapidly growing economy. |
| 8 | National Mission for Electric Mobility Plan 2020 of 2012 | Provides the vision and the roadmap for the adoption of electric vehicles (full range of hybrid and electric vehicles) and their manufacturing in the country. |
| 10 | National Urban Transport Policy, 2014 | Recommends that Indian cities "bring about comprehensive improvements in urban transport services and infrastructure". Encourages public transport, cycling, walking, energy efficiency and clean fuels to mitigate sectoral greenhouse gas emissions. |
National Agroforestry Policy 2014

Sets up a National Agroforestry Mission or an Agroforestry Board to coordinate various agroforestry activities of various agencies to improve productivity; employment, income and livelihood opportunities of rural households; meeting increasing demand of timber, food, fuel, fodder, fertilizer, fibre, and other agroforestry products; conserving natural resources and forest; protecting and increasing the forest / tree cover.

Union Budget 2019-2020

Provides incentives for battery-operated electric vehicles.

Notification S.O. 4259(E) creating the Apex Committee for Implementation of Paris Agreement, 2020

Ministry of Environment, Forest and Climate Change creates the Apex Committee for Implementation of Paris Agreement.

Author profile

C.R Bijoy

C.R Bijoy is an independent researcher examining resource conflict and governance issues for over three decades. He has been associated with initiatives of activists and indigenous Peoples’ mass organisations to strengthen political autonomy and self-governance resulting in such legislations as Panchayat (Extension to Scheduled Areas) Act, 1996 with National Front for Tribal Self Rule, and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, with Campaign for Survival and Dignity, both coalitions of Indigenous Peoples mass organisations from across India that emerged and steered the processes at that historical juncture.
Lhoba Indigenous Women are coming home after celebrating a feast on the occasion of Yartung festival in 2019. Yartung is one of the festivals of Lhoba Indigenous Peoples of Lo-Manthang in Upper Mustang Nepal.

Photo Credit: Tunga Bhadra Rai/NEFIN
Purpose of this report

This report examines Nepal’s climate change policies from Indigenous Peoples’ perspective, in particular the Nationally Determined Contribution (NDC)-2020, the Climate Change Policy-2019, and the REDD+ Strategies-2018. It points out the risks to, and opportunities for, Indigenous Peoples’ livelihoods, wellbeing and rights in the country’s climate action and policy implementation.

In the climate change context, Nepal ratified the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement in 2016. It has been taking climate action, including running climate projects and formulating and implementing policy. The National REDD+ Strategy-2018, Climate Change Policy-2019 and the Nationally Determined Contribution-2020 are some of Nepal’s key milestones in climate action.

Nepal’s NDC-2020 is ranked as “almost sufficient” for meeting its ambition of limiting global temperature rise to 1.5 degrees, as assessed by Climate Action Tracker which ranked NDCs according to five categories (critically insufficient, highly insufficient, insufficient, almost sufficient, and 1.5 degree Paris Agreement Compatible).¹

However, Indigenous Peoples—including men, women, youth and persons with disabilities—are facing multiple layers of challenges associated with climate change and climate actions in Nepal. Specifically, their intrinsic relationships with their land, territories, resources as well as their livelihoods, lifeways, knowledge systems, cultures, identities and their collective survival as peoples, are neither well recognized nor respected in climate policies, including the NDC-2020. Lack of recognition of Indigenous Peoples’ collective representation and of their effective participation, and the lack of respect for their rights in the overall processes and in the substance of climate actions are prevalent in Nepal.

¹ www.climateactiontracker.org
Status of Indigenous Peoples in Nepal

Nepal recognizes 59 Indigenous Nationalities (hereafter referred as ‘Indigenous Peoples’) in the country. Indigenous Peoples of Nepal comprise 35 per cent of the country’s population of over 26.5 million (CBS/Government of Nepal, 2011), though Indigenous Peoples claim their population accounts for about 50 per cent of the total population. They reside throughout the country and in all ecological regions (Tarai/lowlands, hills, and mountains). They are among the most marginalized peoples in Nepal. The 2007 report of the United Nations Office of the High Commissioner for Human Rights shows that Indigenous Peoples have been systematically excluded from participation in the country’s political life for over 200 years and that they have been denied any formal role in building and defining the state in which they now find themselves. The first Law of the Land of Nepal, the *Muluki Ain* of 1854, systematically and structurally marginalized Indigenous Peoples. Guided by the Hindu caste system and its ideology of vertical hierarchy, this law placed Indigenous Peoples at the second lowest level of the caste system. However, Indigenous Peoples of Nepal do not believe that they fall under the Hindu caste system nor do they believe in vertical hierarchy of caste groups / Hindu ideology. Rather, they practice the horizontal classification of different nationalities, which entails no hierarchy but the diversity among different nationalities. The caste-based discrimination was legally abolished in Nepal in 1963. However, the multifaceted forms of exclusion of Indigenous Peoples continue to impact their lives and cultures to this day.

