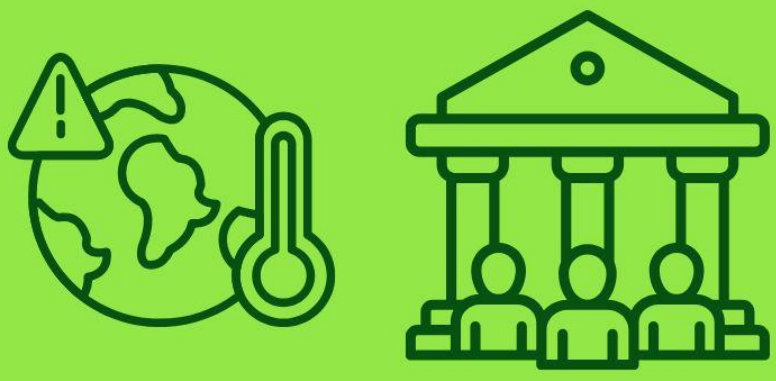
Asia Democracy Research Network

Climate Change and **Local Governments** in South Asia

Asia Democracy Research Network

October 2025



In 2025, the Asia Democracy Research Network (ADRN) selected the “Climate Change and Local Governments in South Asia” as the subject of a joint research project conducted by ADRN members in five South Asian countries: Bangladesh, India, Nepal, Pakistan, and Sri Lanka.

Reaffirming the significance of local governance in addressing climate change, the ADRN published this report with the aim of providing comprehensive documentation of the scale of climate-related challenges and the nature & scope of local governments’ responses, particularly those of urban local bodies including cities and towns.

The report investigates contemporary questions such as:

- How significant is the role of South Asia’s local governments in addressing the adverse effects of climate change?
- What landscapes & initiatives do local governments in South Asia adopt in response to climate change?
- What challenges & recommendations exist for local governments in South Asia regarding climate change policies?

Drawing on a rich array of resources and analyses, the report provides country-specific insights, highlights the challenges faced by local governments, and suggests policy recommendations to address limitations in existing policies & initiatives that tackle the adverse effects of climate change in South Asia.

“Climate Change and Local Governments in South Asia”
ISBN (electronic) 979-11-6617-307-3 95340

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Executive Summary

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Senior Fellow, Observer Research Foundation

South Asia, which is home to nearly 20% of the global population, is among the most climate- vulnerable regions worldwide. The region's extensive coastline, characterized by extensive low-lying areas and a substantial population of 2.06 billion, renders it particularly susceptible to the adverse impact of climate change, including rising sea levels and the exacerbation of extreme weather events such as floods and landslides. Recent catastrophic flooding in India, Pakistan and Bangladesh serves as a salient example of the escalating frequency and severity of climate disasters. It is estimated that as many as 750 million individuals residing in South Asia have been impacted by at least one natural disaster in recent years, a phenomenon that has been largely influenced by climate change. The phenomenon of climate change, characterized by the rising sea levels, limited arable land for food production, severe water scarcity, and mass displacement of populations, poses a substantial threat to the livelihoods of hundreds of millions. However, a particularly salient issue is the concurrent presence of severely compromised air quality in India, Pakistan and Bangladesh, as evidenced by the recent identification of 29 of the 30 most polluted cities in the region. This is further compounded by the issuance of a "red alert" by the World Meteorological Organization for indicators of global warming indicators in the entire region.

The efficacy of local democracies in mounting adaptive responses to climate change is enhanced by consultative processes and citizen participation.

The ongoing discourse surrounding the governance of climate change has given rise to a vibrant debate concerning the most appropriate form of governance to adopt in order to address this pressing issue. In light of the numerous deficiencies exhibited by the democratic system, including its protracted policy-making processes and its tendency towards short-term electoral concerns, which impede efforts to address the escalating dangers posed by climate change, numerous analysts have advocated for the adoption of an authoritarian system, citing its capacity to facilitate expeditious decision-making and responses. Nevertheless, an examination of the experience with the COVID-19 pandemic reveals the profound shortcomings of even authoritarian governments (particularly China's Zero-Covid Policy) in effectively managing the crisis. A mounting body of evidence suggests a correlation between local democracy and the mitigation of climate risk[1]. The efficacy of local democracies in mounting adaptive responses to climate change is enhanced by consultative processes and citizen participation.

As cities confront the disproportionate impact of climate change, municipal governments have assumed a leading role in the broader effort to combat global climate change. As pivotal incubators and accelerators of solutions-for example, by anticipating threats, leveraging urban plans, and examining climate investments, cities and urban local governments worldwide are at the vanguard of the climate battle. Numerous cases of noteworthy adaptation initiatives and mitigation efforts by cities worldwide, particularly in South Asia, have been documented. Nevertheless, in contrast to numerous developed regions, South Asian cities and towns experience challenges attributable to the high concentration of impoverished populations and the inadequate capacity of state entities at various levels of governance, including urban local bodies. Moreover, the lack of financial resources and technical expertise, particularly regarding the generation of clean fuel and renewable energy, has had a substantial impact on the realization of Net Zero emission targets. The majority of nations, including India; world's most populous nation, are reliant on fossil fuels, particularly by more polluting

[1] Niranjan Sahoo, 2024. https://www.orfonline.org/expert-speak/why-india-needs-an-intergovernmental-institution-for-climate-change

coals, as their primary energy source. The efforts to combat climate change are hindered by several factors. Primarily, the lack of robust local institutions at the grassroot level, inadequate investment in capacity-building and empowerment, and a high degree of centralization in the efforts to combat climate change serve as significant impediments. Nonetheless, sub-national and local governments, particularly those of cities, play a pivotal role in implementing a wide range of adaptation and mitigation efforts. The objective of this report is to provide comprehensive documentation of the magnitude of climate-related challenges and the nature and scope of local governments' responses, with a particular focus on urban local bodies (cities and towns). A group of five countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka, have been selected for an in-depth investigation into the status of local government, their legal and administrative positions, and the extent of their involvement in addressing climate change and associated challenges.

As demonstrated in the preceding discourse, the South Asian region appears to be increasingly susceptible to the adverse effects of climate change. Despite the variability in intensity, all nations are subject to the adverse effects of extreme weather events. These events serve as a stress test for the capacities and resilience of the nations and their institutions. The state's reaction to these events has undergone a parallel evolution, adapting to the increasing intensity and frequency climatic phenomena. A review of the literature reveals that all the aforementioned nations have signed major international treaties and agreements, passed enabling legislation, and established multiple institutions and processes to address the challenges posed by climate change. A salient benefit of the South Asian region is that, despite the region's shortcomings in terms of state capacity and institution strength, its extensive history of combating natural disaster has equipped with a robust response to escalating climate risks.

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However, as demonstrated in each case studies, the state responses have been predominantly top-down, with the national and federal governments and provincial agencies planning and leading the actions on climate change. This is in spite of the fact that measures to respond to disaster and adapt to climate change require the active involvement of local-level institutions. Despite the fact that these institutions are generally accorded legal and constitutional status in most nations, local government institutions often function merely as appendages. In the case of India, these institutions primarily function as implementing agencies. Municipal bodies and city governments are characterized by a lack of autonomy and financial resources, as well as a deficiency in technical capacity to address complex challenges, such as climate change. Moreover, there has been a paucity of efforts to establish collaborative networks or alliances among cities, with the exception of India, and to build on experiences and best practices within individual countries and at the regional level.

This is in spite of the fact that measures to respond to disaster and adapt to climate change require the active involvement of local-level institutions.

The role of local government in South Asia (whether in general civic affairs or climate change) is intrinsically linked to the span and extent of devolution and federal power sharing among different levels of government. As evidenced by global experiences, local institutions-particularly in federal democracies-are assuming an increasingly prominent role in issues such as environmental management, climate adaptation, and the establishment of sustainable development goals. India serves as a prime example of this phenomenon. Drawing upon a wealth of experience spanning more than three decades in the realm of decentralization, local governments-through operating within the scope of their limited functions and jurisdictions-have begun to assume an increasingly pivotal role in disaster management and the implementation of climate adaptation programs, among other initiatives. Federal democracies with less extensive experiences, such as Pakistan and Nepal (which adopted the constitution in 2014), continue to confront challenges related to centralization and resistance from provincial authorities,

In summary, the phenomenon of decentralized responses to climate change in South Asia remains in a state of development.

despite the constitutional devolution of powers to third-tier institutions. However, as climate change continues to pose a significant threat, national leaders are likely to recognize the value of promoting decentralized governance and increasing civil society involvement, while also allocating resources to support local governments. For instance, there is a growing chorus in South Asia that advocates for the empowerment of elected mayors to serve as primary actors in securing cities from the adverse effects of climate change and environmental degradation. In summary, the phenomenon of decentralized responses to climate change in South Asia remains in a state of development.