Nepal’s Constitution, adopted in 2015, in its preamble states its aspiration of ending all forms of discrimination. It emphasizes the need for protecting and promoting social and cultural solidarity, as well as harmony and unity in diversity, by recognizing the multi-ethnic, multilingual, multi-religious, multicultural and diverse regional characteristics of the country. It further mentions that the Constitution aims to ensure economic equality, prosperity and social justice by eliminating all forms of discrimination, and underlines the country’s commitment to human rights. The Constitution promulgates federalism, secularism and multiculturalism. Nonetheless, Indigenous Peoples in Nepal continue to face social, political, cultural and economic discrimination.

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This Constitution is viewed as more regressive than the Interim Constitution of 2007. Dissatisfaction with the new Constitution was manifested across the country with 49 people losing their lives and 729 people sustaining injuries during protests in 2015. Most of the victims were members of the Tharu Indigenous nationality; this shows the ongoing social, political, cultural and economic discrimination against Indigenous Peoples in Nepal.


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Indigenous Peoples and climate change in Nepal

Climate science and discourse clearly show that climate change is one of the most pressing global concerns of our time. This is also true for Nepal. Indigenous Peoples—including men, women, youth and persons with disabilities—are at the forefront of adverse impacts of climate change despite their having contributed little or nothing to climate change. They are facing multiple layers of challenges associated with both climate change and climate actions. Experiences on the ground show that Indigenous women, youth and persons with disabilities are affected even more severely than others by the impacts of climate change. They face the double discrimination of being both Indigenous and being either a woman, a youth or a person with a disability. Nonetheless, there is no segregated data available on how they are impacted differently by climate change. Like in many parts of the world, climate change and climate action in Nepal is threatening Indigenous Peoples’ intrinsic relationships with their natural resources as well as their livelihoods, lifeways, knowledge systems, cultures and identities. In sum, what is at risk is their collective survival as peoples.

Some Indigenous Peoples’ ancestral territories are in remote areas, close to the mountains, rivers and forests. Therefore, Indigenous Peoples are often the people hardest hit by climate-induced disasters and catastrophes such as avalanches, glacier lake outburst floods, landslides, floods, droughts and forest fires. The impacts they face from climate change are also particularly severe due to several other factors. They live in terrain and landscapes where access to government facilities is limited and they are often politically, economically and culturally marginalized. Further, most Indigenous Peoples in Nepal depend upon small-scale agriculture for the subsistence of their families, so crop failure due to unusual and severe weather, harmful insects and disease is detrimental. It leaves them short of food and mentally stressed. Likewise, livestock raising—another important occupation of some Indigenous Peoples in Nepal—is also impacted by severe weather events. Government polices further compound the negative impacts on herders. For instance, the national park, conservation, protected areas and community forestry acts restrict herders from grazing cattle. Customary land and forests of Indigenous Peoples are converted either to community forests or to other forest regimes, such as national parks or protected areas, with disregard for Indigenous Peoples’ customary land ownership. This process is inhibiting the continuation of traditional livelihoods such as livestock herding and shifting cultivation. Despite the challenges, some communities of Indigenous Peoples—for example, the Chepang—still practice shifting cultivation.

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4 The term ‘climate action’ is used here to refer to climate policies, strategies, plans, programs, projects, activities and actions related to climate change mitigation, adaptation, loss and damage, finance, technologies, capacity building and other aspects of climate change.
Nepal’s Climate Change Policy and Indigenous Peoples’ Rights

3.1 Recognition of Indigenous Peoples’ Rights in Climate Policies

Nepal’s Climate Change Policy-2019 and its NDC-2020 set the roadmap for climate action in the country.

Overall, there are certain windows of opportunity in Nepal’s climate policy documents for Indigenous Peoples, including for women, youth, and persons with disabilities, to strengthen their participation and rights. Whether this will lead to positive outcomes on the ground depends on the quality of the implementation and the persistence of Indigenous Peoples in taking up the opportunities presented.

Climate Change Policy (2019)

Nepal updated its Climate Change Policy in 2019. From the perspective of Indigenous Peoples, the policy is disappointing. It is not guided by human-rights-based principles and approaches. It emphasizes only socioeconomic prosperity. It omits environmental, cultural, technological and political aspects in its overarching goal and remains silent about Indigenous Peoples in its objectives. The policy identifies eight (8) sectoral and intersectoral policies and strategies for achieving its goal and objectives:

Agriculture and food security

1. Forest, biodiversity and watershed conservation
2. Water resources and energy
3. Rural and urban habitats
4. Industry, transport and physical infrastructure
5. Tourism and natural and cultural heritage
6. Health, drinking water and sanitation
7. Disaster risk reduction and management.

Climate Change Policy: https://mofe.gov.np/downloadfile/climatechange_policy_
A complete lack of attention to Indigenous Peoples’ issues and their contributions to addressing climate change is prevalent in all these sectoral policies. Indeed, the fact that the principle and right of Free, Prior and Informed Consent (FPIC) should apply in all matters and sectors that may affect Indigenous Peoples, either negatively or positively, is not reflected anywhere in the policy. In summary (and as is shown in more detail in the following paragraphs), Climate Change Policy 2076 (2019) of Nepal ignores Indigenous Peoples’ collective rights, participation, knowledge, customary law, institutions, lifeways, adaptive capacity, and contribution to climate change mitigation.

The agricultural component of the policy fails to incorporate Indigenous food sovereignty; food security; traditional livelihoods and food production systems; climate-friendly and climate-resilient agricultural systems and crops; and traditional technologies. Further, the section on forest, biodiversity and watershed conservation completely overlooks customary institutions and customary land ownership; tangible and intangible heritage; traditional lifeways; identity; collective domains; and the relationship between Indigenous Peoples and natural resources.

The section on water resources and energy does not recognize the rights of Indigenous Peoples to give or withhold their FPIC in relation to the establishment or expansion of any renewable energy and hydropower projects on their lands and territories. Likewise, the section on industry, transport and physical infrastructure fails to require that the FPIC of Indigenous Peoples be obtained before any such projects are carried out in Indigenous Peoples’ lands and territories. The section on tourism and natural and cultural heritage disregards the cultural (tangible and intangible) heritage and territories of Indigenous Peoples, despite Indigenous Peoples being the owners and custodians of these cultural heritages. Some of their cultural heritages have already disappeared due to the negligence of the government and policymakers.

Moreover, the policy fails to address Indigenous Peoples’ access to climate finance and to measures for reducing and managing climate-induced disasters. Indigenous Peoples’ participation in climate adaptation through self-selected representatives is also neglected. The section on gender equality, social inclusion and good governance contains only superficial statements; it does not engage with the deeper substance of what is needed to achieve social inclusion, such as respect for Indigenous Peoples’ rights and issues. Neither does it cover indigenous women, youth and persons with disabilities. Again, only superficial statements are made, and women are treated as one homogeneous group. Likewise, the section on awareness raising and capacity building does not deal with Indigenous Peoples’ access to relevant initiatives and information.
Nationally Determined Contribution (2020)

NDCs are at the heart of the Paris Agreement and are key to the achievement of its long-term goals.\footnote{The NDCs embody efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions. Together, these climate actions determine whether the world achieves the long-term goals of the Paris Agreement and to reach global peaking of greenhouse gas (GHG) emissions as soon as possible and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of GHGs in the second half of this century (UNFCCC, 2021).} Nepal submitted its NDC to the UNFCCC in December 2020. It refers to Indigenous Peoples in several sections. For example, it states that by 2030 Nepal will put institutional mechanisms and structures in place, and adequate budget, to ensure social and environmental safeguards—including FPIC, forest tenure, and access to finance and technology—for local communities, women and Indigenous Peoples.\footnote{See Nepal NDC, p. 5: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20Second/Second%20Nationally%20Determined%20Contribution%20(NDC)%20-%202020.pdf} It also mentions that Nepal’s climate action will ensure fair and equitable benefits (carbon and non-carbon) from sustainable forest management, watershed management, and biodiversity conservation among local communities, women and Indigenous Peoples. Further, the NDC talks about Indigenous Peoples in the context of developing an action plan for integrating gender equality and social inclusion in order to achieve the NDC targets.

The NDC states that it aims to promote the leadership, participation and negotiation capacity of women and Indigenous Peoples in climate change forums, and claims that the development of the NDC itself was a country-driven process following the principle of ‘leave no one behind’. On adaptation, the NDC sets as a key policy priority that all 753 local governments will prepare and implement gender-responsive adaptation plans by 2030. The adaptation plans will address climate change and disaster vulnerabilities and risks, and prioritize adaptation and measures for reducing and managing the risk of disasters, focusing on women, persons with disabilities, children, senior citizens, youth, Indigenous Peoples, economically deprived communities, and people residing in climate-vulnerable geographical areas.\footnote{See Nepal NDC: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nepal%20Second/Second%20Nationally%20Determined%20Contribution%20(NDC)%20-%202020.pdf} However, it remains to be seen how the implementation of the above-mentioned aspirations will unfold on the ground.
National REDD+ Strategy (2018)

Nepal developed a national REDD+ strategy in 2018. REDD+ is a framework created by the UNFCCC Conference of the Parties (COP) to guide activities in the forest sector that reduce emissions from deforestation and forest degradation, as well as the sustainable management of forests and the conservation and enhancement of forest carbon stocks in developing countries.9

Nepal’s REDD+ strategy has aligned its objectives and several strategic points with the international Warsaw Framework on REDD+. Twelve strategies and 70 actions have been developed to achieve the objectives. One of the objectives is to improve resource tenure and ensure fair and equitable sharing of carbon and non-carbon benefits of forests among rights-holders, such as women and Indigenous Peoples, among others, with effective implementation of safeguard measures (strategies 5 and 11).10 It also aims to increase livelihood assets and diversify employment opportunities for women and Indigenous Peoples, among others (strategies 6, 7 and 8).