Case 1: Bangladesh

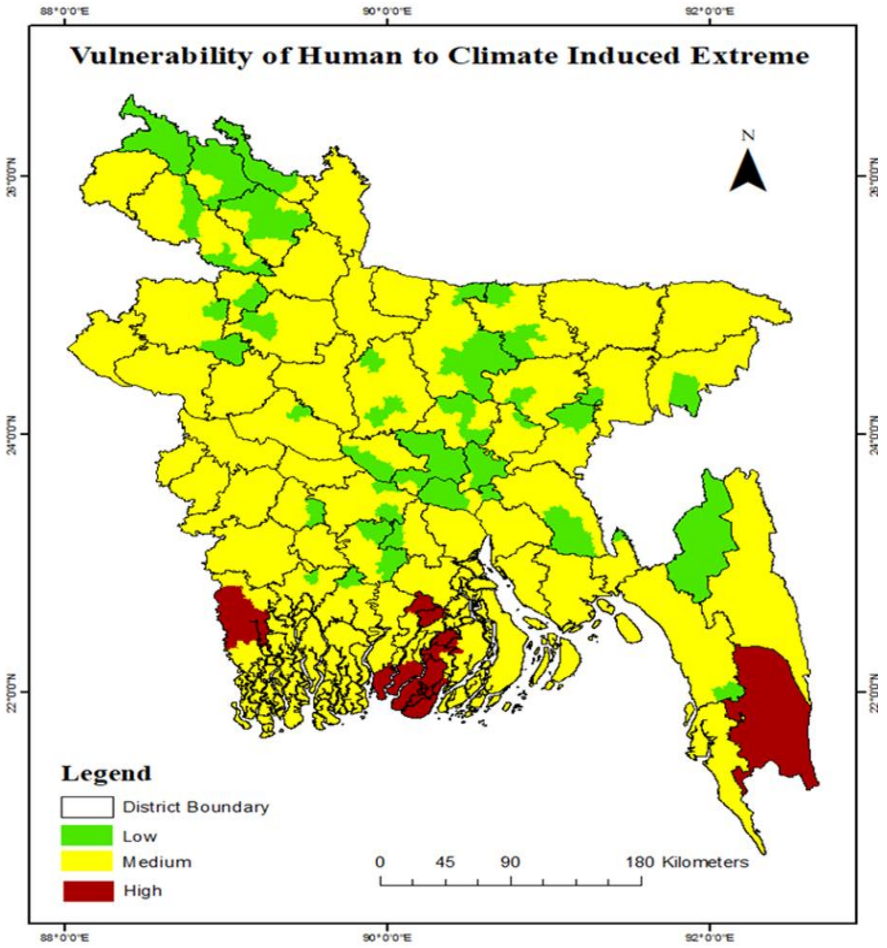
Climate Change and Local Government in Bangladesh

Abdur Rahaman
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1. Introduction

With a population exceeding 170 million, Bangladesh is the 7th most vulnerable country to climate threats. The nation, which is densely populated and situated on the Bay of Bengal, is particularly vulnerable to the adverse effects of climate change, including rising temperatures, intensifying cyclones, frequent floods, and rising sea levels. According to the map, the districts of Jessore, Patuakhali, and Bandarban in Bangladesh are highly vulnerable to climate-induced disasters, including slow-onset extremes such as salinity and drought, sudden disasters like cyclones, floods, flash floods, and riverine floods, geo-hazard like landslides, hydro-geo-hazard such as river bank erosion, atmospheric hazard including lightening and hailstorms and epidemics related to climate-sensitive diseases, including water-borne and vector-borne diseases. In contrast, the districts of Nilphamari, Kurigram, Lalmonirhat, Dhaka, Narayanganj, and Khagrachhari are considered vulnerable, while the remaining districts fall within a moderstely vulnerable category.

Map 1. Percentage of Postmaterialist (%)



Source: INFORM, 2023; CPE, 2024

A total of 17 districts in Bangladesh were affected by salinity in 2013. By 2023, this number had increased by 9, indicating a significant escalation in the severity of the problem. The total area of salinity-affected land increased from 83.3 million hectares in 1973 to 105.6 million hectares in 2009. Over the past five decades, the nation has experienced approximately 20 droughts. The years of 1951, 1957, 1972, 1979, and 1994 were marked by severe droughts, which affected over 39% of the country and half its population. In 2022, the majority of districts experienced drought conditions.

2. Country response to evolving challenges from climate change

The endeavor aims to actualize the aspiration of attaining climate-resilient sustainable development, a pursuit that has necessitated the formulation of requisite policies and regulatory frameworks.

In light of the pressing climate challenges confronting the nation, Bangladesh has demonstrated unwavering commitment to enhancing the efficacy of its regulatory and institutional frameworks. The endeavor aims to actualize the aspiration of attaining climate-resilient sustainable development, a pursuit that has necessitated the formulation of requisite policies and regulatory frameworks. In response to the challenges posed by climate change, the government of Bangladesh has implemented numerous policies, plans, and programs over the course of several years. The following is a concise list of policies and programs that have been developed to address the challenges at hand. Below is a short list of policies and programs to face up to the challenges.

- Bangladesh Climate Change Strategy and Action Plan (BCCSAP), 2009
- National Adaptation Program of Action, 2005, updated in 2009
- Bangladesh Climate Change Trust Act, 2010
- Nationally Determined Contributions (NDC), 2015, Enhanced & Updated in 2021
- NDC Implementation Road Map, 2018
- Bangladesh Delta Plan, 2100
- Bangladesh Energy Efficiency and Conservation Master Plan up to 2030
- Renewable Energy Policy of Bangladesh, 2008
- Bangladesh National Action Plan for Reducing SLCPs, 2012, Updated in 2018

The BCCSAP, developed in 2009, delineates Bangladesh's strategy for addressing the impacts of climate change. The document under review emphasizes adaptation measures, disaster risk reduction, and infrastructure improvements in urban areas (BCCSAP, 2009). The Delta Plan 2100 focuses on long-term sustainable development, particularly in the areas of water management and climate adaptation. These include urban infrastructure development, flood management, and measures to

protect coastal cities from rising sea levels and other climate impacts. The Mujib Climate Prosperity Plan (MCPP), formulated in 2020 incorporates urban adaptation measures, such as climate-resilient urban planning and upgrading urban infrastructure to withstand extreme weather events (Mujib Climate Prosperity Plan, 2020).

The urban policies of Bangladesh are centered om the promotion of sustainable urban development, with a focus on addressing issues such as rapid urbanization, climate change, and urban poverty. The National Urban Policy (NUP), administered by the Ministry of Local Government, endeavors to employ a decentralized and participatory process to attain sustainable urban development across the spatial, economic, social, cultural, and environmental domains. Urban policies have been shown to incorporate strategies for adapting to climate change. These strategies address the vulnerabilities of urban populations to climate risks. Such strategies include improving infrastructure resilience and enhancing the capacity of local governments to manage the impact of climate change. The policies' objectives also include the management of rapid urbanization, the mitigation of climate impacts, and the enhancement of the quality of life for urban residents through inclusive and sustainable development strategies.

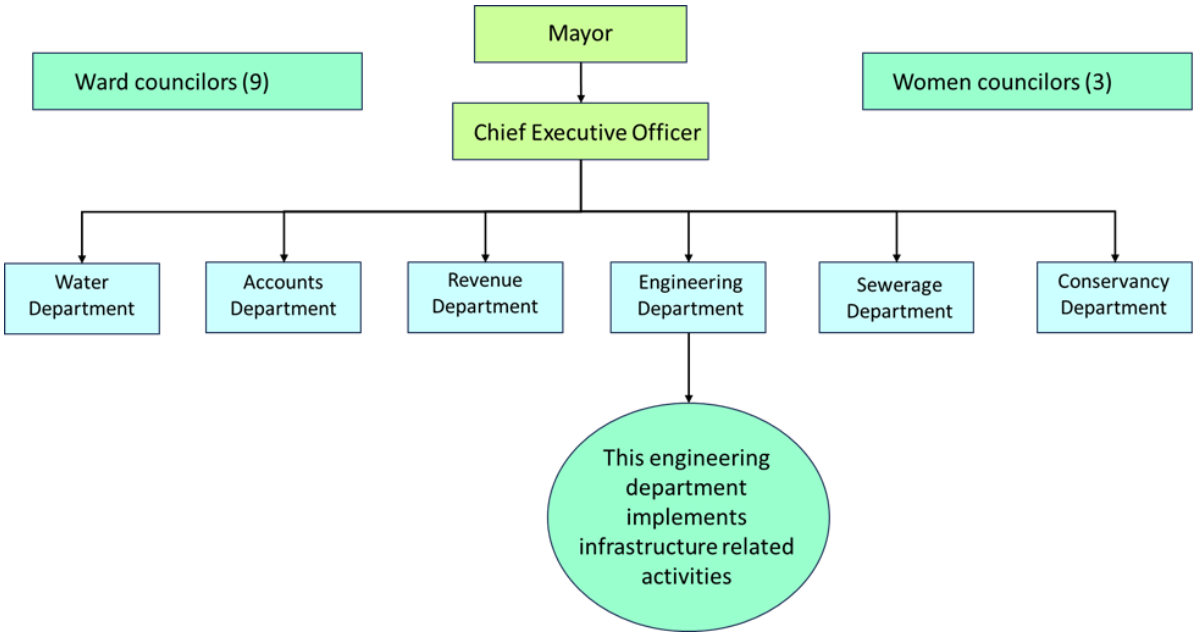
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In order to guarantee municipality governance and to promote sustainable city development, the Local Government (Municipality) Act 2009 and the Local Government (City Corporation) Act 2009 call for the establishment of a city-level coordination committee (CLCC) (LGED, 2018). This committee is comprised of members from local elected representatives, the District Administration, the LGED, the Directorate of Public Health Engineering, the Directorate of Roads and Public Works, social services, cooperatives, T&T, and professional representatives (Educational, cultural, lawyers, businessmen, doctors, NGO representative, Civil Society, urban citizen representatives).

3. State of Urban Local Government (metropolis vs towns)

In the context of Bangladesh, two distinct categories of urban bodies have been identified: City Corporations and Pourashavas. The Pourashavas is subdivided into 9 wards, whereas in the city corporations, the ward limit is not specified. For instance, Dhaka North City Corporation is comprised of 54 wards, while Dhaka South City Corporation consists of 75 wards. The governance structure of the Pourashavas deviates to a minor extent from that of the city corporations, as illustrated in Figure 1. Local government institutions in Bangladesh are subject to the oversight of the national government, as stipulated by the Ministry of Local Governance, Rural Development, and Cooperatives. These institutions generate revenue through various sources, including taxes on trades and holdings.

Figure 1. Governance Structure of a Municipality



Source: LGED, 2018

4. Role of Local Government in Climate Adaptation

Bangladesh has established a comprehensive approach to urban adaptation through several key policies and plans, including the National Adaptation Plan (NAP) 2023-2050, the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), and the Delta Plan 2100. The NAP endeavors to establish a climate-resilient Bangladesh by

addressing various sectors, including urban areas. It establishes objectives for climate-smart cities and incorporates strategies for safeguarding the environment, integrating adaptation into urban planning, and fostering innovation capacity (NAP, 2023). The NAP identifies 113 specific interventions across eight sectors, emphasizing the need for effective adaptation strategies and sustainable urban development. However, there is a conspicuous absence of priority allocated to capacity development for urban governance in the context of climate resilience.

In the context of the country, the institutional framework for urban adaptation employs a multi-tiered approach that encompasses various national, sub-national, and local entities, including:

However, there is a conspicuous absence of priority allocated to capacity development for urban governance in the context of climate resilience.

1. **National Framework and Planning**: The Bangladesh National Adaptation Plan (NAP), approved in 2022, serves as the overarching framework guiding climate adaptation efforts. It delineates long-term strategies and prioritizes interventions across sectors that emphasize a whole-of-government approach, integrating climate adaptation into national planning, budgeting, and policy processes.
2. **Ministry of Environment, Forests and Climate Change**: This Ministry occupies a pivotal role in the coordination of national climate policies and strategies. It engages in collaborative with other ministries to ensure that climate adaptation is integrated into economic and developmental agendas.
3. **Local Government Institutions**: Local governments, encompassing city corporations and municipalities, plays a pivotal role in implementing adaptation measures at the local level. These entities are responsible for urban planning, infrastructure development, and community-based adaptation projects. However, the effectiveness of these measures is often constrained by technological, financial, and technical capacities.

To promote urban adaptation and resilience, the Government of Bangladesh has initiated various programs and strategies, which include:

Policy Framework and Initiatives: The Bangladesh Urban Resilience Project (URP), a government-led initiative supported by international organizations such as the World Bank, aims to enhance disaster risk management and structural resilience. This involves the enhancement of emergency response capabilities, the development of risk-sensitive land-use planning, and the promotion of safe construction standards.
City-Specific Strategies: In Rajshahi, for instance, ICLEI South Asia is providing technical assistance to the city in the form of a Climate-Resilient Strategies and City Action Plan (CRCAP). The objective of this plan is to mitigate the impacts of climate change by preserving natural resources, reducing greenhouse gas emissions, and creating green spaces. Vulnerability assessments are critical in identifying risks to water supply, health, biodiversity, and the economy, which in turn guide the implementation of resilience interventions.

These initiatives underscore the necessity of a multifaceted approach to enhance urban climate resilience in Bangladesh. This approach must address immediate risks while also laying groundwork for sustainable urban development.

5. Major Challenges

The analysis of urban adaptation gaps in Bangladesh reveals several significant challenges that impede effective climate resilience and adaptation efforts in its rapidly urbanizing regions.

The analysis of urban adaptation gaps in Bangladesh reveals several significant challenges that impede effective climate resilience and adaptation efforts in its rapidly urbanizing regions. The primary gaps in this framework include:

1. Insufficient Funding: Municipalities often encounter budgetary constraints that impede their capacity to invest in critical climate adaptation infrastructure and services. This

financial deficit has consequences for the development and maintenance of critical urban systems including drainage, waste management, and flood protection. These systems are vital for mitigating the effects of climate change.

2. Poor Coordination among Agencies: A pervasive absence of coordination has been identified among various governmental organizations and agencies. This fragmented approach engenders inefficiencies and redundancies in executing adaptation measures, thereby diminishing overall effectiveness.

3. Absence of Community Involvement: The efficacy of adaptation is contingent upon the active involvement of the community, a component that is presently absent. Empowering local communities to engage in resilience-building initiatives has the potential to enhance the sustainability and acceptance of adaptation measures.

4. Lack of Comprehensive Data and Research: A significant dearth of systematic research and reliable data on urban climate resilience persists. This deficiency hinders policymakers and urban planners from formulating informed and effective strategies to address climate-related risks in urban environments.

6. Recommendations

In order to cultivate urban resilience in the face of escalating climate risks, it is imperative for Bangladesh to deliberate on addressing location-specific multi-sectoral climate vulnerabilities.

In order to cultivate urban resilience in the face of escalating climate risks, it is imperative for Bangladesh to deliberate on addressing location-specific multi-sectoral climate vulnerabilities. This should be accompanied by a commitment to fostering innovation and collaborating for a substantial impact against climate change. The government should prioritize the implementation of diverse interventions to enhance urban resilience nationwide.

Short-Term Interventions: The implementation of multi-sectoral interventions, meticulously tailored to the distinctive vulnerabilities of climate migrants, women, children, the elderly, and people with disabilities, is imperative. The initiative should also

provide capacity-building and training opportunities related to community-based, locally-led climate solutions. These solutions are intended to enhance health safety, water security, and overall well-being for urban dwellers.

Medium and Long-Term Strategies: The development and promotion of nature-based in conjunction with climate-resilient infrastructure is imperative for the mitigation of risks associated with flooding, waterlogging, cyclones, storm surges, and salinity intrusion.

Capacity Building of Urban Authority and Urban Citizens: The establishment of inclusive capacity-building programs is imperative, incorporating technological and knowledge-based interventions, engaging marginalized groups, and prioritizing community-led initiatives for preparedness and response actions.

Collaboration with multisector: Collaboration with local, national, and international organizations is essential for the implementation of effective, long-lasting climate resilience strategies.

Inclusive Climate Justice: The integration of policies that encompass climate migrants, children, the elderly, and people with disabilities, is imperative to ensure their equitable participation alongside women, youth, and other marginalized groups in climate resilience efforts.

Above all, a multi-faced strategy is needed to address the gaps and meet the demands of climate resilience. This strategy should involve strengthening research capabilities, obtaining financial resources, enhancing inter-agency coordination, upgrading infrastructure in at-risk urban areas, and promoting increased community engagement in adaptation initiatives.

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Case 2: India

Urban Local Government and Climate Change in India

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1. Introduction

As demonstrated in the Global Climate Risk Index 2021, India's ranking among the most vulnerable countries to climate change has worsened, dropping from 14th in 2017 to 7th place in 2019. Despite India's 49th rank in 2022 (CRI, 2025), most states are exposed to recurrent natural hazards, including cyclones, earthquakes, landslides, floods, heatwaves, and droughts, thus classifying India as one of the most disaster-prone countries worldwide.

The rapid and unplanned expansion of Indian cities has resulted in unchecked environmental degradation and heightened climate vulnerabilities. Nearly 44 percent of India's rapidly expanding greenhouse gas (GHG) emissions have their origins in urban areas, emanating from transportation, industry, buildings, and waste. The collective impact of these elements on the phenomenon of climate has been thoroughly documented (TERI, 2015). In recent years, there has been an increase in the frequency and intensity of extreme weather events, including heavy rainfall, heatwaves, and air pollution, in major Indian cities such as Mumbai, Chennai,

and Bangalore. These events have resulted in substantial economic, property, and human losses, particularly in the northern regions of the country. The phenomenon of rising temperatures, which has been identified as a key factor in the exacerbation of natural disasters, has been shown to have adverse impacts on a range of sectors, including basic services, infrastructure, housing, human livelihoods, and health in urban areas. It is anticipated that Indian cities will assume a pivotal function in the realization of the nation's ambitious net-zero target by the year of 2070. The Success of these cities in achieving sustainable development will be contingent upon the effectiveness of their governance and the capacities they develop to accelerate mitigation and adaptation efforts.

It is anticipated that Indian cities will assume a pivotal function in the realization of the nation's ambitious net-zero target by the year of 2070.

2. National Initiatives for Addressing Climate Challenges

The adoption of the National Action Plan on Climate Change (NAPCC) by India in 2008 led to the establishment of eight[1] National Missions, the implementation of which was entrusted to various nodal ministries of the union government. The National Mission on Sustainable Habitat (NMSH) was initiated in 2010 as an initiative of the Ministry of Housing and Urban Affairs (MoHUA). The mission identified five key areas for focus: (i) Energy and Green Building, (ii) Urban Planning, Green Cover, and Biodiversity, (iii) Mobility and Air Quality, (iv) Water Management, and (v) Waste Management (MoHUA, 2021). In an effort to contribute to sustainable urbanization and climate mitigation and adaptation, MoHUA and other ministries have launched several urban missions and programs (WWF, 2024). Table 1 provides a concise overview of several of these initiatives.

[1] National Missions for Solar, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Eco-system, Green India, Sustainable Agriculture, and Strategic Knowledge for Climate Change

Table 1. National Urban Program Initiatives

Missions and Programs	Focus
Jawaharlal Nehru National Urban Renewal Mission (JnNURM)	Launched in 2005, JnNURM was implemented until 2014. It prioritized water, waste, transport, and other infrastructures. It introduced a range of urban reforms.
Atal Mission for Rejuvenation and Urban Transformation (AMRUT)	Launched in 2015, it focuses on water supply, sewage, stormwater drainage, non-motorized urban transport, green spaces, water bodies and leveraging technologies.
Pradhan Mantri Awas Yojana - Urban (PMAY-U)	Launched in 2015, it addresses urban housing shortage among the economically weaker sections, low- and middle-income groups including the slum dwellers by ensuring a pucca house.
Swachh Bharat Mission – Urban (SBM-U)	Launched in 2014, it aims at making urban India free from open defecation and achieving 100% scientific management of municipal solid waste.
Smart Cities Mission (SCM)	Launched in 2015, it promotes smart solutions for cities that provide core infrastructure, clean and sustainable environment and decent quality of life.
Deendayal Upadhyay Antyoday Yojana - National Urban Livelihoods Mission (DAY-NULM)	Launched in 2013, its purpose was to provide self-employment and skilled-wage employment opportunities to empower the poor.
Heritage City Development and Augmentation Yojana (HRIDAY)	Launched in 2015, its purpose was to revitalize and develop heritage cities while maintaining their cultural and architectural significance.
Solar Cities Mission	Launched in 2023, it supports at least one city in each state to prepare a road map for generating renewable energy.
National Clean Air Program (NCAP)	Launched in 2019, it ensures stringent implementation of mitigation measures for prevention, control and abatement of air pollution, augment and strengthen air quality monitoring network across the country and increase public awareness and capacity building measures.
Nagar Van Scheme	Launched in 2020, it aims to develop 200 urban forests in next five years with a focus on people's participation and collaboration between forest department, municipalities, NGOs, corporates and citizens.
Lifestyle For Environment (LiFE Mission)	It seeks to engage citizens in promoting sustainable lifestyles, emphasizing behavioral changes that can reduce environmental impacts, such as water conservation, waste reduction, and energy efficiency.