In its background about the context of REDD+ in Nepal, the national REDD+ strategy indicates that deforestation and forest degradation are posing direct threats to the livelihoods of a large number of people, particularly forest-dependent poor people and Indigenous Peoples. In its sections on policies, governance, institutions and tenure, the REDD+ strategy unveils the situation of the existing legal framework of the forestry sector, which does not adequately recognize the customary rights of Indigenous Peoples over forest resources. It also states that there is no national inventory of customary practices and that the clarity of forest tenure is vital for REDD+. The document highlights that forest tenure is a key factor in shaping the social and environmental impacts of REDD+ and related programs.

The strategy for enhancing the role of the private sector in forestry to promote forest-based enterprises for livelihood and economic development (Objective 3, Strategy 6) states that the REDD+ activities will promote vocational and skill-based training opportunities for enterprise development and forest operations—such as harvesting, logging, sawmilling, carpentry, and wood technologies—especially for women, Indigenous Peoples, Madhesi11, Dalits12, local communities and forest-dependent poor people.

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9 The framework is commonly referred to as the Warsaw Framework for REDD+. It was adopted at COP19 in Warsaw in December 2013 and provides the complete methodological and financing guidance for the implementation of REDD+ activities. REDD+ is also recognized in Article 5 of the Paris Agreement, where Parties re-iterated the encouragement to implement REDD+ activities, and that these should be an integral element of the Paris Agreement.


11 The Madhesi people are from the low land of the country.

12 The Dalit people were historically marginalized and religiously put in the lowest hierarchical category by the Hindu caste system.
Likewise, it focuses on improving access to alternative technologies—such as small sawmills, carpentry, food processing, efficient stoves, kilns, briquettes, power looms and biogas—by providing information, knowledge and loan services for women, Indigenous Peoples, Madhesis, Dalits, local communities and forest-dependent poor people.

The strategy for improving capacity, institutional performance and service delivery of the forestry sector institutions, rights-holders and relevant stakeholders (Objective 4, Strategy 10) sets out actions to ensure the adequate representation and meaningful participation of women, Indigenous Peoples and other marginalized groups in relevant forestry decision-making processes through policy provisions, institutionalization and capacity development. Action 11.2 states that the strategy to ensure social and environmental safeguards will “adopt the approach to [apply] Free, Prior, and Informed Consent (FPIC) of rights holders, particularly of indigenous peoples”. However, this statement is opaque about who will seek FPIC, how, and in what circumstances.

In the context of the implementation arrangements, the strategy states that the REDD+ institutions will be responsible for a) managing the flow of information among entities and stakeholders, including information on changes in forest carbon stocks, and ensuring that women, Indigenous Peoples, Madhesis, Dalits, local communities and the poor are consulted and informed, and b) managing the flow of incentives to carbon rights-holders including women and Indigenous Peoples. The strategy, however, does not clearly define who the carbon rights-holders are. Another important point is that the phrasing about the function of the REDD+ institution is vague and this mixes up stakeholders and rights-holders in every matter. The long-advocated point about Indigenous Peoples is that they are rights-holders of their domains—not just stakeholders. Despite this, Nepal’s REDD+ strategy repeats the government’s conventional attitude of treating Indigenous Peoples merely as stakeholders, not as rights-holders.

Likewise, the strategy states that a benefit-sharing plan and service-delivery mechanism specific to the REDD+ program will be developed to clarify the benefit-sharing among the carbon rights-holders at different levels. The mechanism will require schemes to address the issues of equity, exclusivity and conditionality. A specific regulatory provision and accompanying institutional arrangements will be defined for implementing the benefit-sharing plan and maintaining equitable benefit-sharing arrangements at different levels. Specific provisions will be incorporated in instruments and forest management plans to ensure the customary practices of Indigenous Peoples are safeguarded and protected during the implementation of the REDD+ program. Furthermore, the strategy mentions that the benefit-sharing plan and mechanism among different forest regimes (such as national park, protected area, community-based forestry) and levels (federal, provincial and local) will be based on the performance of forest carbon stock increments and enhancing non-carbon benefits.

13 REDD+ Strategy, p. 21
The strategy indicates that, depending on the location and type of REDD+ activities, these non-carbon benefits could include poverty alleviation; recognition of the rights of Indigenous Peoples and forest-dependent communities; improved community livelihoods; technology transfer; sustainable use of forest resources; and biodiversity conservation through community mobilization. However, it does not clarify if past contributions to protect forests—many communities and Indigenous Peoples have for centuries sustainably managed their forests and related biodiversity—will qualify for result-based payments from REDD+.

Finally, feedback and grievance redress mechanisms will be built into the existing system and structures at three levels: district/local, regional/provincial and central. Both formal and informal mechanisms, such as customary laws and institutions of Indigenous Peoples, will be utilized to resolve disputes and conflicts related to REDD+ at relevant levels.14

### 3.2 Issues and concerns for Indigenous Peoples in climate policies

**Lack of respect and protection of Indigenous Peoples’ land/territorial rights and traditional livelihoods, and non-implementation of safeguards and national/international obligations**

Despite some progress in recognizing Indigenous Peoples’ rights in climate actions in Nepal, gaps remain. Most of the climate policies fail to fully align with the country’s obligations and commitments to respecting Indigenous Peoples’ rights as set out under ILO Convention 169, UNDRIP and other international human-rights instruments, including the International Convention on the Elimination of All Forms of Racial Discrimination, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights. And even though some of the policies contain general language on Indigenous Peoples’ rights, the prevalence of negative attitudes towards Indigenous Peoples in many cases prevents those rights from being protected and fulfilled.