In addition to a variety of missions and programs, a number of policy and guidelines have been developed to guide cites in their efforts to adapt to and mitigate climate change. Table 2 offers a concise synopsis of several salient policies and guidelines.

Table 2. Important Policies and Guidelines Relevant to Climate Action

Policies/Plans/Guidelines	Focus
National Urban Transport Policy (NUTP)	It encourages interventions in urban transport such as Bus Rapid Transit System (BRTS) and metro rail projects Linked to it, the National Electric Mobility Mission 2020 aims at promoting electric mobility in Indian cities.
India Cooling Action Plan (ICAP)	It provides recommendations to address the cooling requirements across sectors, and ways and means to provide access to sustainable cooling.
Urban River Management Plan (URMP)	Its objective is to assist Ganga towns in improving the state of the river in their stretch.
System of Air Quality and Weather Forecasting and Research (SAFAR)	Introduced for metropolitan cities to provide location specific information on air quality.
Standard Operating Procedure on Urban Flood Management	It recommends specific actions required to be undertaken by various departments and agencies in a city or town for responding to urban flooding/disaster of any magnitude.
Eco Niwas Samhita 2021	It sets the minimum benchmark to achieve energy efficiency in residential buildings.

3. Climate Actions in Cities

It is imperative to recognize the pivotal function of India's approximately 8,000 cities and towns[2] in achieving the nation's Nationally Determined Contributions (NDCs) and in safeguarding the urban population from climate-related challenges. Urban bodies, most notably municipal corporations, municipal councils and Nagar Panchayats, play a pivotal role in orienting cities and towns towards sustainable

[2] The 2011 census reported 7,935 towns in India, which included 3,784 census towns (areas not officially recognized as towns but possessing urban characteristics) and 4,145 statutory towns (towns with a municipality, corporation, cantonment board, or notified town area committee).

development pathways. The 74th Constitutional Amendment Act (Part IX-A) of the Indian Constitution formally acknowledges municipal authorities as institutions of self-governance. Schedule XII delineates 18 essential functions for these authorities, encompassing economic, spatial, and service delivery planning.

Despite the involvement of municipal authorities in the planning and development of local infrastructure associated with service provision, climate mitigation and adaptation actions are not necessarily included in this process. Although, the preparation of City Climate Action Plans (CCAP) through the establishment of local partnerships is envisaged under NMSH 2.0. However, a review of municipal statue books reveals that the words the words 'preparation and implementation of Climate Action Plan' are absent from most Indian statue (Jha, 2023). The degree of maturity exhibited by Indian Cities varies considerably across multiple indicators, encompassing human resources, financial capacities, and institutional mechanisms. Nevertheless, a number of cities have exhibited significant advancements in this regard.

Despite the involvement of municipal authorities in the planning and development of local infrastructure associated with service provision, climate mitigation and adaptation actions are not necessarily included in this process.

In recent decades, a select number cities have identified, planned and executed priority climate actions. These actions have been supported financially and technically by international development partners, and they have been informed by assessments of climate risk and vulnerability. One of the earliest initiatives for climate resilience planning at the city level was the Asian Cities Climate Change Resilience Network (ACCCRN)[3] program. The program, initiated in 2008, provided technical assistance and capacity-building support for the following activities: vulnerability analyses, sector studies, pilot projects, and the development of city resilience strategies in 12 cities. The 100 Resilient Cities[4] (100RC) program was initiated in 2013 and included four Indian cities: Pune, Surat, Chennai, and Jaipur. The project facilitated the appointment of a Chief Resilience Officer and provided technical capacity-building support to enable

[3] Supported by the Rockefeller Foundation

[4] Supported by the Rockefeller Foundation

the formulation of Resilience Strategies for these cities. In a similar manner, the C40[5] provided assistance to six Indian cities in India: Ahmedabad, Bengaluru, Chennai, Delhi, Kolkata, and Mumbai. The objective of the assistance was to facilitate the preparation of city climate action plans.

The Capacity Building for Low-carbon and Climate Resilient City Development project (CapaCITIES)[6] was implemented in two phases (2016-19 and 2019-23) in the following locations: Coimbatore, Tirunelveli, and Tiruchirapalli in Tamil Nadu; Vadodara, Ahmedabad, and Rajkot in Gujarat; Siliguri in West Bengal; and Udaipur in Rajasthan. The objective of the project was to integrate climate action into urban development through the implementation of integrated climate-resilient planning, the design of innovative finance mechanisms, and the development of climate-resilient infrastructure, particularly in the sectors of water, waste, and transport. The objective of the project was to illustrate scalable solutions for urban climate action in India. A notable achievement for the CapaCITIES project was the formulation of Net-Zero Climate Resilient City Action Plans for the cities of Rajkot, Vadodara, Coimbatore, Tiruchirapalli, Tirunelveli, Udaipur, and Siliguri. In each city, several climate-resilient infrastructure projects were piloted under the CapaCITIES project.

In summary, the phenomenon of decentralized responses to climate change in South Asia remains in a state of development.

In summary, a number of cities have identified issues such as heat stress, flooding, air and water quality, sustainable waste management, low-carbon transport and sustainable building standards as priorities. Presently, there is a plethora of illustrations of area-based climate mitigation and adaptation initiatives in major cities, subsequent to the implementation of their respective climate action plans.

[5] A global network of nearly 100 mayors of the world's leading cities addressing climate crisis

[6] Supported by the Swiss Agency for Development and Cooperation (SDC)

4. Challenges

However, despite the existence of a multi-layered governance system and a plethora of policies and guidelines to address climate issues in urban areas, a national-scale program to empower cities with adequate technical and financial support is still not in place. Despite the enactment of the 74th Constitutional Amendment Act in 1992 and subsequent state legislation, progress in devolving functions, personnel, and funds to urban local bodies has been minimal or excessively slow (CAG, 2024). It is evident that the vast majority of state governments have exercised a high degree of control over the urban planning process through the utilization of multiple para-statal institutions, thereby impeding the development of municipal capacities for independent planning. In contrast to the practices observed in numerous other countries, the role of the elected mayor in the domains of city planning and budgeting is subject to stringent restrictions.

However, despite the existence of a multi-layered governance system and a plethora of policies and guidelines to address climate issues in urban areas, a national-scale program to empower cities with adequate technical and financial support is still not in place.

Municipalities are heavily reliant on grants and transfers from the state and national governments. Property taxes constitute a substantial proportion of the total tax revenue collected by municipalities in India (RBI, 2024). Nevertheless, the majority of state governments are responsible for both the control of the tax base and the determination of the tax rate. The introduction of the Goods and Service Tax (GST) has had a further deleterious effect on the ability of municipal governments to increase own source revenue. A dearth of strategic planning and interventions aimed at enhancing the capacities of the elected representatives is evident. Moreover, there is a conspicuous absence of citizen participation, or if participation does occur, it is minimal. Despite the existence of a provision for Ward Committees in cities with populations exceeding 300,000, this has not been effectively implemented across states, resulting in the largely ineffective nature of these committees.

In the context of an underdeveloped urban governance system, climate-related concerns are characterized by a relative absence of institutionalization and a sporadic approach to management. A comprehensive and systemic regime of planning, implementation, monitoring, and evaluation of city-level climate actions, as envisaged under NMSH 2.0, is yet to evolve at a scale across Indian cities. In the absence of such initiatives, urban areas typically depend on programs and initiatives provided by the union and state governments. These government entities address the issue of climate resilience to limited extent and in an inconsistent manner, despite the significance of this subject (SSEF and OPM, 2023).

In the context of an underdeveloped urban governance system, climate-related concerns are characterized by a relative absence of institutionalization and a sporadic approach to management.

5. The Way Forward

It is imperative that Indian cities integrate climate resilience into their governance and financing frameworks. This necessitates a multi-stakeholder approach, wherein local governments, the private sector, and citizens collaborate to develop sustainable, climate-smart cities. It is incumbent upon national and state governments to provide support to cities in establishing city-level climate resilience cells within municipalities. These cells should be mandated to develop city climate action plans. It is imperative that mechanisms are established to ensure effective facilitation and enhancement of inter-agency coordination.

Municipalities are obliged to embrace bottom-up participation by involving citizens in climate action planning, ensuring that policies align with local needs and priorities, particularly for the urban poor and marginalized communities.

It is imperative that municipalities are granted greater autonomy I planning and decision-making through devolution. It is imperative that they possess the capability to establish and operationalize urban climate data repositories. Municipalities are obliged to embrace bottom-up participation by involving citizens in climate action planning, ensuring that policies align with local needs and priorities, particularly for the urban poor and marginalized communities. It is recommended that municipalities be mandated to raise resources through municipal bonds linked to green and climate-resilient infrastructure projects, based on a market-based rating. The present paper sets out the argument that the framework for public-private partnerships (PPPs) for sustainable infrastructure investments should be strengthened and enhanced.