Position statements and recommendation papers on climate actions by the Indigenous movement, including by the Nepal Federation of Indigenous Nationalities (NEFIN), illustrate the multiple layers of inequality, marginalization, and cultural and symbiotic devaluation of Indigenous Peoples that persist in Nepal’s climate action.15 For instance, climate actions and so-called conservation policies falsely refer to shifting cultivation and livestock grazing as drivers of deforestation in Nepal.16 Shifting cultivation is a traditional livelihood based on

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customary land ownership of Indigenous Peoples, and evidence shows that it contributes to biodiversity enhancement and food security. The government’s portrayal of these traditional practices as deforestation drivers has negative consequences for the livelihoods of Indigenous Peoples.

Indigenous Peoples in Nepal are concerned about the misrepresentation of their livelihoods and the lack of recognition of their rights to land, territories and resources. They are also worried about the lack of acknowledgement in any of the climate policies of the multiple attachments (social, cultural, economic and political) of Indigenous Peoples with nature.

In this context, NEFIN, through its Climate Change Program (NEFIN CC Program) has been advocating for Indigenous Peoples’ rights in climate action for more than a decade. It has been urging government authorities, accredited entities and other stakeholders to comply with national and international instruments such as UNDRIP, the Paris Agreement, and the GCF Indigenous Peoples Policy in their actions.

**Indigenous Peoples’ limited awareness of climate change and exclusion from meaningful participation**

As explored in the next section, the participation of Indigenous Peoples in climate policy formulation has been very limited. Even in the few instances where there have been public calls for input on policies under development, and where Indigenous Peoples have been invited to take part in consultations, the limited awareness among Indigenous Peoples about climate change and climate actions has prohibited their meaningful participation; they are often unable to give informed feedback due to their having limited or no knowledge about the matters. Contributing to this is the lack of access to information, the language barrier, technology illiteracy, and the lack of media coverage of Indigenous Peoples’ issues. FPIC, which is at the core of self-determined decisions of Indigenous Peoples, is impossible to obtain without full, accurate and timely information and without meaningful participation of Indigenous Peoples in matters that concern and potentially affect them. Such challenges remain unaddressed by Nepal’s climate policies. In terms of climate action, the key concerns of Indigenous Peoples are rights to self-determination, land, territories and resources, customary lifeways, distinct world views, self-governance, customary law, customary land tenure and FPIC.

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3.3 Participation of Indigenous Peoples in climate change policies

The promulgation of the new Constitution in Nepal in 2015 opened up opportunities for the government to develop new policies and measures for various sectors. Among many others, those policies and measures on climate change, forestry and natural resources are critical for Indigenous Peoples. Alongside other sectoral policies, Nepal developed the REDD+ Strategy in 2018, revised its Climate Change Policy in 2019 and developed its NDC in 2020; the national adaptation plan is in the process of being developed.

It was difficult for Indigenous Peoples to engage in the policy development processes because they were not formally invited to do so. Despite the lack of official inclusion in the processes, the NEFIN CC Program followed the processes to the extent possible and gave feedback at every possible opportunity. NEFIN, as an umbrella organization of all Indigenous Peoples organizations in Nepal, has repeatedly urged national and international actors to ensure that climate policies and programs do not negatively affect Indigenous Peoples’ health, traditional healing practices, territorial integrity, collective identity, ancestral domain, cultural integrity, livelihoods, customary practices and law, knowledge system, skills, social cohesion, wellbeing and collective rights. As a result, Nepal’s climate policy documents contain some references to Indigenous Peoples’ participation, which are described in the following paragraphs.

The REDD+ Strategy, in the context of institutional arrangements, outlines a three-tiered institutional mechanism for implementing REDD+. This includes the National REDD+ Steering Committee (NRSC) as the apex body, chaired by the Minister for Forests and Environment. The NRSC is the high-level policy institution for REDD+, in charge of providing overall policy direction for Nepal’s REDD+. It oversees operating procedures and membership of related sectors and stakeholders. A second committee, the National REDD+ Coordination Committee (NRCC) is an institution mandated to make decisions on technical matters such as endorsing research documents, implementing and monitoring REDD+ programs, and recommending the agenda for meetings organized by the government’s REDD Implementation Centre. The NRCC is chaired by the Secretary of the Ministry of Forests and Environment. Indigenous Peoples can have their representatives on both of these committees; however, the committees are not functioning effectively.

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The Climate Change Policy (2019) does not specifically refer to the full and effective participation of Indigenous Peoples; however, there is a vague reference to “marginalized groups”\(^20\), which arguably provides the basis for Indigenous Peoples’ participation.