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Case 3: Nepal

Youth in the Climate Change and Local Government in Nepal

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1. Introduction

Nepal is considered to be one of the most vulnerable countries in the world with regard to the effects of climate change. Nepal is positioned 139th out of 182 countries in terms of its exposure, sensitivity, and ability to adapt to the adverse impact of climate change (ND-GAIN, 2022). Nepal is positioned within the lower echelons of the rankings, occupying the lowest 20 percent in terms of greenhouse gas (GHG) emissions per capita (164th among 190 countries), and 87th in the overall global context, out of 194 countries (Mattia Amadio, 2022). The impact of climate change on the country is exacerbated by its mountainous topography and its abrupt ecological and climatic transitions.

It is widely acknowledged that floods, landslides and droughts represent the primary climate hazards in this country. It is estimated that more than 80% of property loss due to disasters is attributable to climate hazards, particularly

as floods, landslides, and glacier lake outburst floods (GLOFs). These phenomena displace people, and destroy homes, farmland, and other essential infrastructure. The Nepal Vulnerability and Risk Assessment (VRA) report 2021 states that on average, 647 lives are lost and economic losses over NPR 2,778 million each year are sustained each year due to climate-induced disasters in Nepal (Government of Nepal, Ministry of Forests and Environment, 2021). Due to a combination of political, geographic, and social factors, Nepal is recognized as being vulnerable to the impacts of climate change. In the 2019 ND-GAIN Indes, Nepal was ranked 128th out of 181 countries (Asian Disaster Preparedness Center, 2021).

2. Climate Policy Landscape

Due to a combination of political, geographic, and social factors, Nepal is recognized as being vulnerable to the impacts of climate change.

Since 2010, Nepal has made significant progress in integrating climate adaptation into policy and planning and implementing climate adaptation and climate resilience projects and programs. This progress encompasses an augmentation of the priority themes for focused adaptation action from six sectors and two crosscutting priorities, stipulated in the NAPA in 2010, to eight thematic priorities and four cross-cutting priorities. In the 2019 National Climate Change, Nepal initiated its National adaptation Plan (NAP) process made in 2015.

In the context of the eight overarching priorities, the theme of Urban Settlement and Infrastructure is of particular significance, as it is aligned with the SDG Goal 11, which aims to "make cities and human settlements inclusive, safe, resilient, and sustainable."

Since its ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in 1994, the Government of Nepal has been

committed to addressing the issue of climate change. In the wake of the National Adaptation Program of Action (NAPA) in 2009, climate change adaptation projects have been initiated and are currently operational (National Climate Change Policy (2019), 2020).

2.1. Climate Change Policy, 2019

The following aspects of climate change policy 2019 are in place:

Firstly, at least 80% of the budget available for climate change-related programs should be allocated directly to the program implementation area and community. Secondly, there is a necessity to enhance the capacity of the economically disadvantaged, including Dalits, women, children, and the youth, to prioritize and implement adaptation programs in the context of climate change. Thirdly, the implementation of climate resilient livelihood programs targeting households and communities at risk of the adverse impacts of climate change is essential. Fourthly, it is essential to identify households, communities, and vulnerable areas affected by climate change and adopt adaptation measures based on local skills, knowledge, and technology.

In order to facilitate the integration of climate change into local development plans, an implementation framework for Local Adaptation Plans for Action (LAPA) was developed in 2011.

In order to facilitate the integration of climate change into local development plans, an implementation framework for Local Adaptation Plans for Action (LAPA) was developed in 2011. The Local Adaptation Plan has been introduced at various vulnerable areas in accordance with the aforementioned framework (Government of Nepal, Ministry of Forests and Environment, 2021).

3. Local government and legitimate authority

Nepal's political structure is characterized by three-tiered government system, comprising Federal, Provincial and local level of governance. The Local Government Operation Act, 2074, which came into effect on 15 October 2017, established a robust legal foundation for the institutionalization of the legislative, executive and quasi-judicial practices of the newly formed local government. The legal mechanism was enacted in accordance with Article 296 (1) of the Nepal Constitution, 2015, with a view to leveraging local leadership and governance systems. The Act has stipulated several arrangements related to authorities, duties and responsibilities of local government, assembly meeting and working system, assembly management procedures, plan formulation and implementation, judicial works, financial jurisdictions, administrative structure and district assembly, among others.

Article 56 of the Constitution of Nepal (2015) provides a definition of local government as comprising rural municipalities, municipalities and district assemblies. The governing body of the rural municipalities and municipalities is referred to as the village executive and municipal executive respectively. The governance of the district assembly is overseen by the District Coordination Committee.

The country is further subdivided into 77 districts, each of which is equipped with its own district assembly. In addition, the nation is comprised of 753 local levels, including six metropolises, 11 sub-metropolises, 276 municipalities and 46 rural municipalities, each of which is also equipped with its own executive body. The Constitution of Nepal 2015 (Schedule 8) grants 22 powers to these local levels, thereby enabling them to formulate laws to implement these powers.

In accordance with section 11(2) of the Local Government Operation Act (LGA), local governments are assigned specific disaster management-related functions. As stated by the (Democracy Resource Center, 2019), there are twelve specific authorities that should be considered. These include the formulation of plans and policies for disaster preparedness, the mobilization of municipal police for rescue and relief, the mapping of risk areas and subsequent relocation,

coordination with provincial and federal governments, as well as non-governmental organizations, and the management of data and research.

3.1. Tasks of local government relating to disaster caused by climate change

1. The formulation and implementation of local plans for disaster risk reduction and management is to be conducted in accordance with the National Climate Change Policy, 2076 BS. Furthermore, the implementation of climate change adaptation and mitigation programs is to be conducted in coordination and collaboration with stakeholders including non-governmental organizations, communities, private sector, educational institutions. The monitoring, evaluation, and documentation of the programs being implemented is also to be conducted.

2. It is imperative that research be conducted on the potential causes and mitigation measures of national disaster risk reduction and management as provided for in the Disaster Risk Reduction and Management Act, 2074 BS. Such research should include river control, floods, landslides, earthquakes, global warming, climate change, land use, and various disasters and calamities.

4. Urbanization and Climate Change

Urbanization in Nepal is a salient issue, given its concomitant increase in urban poverty and inequality. Urban areas are facing a number of challenges due to rising population, including issues such as housing, sanitation and water supply, food security, energy and health safety. These challenges are further compounded by the impact of climate change.

The confluence of multiple stresses, engendered by rapid urbanization, industrialization, and economic development, is further compounded by climate change. These stresses are anticipated to exert a deleterious effect on the sustainable development capabilities of Nepal, by exacerbating pressures

on the environment (Clean Energy Nepal, Climate Action Network South Asia (CANSA) and Misereor, 2023).

In the context of the escalating climate crisis, economically disadvantaged populations find themselves compelled to seek refuge in the most marginalized and vulnerable areas of the city, including the vicinity of contaminated water bodies, landslides and areas susceptible to inundation and flooding. The disposal of substantial quantities of waste in the vicinity of rivers has a detrimental effect on the health of the urban poor, thereby increasing their vulnerability. The most significant factors contributing to environmental pollution in the Madhesh region include vehicular and industrial emissions, waste burning (for cooking and heating, burning of garbage), unmanaged construction, poor road conditions, population growth, and trans-boundary pollution. Of these, vehicular emissions are the primary contributing factor due to consumption of fossil fuels (Shakya et al., 2017).

The confluence of multiple stresses, engendered by rapid urbanization, industrialization, and economic development, is further compounded by climate change.

5. Vulnerable Rural and Urban Areas

As indicated in the NAP report 2021-2050, the most vulnerable urban municipalities in Nepal are predominantly located in the provinces of Karnali and Sudurpaschim. As stated in the 2021 report by the Government of Nepal's Ministry of Forest and Environment, (Government of Nepal: Ministry of Forest and environment, 2021) urban regions that are highly susceptible to climate impacts by the year 2050 include Suryadaya and Biratnagar in Koshi province, Janakpur in Madhesh province M Bhanu, Byas, and Pokhara Lekhnath in Gandaki province and Sitaganga in Lumbini province. The following section outlines the principal climate impacts in question.

1. Building and property damage and destruction
2. Increasing migration from rural to urban areas leading to overcrowding of informal settlements and conversion of ghost villages in rural/mountain areas.
3. Heat islands in urban settlements.
4. Scarcity of urban water provisions.
5. Damage and loss to urban ecology.
6. Shifts in production of food and non-food crops in rural areas.

6. Innovations/experiments by city governments/NGOs/community level

Nepal's urban areas are confronted with a combination of geographical, technical (including human resources), and financial constraints. A substantial segment of the population lacks adequate infrastructure, consequently experiencing constrained access to essential services. This has led to an elevated susceptibility to the repercussions of climate change (Joshi, 2018).

Nepal's urban areas are confronted with a combination of geographical, technical (including human resources), and financial constraints.

Climate change has led to an increase in the number of suitable breeding habitats for disease-carrying mosquitoes. These mosquitoes are spreading their reach to higher-altitude areas such as Nepal which were previously unaffected by outbreaks (Ghimire, 2023). Nepal employed fumigation techniques to eradicate these pests. This efficacy of this technique has been demonstrated; however, its implementation has been shown to have deleterious effects on biodiversity and public health. Specifically, the technique has been found to cause damage to beehives and to amplify the severity of respiratory disease.

In the context of local governance, certain authorities have embarked on distinctive initiatives. For instance, the Waling municipality of Syangjha district has formulated a resilience roadmap consistent with the Paris agreements and the Sustainable Development Goals (SDGs). The roadmap's objectives are as follows: 1) the transformation of the town into a resilient city by 2030 with a particular emphasis on waste management; 2) the establishment of green jobs and businesses; 3) the protection of lives and critical infrastructure from disaster risks; and 4) the reduction of congestion in core areas to create more open space and greenery. Presently, the Waling Municipality is responsible for the management of over 11 tons of solid waste on a daily basis.

In the context of local governance, certain authorities have embarked on distinctive initiatives.

In Kathmandu and Lalitpur, electric vehicles are gaining popularity. Nowdays, public electric vehicles such as 'Sajha Yatayat', 'Sundar Yatayat, and Degoo' have emerged as a prominent alternative to fossil fuels. The introduction of a battery-powered three-wheeler public transportation vehicle known as the Safa Tempo in Kathmandu occurred in the mid-1990s with the support of the Global Resources Institute (GRI) and the United States Agency of International Development (USAID).

7. Key initiatives by Nepali municipalities

There are several areas where the municipalities have taken initiative to

1. **Waste management**: Implementation of solid waste collection systems, promotion of compost manure, and establishing sanitation clubs in schools to raise awareness about waste reduction.
2. **Green spaces and urban planning**: Creating green areas within city areas, incorporating green infrastructure into new developments, and designing climate-resilient buildings.

3. **Renewable energy adoption**: Promoting solar power generation and integrating renewable energy sources into municipal buildings.
4. **Disaster preparedness**: Developing disaster management plans, early warning systems, and community-based resilience initiatives to mitigate flood and landslide risks.
5. **Climate-smart transportation**: Promoting walking, cycling, and public transport options to reduce carbon emissions from transportation by operating electric vehicles.
6. **Community engagement and awareness campaigns**: Educating residents about climate change impacts, sustainable practices, and adaptation strategies.

7.1. Examples of specific municipality actions

1. **Waling municipality**: Developed a climate resilience roadmap with a focus on waste management, green jobs creation, and disaster risk reduction.
2. **Bharatpur municipality**: Bharatpur municipality has initiated a public-private partnership for waste management, encompassing composting initiatives, thereby reducing its reliance on mosquito fumigation. The municipality has been organizing sanitation clubs at schools with the objective of promoting waste management and sanitation. The municipality has established a private-public partnership model for waste management, and they have been distributing composting chambers to the public, accompanied by training. The practice of mosquito fumigation in Bharatpur has been discontinued for a period of 4–5 years (Chloe Pottinger-Glass, 2023).
3. **Panauti municipality**: Established a local disaster management committee and allocated funds for disaster preparedness.

8. Challenges faced by Nepali municipalities

1. Insufficient financial resources to implement large-scale climate adaptation projects.
2. Lack of technical expertise in climate change adaptation planning and implementation.
3. Need for better coordination between different government levels and stakeholders.
4. Due to the lack of adequate information on climate relevance, risks and potential impacts of proposed programs, local governments are struggling to allocate resources and finance appropriately.

9. Recommendation:

1. Local governments should also introduce programs to enhance adaptability capacity of people residing in metropolitan cities.
2. Nepal can learn the coping strategies and mitigation technologies from neighboring countries to address impact of climate change in urban areas.
3. Knowledge of climate finance (budget) should be imparted to representatives of local governments.
4. Local governments should work particularly on public health and food security to safeguard the people from the impact of climate change.
5. Slum dwellers should be trained with preparedness drills by the local disaster management committee.
6. There should be programs to exchange good practices among the various municipalities who have success stories of tackling the impact of climate change.

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Case 4: Pakistan

Climate Change and Local Governments in Pakistan

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1. Introduction

Despite contributing a negligible proportion of global greenhouse gas emissions, measuring 0.93%, Pakistan is frequently highlighted as one of the most adversely affected countries by climate change. The effects of climate change have become increasingly evident in Pakistan in recent years, with the country experiencing devastating floods in 2022 that affected more than 30 million people and caused damage estimated at almost 15 billion US dollars. As rising temperatures put Pakistan's glaciers at risk, there is a high probability of an increase in both the frequency and intensity of floods. As global warming leads to increasingly extreme weather conditions, Pakistan is also susceptible to recent heat waves. In urban areas, these effects are exacerbated by unplanned urban expansion and a decline in forest coverage, leading to the phenomenon known as the urban heat island effect. Furthermore, the agriculture sector, which constitutes a substantial proportion of the country's economy, is particularly vulnerable to the impact of droughts. A decline in crop yields has far-reaching consequences, impacting not only the

livelihoods of farmers but also national food security. The phenomenon of climate-induced rural economic deterioration is poised to precipitate mass displacement, thereby exacerbating population pressures in urban areas and consequently rendering urban adaptation an imperative policy priority.

It is also imperative to acknowledge the profound impact of air pollution on public health in Pakistan. The onset of smog during winter months, characterized by declining temperatures and the entrapment of pollutants in the atmosphere, has endangered a crisis in public health. The phenomenon is often exacerbated by the practice of seasonal crop burning in Pakistan and India. In November 2024, the Air Quality Index in Lahore and other major cities in Punjab reached hazardous levels, prompting the government to take measures including the closure of schools and public places. A significant increase in the number of cases of Pakistanis being admitted to hospitals with symptoms including cough and troubled breathing has been reported.

It is also imperative to acknowledge the profound impact of air pollution on public health in Pakistan.

2. Climate Policy Landscape

In 2024, Pakistan's Parliament passed the controversial 26th constitutional amendment, which included a new article 9A: "Clean and healthy environment — every person shall be entitled to a clean, healthy and sustainable environment." The Constitutional acknowledgement of the people's rights with regard to climate was a welcome development.

Prior to this, Pakistan has been gradually concentrating on formulating national-level climate change policy. This is one of the few issues where there now seems to be unanimous consensus among political parties that it is a serious, long-term challenge for Pakistan. The Ministry for Climate Change was established in 2012 and in the same year the Pakistani government endorsed its inaugural National Climate Change Policy. The policy underwent a revision in 2021. Despite the varying degrees of emphasis attributed to this domain by respective governments, the 2022 floods served as a pivotal catalyst, prompting a collective realization among the political elite and propelling this issue to the forefront of public discourse. However,

as of February 2025, the Prime Minister has assumed responsibility for the portfolio of Climate Change himself and has not appointed a dedicated minister. Each of the four provinces has a department for the environment and climate change, with Sindh, Khyber Pakhtunkhwa and Punjab having appointed a minister with responsibility for this area. Furthermore, the Provincial Disaster Management Authorities and the National Disaster Management Authorities are charged with the responsibility of evaluating risks nationwide and formulating strategies to mitigate the impact of future climate disasters.

In a significant development, Pakistan has formally endorsed the Paris Agreement on Climate Change, thereby pledging to reduce its greenhouse gas emissions by 50% by the year of 2030. This commitment is outlined in the Nationally Determined Contributions submitted by the country in 2021. However, it should be noted that 35% of this is contingent upon the provision of international financing. In recent years, the Pakistani government has repeatedly called for reparations at the United States Conference of the Parties, an annual conference on climate change. It is contended that Pakistan is currently experiencing difficulties as a result of the emissions of developed nations and that the country should be provided with financial assistance through the allocation of funds specifically earmarked for climate-related initiatives. This would enable Pakistan to allocate funds to adaptation measures and to prepare for impeding climate-related shocks.

It is contended that Pakistan is currently experiencing difficulties as a result of the emissions of developed nations and that the country should be provided with financial assistance through the allocation of funds specifically earmarked for climate-related initiatives.

The National Adaptation Plan 2023 was endorsed by the Federal Cabinet in July 2023, with a budget of 441 million US dollars being allocated for its implementation. At the inauguration of the Plan, the then Minister for Climate Change, Ms. Sherry Rehman, stated that local governments must be central to adaptation efforts. Furthermore, she asserted that each province must formulate its own adaptation strategy. The fifth guiding principle of the plan is as follows: "Act Locally – understand and address local risks and opportunities." The NAP places significant emphasis on the necessity of adapting to local conditions in order to

enhance both the level of acceptance and the efficacy of the measures employed. Furthermore, a pivotal strategic domain pertains to urban resilience, which delineates the ensuing priorities: the promotion of climate-informed urban planning, the enhancement of municipal service delivery, the utilization of nature-based solutions, and the fortification of municipal financial capacity. In the process of devising the implementation plan, the NAP brings together provincial and local governments, without distinguishing between the two. It says:

Provincial and local governments are responsible for developing and implementing climate adaptation policies and implementation plans tailored to the specific needs and vulnerabilities of their regions. This includes identifying local climate risks and vulnerabilities and adaptation priorities and designing strategies to build resilience at the community level. They oversee critical infrastructure and public services (including municipal services and disaster risk management) as well as land-use, management, planning and development which are critical areas for building resilience.

While the National Adaptation Plan provides a comprehensive delineation of strategic areas, the implementation process remains less explicit. Local governments appear to be an afterthought in this regard, reflecting Pakistan's longstanding history of weak local governance structures, particularly in urban areas.

3. Local Government System in Urban Pakistan

While the National Adaptation Plan provides a comprehensive delineation of strategic areas, the implementation process remains less explicit.

As outlined in Article 140 (A) of Pakistan's constitution, each state and province is obligated to establish a local government system, entailing the establishment of political, financial and administrative authorities. As of February 2025, local governments have been elected and are in office in all provinces except Punjab, where a new LG law will be passed this year by the Provincial Assembly.

Each province is governed by its own system of local governance, as established by legislation enacted by the respective provincial assemblies. Consequently, the local government bodies of each province possess disparate structures, term limits and

powers. In a similar manner, divergent systems of local governance are employed for urban areas. According to the 2023 census, a significant 39% of the population of Pakistan lives in urban areas. In the province of Baluchistan and Sindh, the highest tier of urban local governments are metropolitan corporations for the largest cities and municipal corporations for smaller cities. In the urban area of Khyber Pakhtunkhwa's, these local authorities are designated as city local councils. The numerical breakdown is presented in Table 1.