Nepal’s NDC (2020) describes its development process, saying that “a team of experts reviewed overarching and sectoral policies, strategies and programs; and coordinated the process of gathering data and performing analysis. These assessments were later verified through in-person and virtual consultations both at national and provincial levels with line ministries, experts, women, indigenous peoples and youth”. The statement about consultation with and participation of Indigenous Peoples is only partly true because there was no participation of Indigenous Peoples in the NDC formulation team or in the consultation process. They were only allowed to provide their input in writing in response to the Ministry’s ‘public call for input’; this was their only ‘participation’ in formulating the NDC.

The NDC in the context of its implementation emphasizes the importance of equity and inclusiveness. It mentions the principles of equity, ensuring women, children, youth, Indigenous Peoples and marginalized groups have equal access to participation, decision-making and benefit-sharing from NDC implementation. Additionally, the NDC states that the government will develop clear lines of communication between levels of governance (local, provincial, national and international) and across sectors and stakeholders, including women, Indigenous Peoples and youth.

In addition to the national climate-related policies already mentioned, Nepal is planning how it will carry out its climate actions with a view to accessing international climate finance. Indigenous Peoples’ participation in these processes is limited, as is shown with examples below.

**The Green Climate Fund Readiness Programme – Indigenous Peoples’ participation**

As agreed by the Parties to the UNFCCC, Annex I countries will provide support to countries with economies in transition and to non-Annex I countries through various climate finance mechanisms.\(^21\) The Green Climate Fund (GCF) is one such climate finance mechanism, established by the UNFCCC to channel funding to developing countries. GCF’s Readiness and Preparatory Support Programme (‘the Readiness Programme’) is a funding mechanism that supports country-driven initiatives by developing countries to strengthen their institutional capacities, governance mechanisms, and planning and programming.

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\(^21\) https://unfcc.int/parties-observers
frameworks towards a transformational long-term climate action agenda.\textsuperscript{22} Nepal has received support from the GCF Readiness Programme for the development of its National Adaptation Plan (NAP) (described below) and for country readiness. Further, GCF has approved two funding proposals for projects in Nepal, one through the Food and Agriculture Organization (in 2019) and the other through the International Union for Conservation of Nature (in 2020). Those entities did consult Indigenous Peoples to some extent during their proposal development. The Ministry of Finance, which is the National Designated Authority for GCF, is in the process of developing another three funding proposals.

To enhance Nepal’s direct access to the GCF, in 2019 the GCF Board accredited the Alternative Energy Promotion Center as a direct access entity (DAE) of Nepal. In 2020, the National Trust for Nature Conservation was also accredited as a DAE. Further, the Town Development Fund and Nepal Investment Bank Limited have submitted their application to GCF for accreditation as DAEs and are awaiting approval.\textsuperscript{23} Except for the Nepal Investment Bank, all approved and applicant DAEs are semi-governmental institutions, none of which has an Indigenous Peoples policy or, looking at their track record, an inclusive approach towards Indigenous Peoples.

Besides the preparation of funding proposals and DAE applications, Nepal is setting up mechanisms to implement climate actions supported by GCF. The National Designated Authority has already issued five no-objection letters to the accredited entities, which allows these entities to develop and submit concept notes and funding proposals to GCF. However, there is no Indigenous Peoples representative or any Indigenous Peoples’ organization in the institutional architecture of Nepal’s GCF readiness and project implementation. This clearly shows that the aspirations towards broad participation included in the policy documents are not reflected in actions—Indigenous Peoples’ engagement in climate policies and actions is still limited.

On the other hand, with consistent advocacy of Indigenous Peoples, including by the NEFIN CC Program and civil society organizations, GCF adopted its Indigenous Peoples Policy in 2018. This policy provides quite a wide range of opportunities for Indigenous Peoples’ participation and requires respect for their rights. It should be applied in all GCF business, including in funding proposals and in the GCF Readiness Programme, which has not been the case until now.

\textsuperscript{22} https://www.greenclimate.fund/readiness
\textsuperscript{23} https://www.greenclimate.fund/countries/nepal
Nepal’s NAP – Indigenous Peoples’ participation in its formulation

The Ministry of Forest and Environment (MoFE) has started the process to develop a National Adaptation Plan (NAP). The NAP process was established under the Cancun Adaptation Framework and is envisaged to be “a continuous, progressive and iterative process which should follow a country-driven, gender-sensitive, participatory and fully transparent approach”.

According to Paris Agreement Article 7.5, adaptation action should also “be based on and guided by […] as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems.”

The MoFE, in coordination with other ministries, has formed thematic working groups such as ‘Forest and Biodiversity’, ‘Tourism’ and ‘Cultural Heritage’ for the NAP formulation. This process is critical for Indigenous Peoples as they have been demanding that adaptation action take account of their customary laws, institutions, lifeways, knowledge and world views. Recognition of Indigenous Peoples’ rights to land, territories and resources is equally important in climate adaptation. However, Indigenous Peoples’ participation is currently limited in this process. NEFIN is engaged as a member of a technical working group in one out of nine thematic groups. This situation again highlights the limited participation of Indigenous Peoples and the lack of application of what is committed to on paper in relation to climate actions in Nepal.

24 UNFCCC. National Adaptation Plans: https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans
The Impact of current climate interventions on Indigenous Peoples

Climate discourse and actions are the global agenda for every country, now. Countries are making important decisions. At the same time, threats to Indigenous Peoples have become two-fold: 1) the threat of climate change and 2) the threat of climate action. The point of Indigenous Peoples’ advocacy on climate negotiation, both nationally and globally, is that climate polices are neglecting social and cultural assets of human beings, particularly those of Indigenous Peoples. In this respect, climate action in Nepal looks similar to the development approach of the post-World-War-II era—when the war was over, the world began to embrace ‘development’. The ‘development’ approach of that time was based on unidimensional progress. It assimilated multiple lifeways and cultures of Indigenous Peoples into the so-called universal development ladder of living standards with a focus on economic and quantitative growth only. Similarly, Nepal’s climate actions in many cases ignore the distinct lifeways, knowledge and cosmo-visions of Indigenous Peoples. They disregard the cultural and symbiotic relationship of Indigenous Peoples with land, territories and natural resources.

Nepal’s climate actions are mostly in an early stage meaning that most of the plans, programs and projects are in a development phase. For instance, Nepal’s NDC was developed and submitted to the UNFCCC in December 2020 but its plans are not yet translated into action. The NDC target timeline is 2030. REDD+ activities are not yet happening on the ground—Nepal has just completed its REDD+ readiness with support from the Forest Carbon Partnership Facility and signed an Emission Reduction Payment Agreement in February 2021. Likewise, the NAP is still in the formulation process and has yet to be finalized and adopted. The GCF Readiness Programme has started, with GCF-funded projects approved in 2020 and 2021. In summary, the impact of the climate intervention is not yet visible.
Despite some progress in articulating Indigenous Peoples’ issues and rights in climate policy documents, climate change has become more and more threatening for the lives and livelihoods of Indigenous Peoples in Nepal. Climate actions are being developed to be implemented at all levels (local, provincial and national). The planned actions ignore Indigenous Peoples’ issues, as discussed earlier. The current situation highlights the need for Indigenous Peoples to participate meaningfully and for their capacity to be strengthened if they are to be able to ensure their rights in climate negotiations and climate actions on the ground. Persistent awareness raising and advocacy for Indigenous Peoples’ rights is needed now more than ever.
Indigenous Peoples’ contributions to addressing climate change

The Kghyemba system, a customary institution of the Lhoba Indigenous People of Lo-menthang in Upper Maitang, is an example of how the customary institutions, values and knowledge of Indigenous Peoples contribute to enhancing climate adaptation.

5.1 The Kghyemba system of the Lhoba people

The ancient mud-walled village of Lo-menthang (sometimes spelled as Lomanthang) in Upper Maitang25 (Mustang) is the ancestral homeland of the Lhoba indigenous people of Nepal. Situated in the southern part of the Tibetan plateau, at an elevation of 3,850 metres above sea level, Lo-menthang is in a high-altitude rain shadow area behind the Annapurna Himalayan range. It receives only occasional drizzle during summer but heavy snowfall in winter. The temperature drops to between minus 10 and minus 20 degrees Celsius from December to March. Snowmelt rivers named Dhokpo Lho and Dhokpo Zhyang are the main source of water for villagers’ household use, livestock and irrigation. The mountainous terrain and farm fields around the village speak of the hardship the Lhoba people are living with, and also of their knowledge system and capabilities to adapt to the tough climatic conditions in this rain shadow area of the Himalaya.

25 Maitang, the indigenous name of this place, is currently being misspelled and mispronounced as ‘Mustang’ in official sources.
The social context of Lo-menthang is as unique as its geographical location. Lo-menthang is the traditional capital of LoTsho Dyun (which includes the nine villages of Upper Maitang). There are some 170 houses with 569 residents—293 women and 276 men (including children). Traditionally, Lho Ghyalpo is the chief of LoTsho Dyun.

The Kghyamba system is a customary institution of managing irrigation water and village regulations. No trees and no crops grow in such a dry land without wisely managed irrigation. The equal distribution and allocation of water is also crucial. Water flowing through the irrigation canals is the lifeline not only for livestock but also for the households. Every household is responsible for getting water flowing through the village to the fields. The Kghyamba system is the key for bringing them together in this shared effort of water management for the village in this arid land of the Himalayan rain shadow.

The Kghyamba team, comprising nine key personnel, holds the overall role for irrigation management, farming activities and many other village affairs. The Kghyamba, the chief of the team, leads the institution, in coordination with Ghyalpo, two Mhetees (deputies to Kghyamba), and six Tsumes (associates) representing five traditional village clusters (Potaling, Ghudang, Tsyode, Dhulang and Ghyadang). The team helps Kghyamba, Ghyalpo and community members to oversee the execution of the community rules. Tsumes inspect any damage to the irrigation canals, monitor the distribution of irrigation water, and look after livestock grazing in the farm fields. In addition to the management of irrigation and farming activities, the system handles disputes locally and takes care of almost all community affairs, thus maintaining social harmony within the community. The roles and responsibilities of Kghyamba, Mhetees, Tsumes and the community members, and the rules by which they must abide, are determined and legitimatized based on certain cultural norms and through certain rituals. The Kghyamba, Mhetees and Tsumes are changed every year, rotating between households. Mainly, the Kghyamba system is important for the following aspects of irrigation.