Table 1. Typologies of Urban governance system

	Punjab	Sindh	Balochistan	Khyber Pakhtunkhwa
Metropolitan Corporations	11 in PLGA 2022 (New LG law has not yet been passed by the Provincial Assembly as of February 28, 2025)	1	1	NA
Municipal Corporations	NA	34	1	NA
City Councils	NA	NA	NA	7

The electoral process for urban bodies is subject to variation. In the provinces of Sindh and Baluchistan, the chairpersons of union councils are automatically deemed members of metropolitan and municipal corporations, while the vice chairpersons of union councils become members of town committees. Conversely, in the province of Khyber Pakhtunkhwa (KP), the mayor and members of city council are elected directly by the populace. Local government elections are conducted under the auspices of the Election Commission of Pakistan (ECP). Women, ethnic minorities, laborers, and the youth have reserved seats in local governments, but the number of reserved seats varies between provinces.

From a legal, financial and administrative prospective, local governments – both rural and urban – continue to be dependent on their respective provincial governments. In accordance with prevailing local government legislation, the Chief Minister of a province is empowered to dissolve the local government, while the Provincial Secretary for Local Government has the authority to suspend the government. The decision regarding funding allocations in the provinces of Punjab, Khyber Pakhtunkhwa (KP) and Sindh is made by the relevant Provincial Finance Commissions. In contrast, the province of Balochistan is subject to the oversight of the Grants Committee. It is important to note that Khyber Pakhtunkhwa's legislation

goes a step further and stipulates that 30% of the total development budget of the province must be allocated to the local governments. However, the implementation of this policy remains to be observed. Elected local officials have been threatening protests in KP over this very issue.

City governments, in particular, encounter difficulties in exerting authority, as key powers remain with provincial governments and their appointed bureaucracies. In major cities such as Karachi, Lahore and Peshawar, district authorities and Deputy Commissioners (the district head of the administration) wield significant control.

City governments, in particular, encounter difficulties in exerting authority, as key powers remain with provincial governments and their appointed bureaucracies.

Historically, local governments have not been functional at the majority of times, and as such, the responsibility of local governance has been assumed by provincial Local Government Departments. consequently, Pakistan's local governance structure remains predominantly centralized, with local governments in urban areas exhibiting a notable lack of autonomy, whether in the management of daily urban affairs or the response to pressing issues such as climate change. Unlike many countries across the world, Pakistan has not empowered city mayors to take the lead on climate fight especially laying out adaptation and mitigation strategies and developing climate resilient urban plans.

4. Local Innovation and Community Level Initiatives

In the absence of local governments, grassroots innovation and community-led climate action have emerged as critical lifelines for building climate resilience across urban landscapes. These efforts, often led by civil society, are commendable but remain insufficient to fill the vacuum left by the absence of empowered local institutions.

The Pakistan Air Quality Initiative (PAQI) is a notable example of civic-led innovation in environmental monitoring. Since 2016, PAQI has deployed low-cost sensors in major cities like Karachi, Islamabad and Lahore, publishing real-time AQI data to raise public awareness. In 2025, PAQI partnered with Bank Alfalah and

Institute of Business Administration (IBA) to develop Karachi's first scientific emissions inventory, aimed at supporting evidence-based air quality management. While PAQI maintains linkages with policymakers, its work remains largely outside the formal remit of municipal governance structures. This highlights the need for stronger institutional integration at the local level to ensure such initiatives contribute meaningfully to long-term urban environmental policy.

Civic initiatives are increasingly contributing to environmental restoration through nature-based solutions that enhance urban climate resilience. A notable example is the Clifton Urban Forest in Karachi, a community-led project launched in 2021 by Masood Lohar through the Sindh Radiant Organisation, in coordination with the Government of Sindh. The initiative has transformed approximately 200 acres of former landfill into a dense, biodiverse forest. Urban forestry efforts like this offer a replicable model for expanding green cover in areas vulnerable to air pollution and extreme heat. However, the Clifton Urban Forest's vulnerability to the Karachi Development Authority's urban development plans illustrates the disconnect between civic innovation and local institutional planning – highlighting the need for greater alignment and policy coherence between community initiatives and urban authorities.

Provincial governments also play a significant role in driving urban environmental solutions. In 2025, the Government of Punjab launched the Environmental Protection Force (EPF) under its Climate Resilient Punjab Vision, to strengthen regulatory enforcement and address deteriorating air quality. Key measures include an emission testing certification system for vehicles, the installation of air quality monitoring stations and the establishment of fuel testing labs. This is supported by a public helpline for environmental complaints. While these developments signal increased provincial engagement on climate and environmental governance, they are unfolding in a context where elected local governments remain absent in Punjab. This institutional gap may hinder the long-term sustainability, responsiveness, and localization of such efforts – especially in urban areas where municipal governments are best positioned to lead on environmental planning and service delivery.

A major example of urban local government structures working for climate planning is the Karachi Climate Action Plan (KCAP), launched by the Karachi Metropolitan Corporation (KMC) in 2025. Aligned with the Paris Agreement, KCAP aims to cut greenhouse gas emissions by 62.2% by 2050. It also envisages of initiating

legal reforms such as amendments to the Sindh Local Government Act (2013) to formalize environmental governance and recommends the establishment of a Directorate of Environment and Climate Change within KMC. However, successful implementation will depend on whether local governments are given the autonomy and resources to lead such efforts. Similarly, the Lahore Climate Action Plan (LCAP) aims for emissions neutrality by 2050 and prioritizes waste management, public transport, and green space expansion as interventions crucial for countering the urban heat island effect and smog.

While many local initiatives remain driven by civil society or provincial agencies, Karachi and Lahore have recently seen city-level climate planning emerge through formal mechanisms. The Karachi Climate Action Plan (KCAP), launched in 2025 by the Karachi Metropolitan Corporation (KMC) with technical support from UNDP, C40 Cities, the Urban Unit, and NED University, outlines 71 actions across sectors such as transport, energy, and waste, aiming to cut emissions by 62.2% by 2050. While Karachi now has an elected mayor and city council, the city government continues to face institutional and financial constraints that may affect its ability to implement climate initiatives at scale. Similarly, the Lahore Climate Action Plan (LCAP), developed by the Urban Unit with support from the Punjab government, UNDP and C40 Cities, responds to Lahore's acute air pollution and urban vulnerability. It aims for emissions neutrality by 2050 and includes short-term goals such as a 50% emissions reduction within one year. However, with no elected local government in place, LCAP is being driven by provincial and technical agencies, raising concerns about long-term accountability and local ownership. Both cases reflect the growing technical sophistication of urban climate planning in Pakistan, but also highlight the governance gap between climate ambition and the institutional empowerment of city governments.

While community innovation and initiative are both valuable, their impact will remain piecemeal unless supported by a structural shift toward empowered and accountable local governments.

Taken together, these various initiatives reflect both the potential and limitations of civic-led local climate action in Pakistan. While community innovation and initiative are both valuable, their impact will remain piecemeal unless supported by a structural shift toward empowered and accountable local governments.

5. Challenges and Way Forward

Punjab has experienced the most significant challenges, having only had a local government for two years between 2010 and 2024. In order to facilitate effective decision-making process at the local level in the context of climate adaptation, it is imperative to enhance the efficacy of urban governance systems in Pakistan. Weak zoning legislations has resulted in settlements being established in flood-prone and hazardous areas, while the absence of urban planning informed by climate change has served to exacerbate existing vulnerabilities. It is vital to acknowledge that essential services such as waste management, drainage, and public transportation persist in their inadequacy, thereby serving to intensify the risks related to climate change in major cities. In order to achieve citizen buy-in and identify genuinely indigenous solutions – particularly in diverse and expansive cities – it is essential to engage the voices of the populace through the medium of effective and active local governance.

To address these challenges, it is recommended that a detailed constitutional amendment, akin to India's 73rd and 74th Constitutional Amendments, be implemented in order to ensure regular and empowered local governments with taxation powers.

Two significant impedimenta are identified as primary barriers to the empowerment of urban local governments. Firstly, the irregularity of local government elections has resulted in significant capacity deficits, thereby enabling provincial bureaucracies to exercise substantial dominance over urban governance. For instance, in the last 14 years, no province has had a fully functioning local government for more than a total of seven years. Secondly, there is an absence of independent revenue streams and significant tax collection powers which results in city governments being wholly dependent on provincial transfers. To address these challenges, it is recommended that a detailed constitutional amendment, akin to India's 73rd and 74th Constitutional Amendments, be implemented in order to ensure regular and empowered local governments with taxation powers. It is imperative that these structural challenges are addressed through constitution provisions to ensure the adaptation of Pakistan's cities to the growing climate crisis.

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Case 5: Sri Lanka

Climate Resilience Initiatives by Local Government in Sri Lanka

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1. Introduction

As a tropical island nation in South Asia, Sri Lanka is particularly vulnerable to the adverse effects of climate change, including rising temperatures, shifting monsoon patterns, and intensifying extreme weather events. The Intergovernmental Panel on Climate Change (IPCC) has identified South Asia and Sri Lanka specifically, as regions of particular concern due to their high population density, reliance on livelihoods that are vulnerable to climate changes, and exposure to coastal hazards (IPCC 2022).

Sri Lanka's vulnerability to extreme weather events has fluctuated significantly over the years, as reflected in its rankings on the Climate Risk Index, which assesses the extent to which countries and regions are affected by weather-related losses. In 2015, the country was ranked 98th (Kreft, et al. 2016), yet by 2016 it had ascended dramatically to 4th place (Eckstein, et al.

2017). In 2017, Sri Lanka was among the three most affected countries globally, reaching its highest ranking at 2nd, thereby highlighting the severe impact of weather-related loss events (Eckstein, et al. 2018). Despite a decline to 6th in 2018 (Eckstein, et al. 2019) and further to 30th in 2019, these rankings underscore the nation's persistent exposure to fatalities and economic losses caused by extreme weather conditions (Eckstein, et al. 2021).