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27 Ghyalpo may be referred to as ‘king’ these days. King, kingship and kingdom are more of a concept influenced by the colonization against Indigenous Peoples. Dr. K.B. Bhattachan: “I do not think that any indigenous peoples have a concept and practice of kingship. The use of the concept of kingship is a part of the colonization or Nepalization/Hinduization or Brahmanization. Ghyalpo looks to be a Lhoba term but if it really means a king, it is due to influence of others”. When and how the Lhoba began to use the term Ghyalpo and the term ‘king’ could be the subject of another study.
Maintaining and operating the irrigation canals

Heavy snowfall in winter makes the irrigation canals fragile and may cause damage to certain sections. The gravel silts up in the canals, and Ha (conduits) and Zhiu (intakes) require maintenance before the canal system is brought into operation in the spring. Around the first or the second week of April, the villagers repair all the structures used for water harvesting. Anyone aged between 16 and 60 years is eligible to contribute their labour. They work together, sharing their ideas, experiences, skills and knowledge with one another. Though the elders cannot take part in physical labour to the same extent as young people, their role in sharing their experiences and knowledge with the youth is critically important. Villagers enjoy singing and sharing a light moment together, and recounting stories about their canals and village. They retain the irrigation canals with locally available materials and traditional technology. Once they have completed the maintenance, the canal is brought into use to distribute the water to every plot in the field.

Distributing the irrigation water

The Kghyamba system adheres to democratic norms for sharing irrigation water among the villagers. The turn for each household or plot to use water is determined taking into account factors such as the nature of the plot, the type of crops planted on it and the location of the agriculture field. The villagers know how much water needs to be allocated at different times for different crops. They know what to grow, when to grow it, and how to irrigate arid land of the Himalayan rain shadow. In this way, they grow different crops with allocations of scarce water in an equitable way.

Managing conflict

Complaints and conflict are likely when sharing scarce resources. When everyone is in need of the same resource, naturally the competition increases. As such, it helps community members to have norms for sharing limited resources among themselves. The Kghyamba system provides social norms for managing conflict and has a control mechanism, Tsepa (penalty), in case someone violates the community rules.

The uniqueness of this customary institution is that, unlike externally introduced institutions and systems for natural resource management, it is grounded in social, environmental and cultural contexts as well as in the worldview of Indigenous Peoples. The rotation of leadership, the decision-making process, the participation of community members in decision-making, the reward and punishment system, the sharing of roles and responsibility, and many other features of this institution are embodied with the significance of collectiveness, in contrast to externally introduced institutions and systems for natural resource management.
The significance of the Kghyamba system in the face of climate change

Without irrigation and the *Kghyamba* system, the dry land of Lo-menthang would turn to desert. Had there been no collective action and shared values among Lhoba people, the canals to the farmlands would have dried up. Thus, the *Kghyamba* system is critical not only to the adaptation of the Lhoba people in harsh Himalayan rain shadow but to the ecological sustenance of Lo-menthang.

In the international arena, the UNFCCC recognizes the need to strengthen the knowledge, technologies, practices and efforts of Indigenous Peoples for addressing and responding to climate change. It has established a Local Community and Indigenous Peoples Platform (LCIPP) for the exchange of experiences and sharing of best practices on mitigation and adaptation in a holistic and integrated manner (UNFCCC. 1/CP.21/ 2015). Parties to the UNFCCC have acknowledged that adaptation should be based on and guided by the best available science and the knowledge of Indigenous Peoples, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions (UNFCCC Paris Agreement 2015, Article 7.5). The knowledge of Lhoba people that is embedded in the customary institutions of the Kghyamba system is an important example of climate science that can be integrated into the “best available science” (as referred to in UNFCCC agreements).

5.2 The key message

The *Kghyamba* system shows how an Indigenous Peoples’ customary institution, embedded in a unique social, cultural and geographical context, can hold the values and unique knowledge system and science that is rooted in the people’s culture, tradition and worldview and in the climatic conditions of the place. The significance of recognizing and promoting Indigenous Peoples’ customary institutions in climate action is reflected by several facts, including the role of the *Kghyamba* system in 1) maintaining social order, water resource management, and environmental sustainability and 2) helping people adapt to tough climatic conditions in a high-altitude desert. All in all, the contribution of this customary institution in Lhoba lifeways surpasses any external intervention of climate change adaptation.

In a nutshell, for centuries the strong interplay between the culture, self-governance and collectiveness as the lifeline of the *Kghyamba* system has enabled Lhoba indigenous people to adapt to the tough climatic conditions of Lo-menthang in this trans-Himalayan rain shadow. The remaining question is, if such values and institutions of Indigenous Peoples are not combined with the “best available science” referred to in the UNFCCC Paris Agreement, and with national policies, how can climate science and climate actions help people on the ground and planet Earth in the long run?
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