Temperature patterns demonstrate a consistent rise across the country, with average temperatures increasing by approximately 0.16°C per decade from 1960-1990. Projections under intermediate emission scenarios indicate further warming of 1.5°C to 2.5°C by 2050, with significant implications for agriculture and water availability (IPCC 2018). Research indicates a narrowing gap between maximum and minimum temperatures across Sri Lanka, with minimum temperatures rising more rapidly than maximum temperatures (Jayawardena, et al.2018).

Over the years, precipitation patterns have undergone significant changes, with the southwest experiencing increased rainfall intensity and the dry zone facing prolonged droughts. These shifts have had substantial consequences for food security and water resources. It has been observed that extreme weather events, including floods and landslides, are becoming increasing prevalent and severe. For instance, the 2017 floods and landslides affected over 800,000 people and caused significant economic damage (Ministry of Disaster Management et al. 2017). The IPCC (IPCC 2022) predicts that such events will intensify, with cascading effects on infrastructure, public health, and ecosystems.

It has been observed that extreme weather events, including floods and landslides, are becoming increasing prevalent and severe.

2. Climate change policies and legal frameworks

The climate policy of Sri Lanka is determined by its commitment to international agreements, particularly the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement. On a national scale, the Ministry of Environment (MOE) serves as the primary entity responsible for the implementation of the UNFCCC. In 2008, the Climate Change Secretariat (CCS) was established as a specialized division within the ministry, with the explicit mandate to address issues pertaining to climate change. The National Climate Change Policy (NCCP) of 2012, an early initiative of the CCS, provides a guiding framework for the country's response to climate change. The policy emphasizes integrating climate considerations across all sectors of the state (Ministry of Environment 2012).

Sri Lanka has also developed a 'National Adaptation Plan (NAP) for Climate Change Impacts 2016-2025'. This plan underscores the pressing need for adaptation measures, given the country's high degree of vulnerability to climate change impacts. The NAP delineates strategies to enhance resilience in key sectors, including food security, water, health, marine and biodiversity, and identifies Local Government Authorities as a pivotal actor responsible for implementing adaptation measures in the human settlements and infrastructure sector (Climate Change Secretariat 2016).

The government has delineated decarbonization pathways across multiple sectors, including energy, waste, and transportation.

In August 2023, Sri Lanka declared its commitment to achieving carbon neutrality by 2050 through the inauguration of the 'Carbon Net Zero 2050: Roadmap and Strategic Plan Sri Lanka'. This strategy emphasizes the transition to renewable energy resources, the enhancement of energy efficiency, and the promotion of carbon sequestration through reforestation and mangrove restoration initiatives. The government has delineated decarbonization pathways across multiple sectors, including energy, waste, and transportation. In the context of

transportation sector, the Strategic Plan emphasizes the promotion of electric vehicles in both public and private transport, complemented by the expansion of affordable renewable energy infrastructure (Climate Change Secretariat 2023a).

Furthermore, Sri Lanka has instituted legislative measures to support its climate objectives. The National Environmental Act (NEA) No. 47 of 1980, as amended, constitutes the legal foundation for environmental protection in the country. The Act stipulates the implementation of Environmental Impact Assessments (EIAs) for development projects, thereby ensuring that considerations pertaining to climate resilience, including the preservation of forest and coral cover, are integrated into the decision-making processes. In addition, Sri Lanka has established sector-specific policies that are designed to align with its overarching climate resilience framework. These include the national energy policy and the national waste management policy.

The National Environmental Act (NEA) No. 47 of 1980, as amended, constitutes the legal foundation for environmental protection in the country.

3. Local government in Sri Lanka

The Sri Lankan governance structure is comprised of national and provincial governments, which form a two-tier system. The local tier operates under the provincial governments. The national tier, which consists of the central government, is responsible for matters of national importance. These matters include defense, foreign affairs, finance and overall policymaking. In the provincial tier, Provincial Councils (PCs) were established under the 13th Amendment to the Constitution. These councils derive their powers as outlined in Article 154G of the Constitution, which delineates three categories of authority: the Provincial Council List (List I), the Reserved List (List II), and the Concurrent List (List III). The Provincial Council List delineates the powers and functions allocated exclusively to the PCs. The Reserved List

preserves powers and functions solely for the national government. The Concurrent List includes matters on which both the PCs and the national government may legislate in consultation with each other, with Parliament maintaining preeminence. The local tier is comprised of Local Government Authorities (LGAs), which consists of the following: (i) 24 municipal councils, (ii) 41 urban councils and (iii) 276 pradeshiya sabhas. Each of these local government bodies functions under statutes specific to each category: the Municipal Councils Ordinance No. 29 of 1947, the Urban Councils Ordinance No. 61 of 1939, and the Pradeshiya Sabhas Act No. 15 of 1987, each as amended. LGAs function under the oversight of the respective PCs, exercising the powers vested in them prior to the 13th Amendment. Furthermore, a national-level Ministry exercises oversight over provincial councils and local governments, providing support to PCs and LGAs in policy formulation, project implementation under the National Budget and State Investment and National Development Program, and the execution of monitoring and evaluation functions.

4. Local Government Initiatives

The protection of the environment is included in the Concurrent List under the 13th Amendment to the Constitution, meaning that both Parliament and Provincial Councils have the authority to legislate on environmental matters. According to the provision stipulated in the Municipal Councils Ordinance, Urban Councils Ordinance and Pradeshiya Sabhas Act, Local Government Authorities (LGAs) are entrusted with the responsibility of overseeing the management of water resources, the mitigation of pollution caused by industrial facilities, and the effective disposal and management of solid waste. Nevertheless, despite this shared responsibility, LGAs have limited involvement in climate governance. Furthermore, as the Ministry of the Environment functions as the national focal point for climate change, climate resilience efforts are primarily guided by the national government.

The implementation of Sri Lanka's nationally determined contributions (NDCs) is guided by the 'NDC Implementation Plan 2021-2030' which was published by the Ministry responsible for the Environment in July 2023. This plan delineates sectoral targets, timelines, and responsibilities to ensure the effective realization of climate commitments. LGAs are identified as lead agencies and/or other key agencies in multiple activities/targets. For instance, LGAs function as a lead agency, collaborating with the ministry responsible for Provincial Councils to oversee the majority of waste sector operations. Additionally, LGAs serve as a pivotal agency in the implementation of activities within the transportation and industry sectors. (Climate Change Secretariat 2023b). The 'National Waste Management Policy' formulated in 2020 has designated LGAs as the responsible authority for the management of all forms of waste, related knowledge and capacity building activities, and monitoring and evaluation efforts (Ministry of Environment 2020).

Notwithstanding this fact, the initiation of climate action by LGAs remains inconsistent and ineffective.

Notwithstanding this fact, the initiation of climate action by LGAs remains inconsistent and ineffective. For instance, the mayors of Colombo and Kandy made commitments in 2020 and 2023 respectively, to the 'Global Covenant of Mayors for Climate and Energy'. These commitments included tracking and reducing greenhouse gas (GHG) emissions, improving sustainable energy sources, and assessing climate risks and vulnerabilities. However, these commitments remain largely unrealized. In a similar manner, the Matale Municipal Council has also become involved in this initiative, but it has not yet made any formal commitments. In accordance with the provisions of the global covenant, a project administered by the Colombo Municipal Council was featured in the "South Asia's Climate Response Case Study Compendium" (All India Institute of Local Self-Governance 2024). The project, entitled 'A Fallen Tree in Colombo makes way for effective tree management' exemplifies commitment to environmental stewardship and

sustainable urban development. This initiative was prompted by the increased number of fatalities resulting from falling trees during heavy rains in late 2023. The initiative involved the inspection of 800 trees within the city limits and the removal of those deemed hazardous. While the Colombo and Matale Municipal Councils are members of the ICLEI- Local Government for Sustainability (originally, International Council for Local Environmental Initiatives), there is no publicly available information on climate-related initiatives in this regard.

5. Community/NGO driven initiatives

In the Thalakolawewa Grama Niladhari Division of Polpithigama, in the Kurunegala District, local residents established the community-based organization (CBO) Nildiyavara in 2014 to address the pressing issue of inadequate and unsafe drinking water. In 2018, with the support of the Sri Lanka Red Cross Society, the CBO initiated the Climate Resilient Integrated Water Management Project. This initiative's objective was to establish a community-managed drinking water system. To that end, comprehensive training was provided to community members on a range of subjects, including infrastructure maintenance, water supply systems, leadership, financial management, and auditing. This community-managed rural water supply scheme was completed in 2021 with the support of various stakeholders, including the Pradeshiya Sabha of Polpithigama (Kariyawasam 2021).

In the Thoduwawa Lagoon area of the Puttalam District, a local non—governmental organization (NGO) initiated a project in 2010 to address the critical issue of severe drinking water shortages caused by groundwater salinization, which is associated with sea level rise and inadequate water infrastructure. The project was implemented by the grantee NGO, LGAs and the National Water Board, under the UNDP-GEF Small Grants Programme with co-financing from Australian Aid and the national government. The initiative sought to enhance access to drinking water, strengthen food security,

and promote livelihood development, with a particular focus on coastal women. Community members played an active role in the selection of water sources, the laying of pipelines, and the provision of financial support. The project's components also encompassed the installation of rainwater harvesting systems, the facilitation of waste management demonstrations, and the promotion of alternative livelihoods, with a particular emphasis on the insight of women. Subsequent to this, ownership of the project was subsequently transferred to the relevant LGA and the project is currently managed by a committee comprising both villagers and local authority representatives (UNDP 2016).

In the context of Buttala, situated within the Monaragala District, women farmers belonging to the Vikalpani National Women's Federation have demonstrated a commitment to the conservation of traditional and endemic seed varieties, while concurrently promoting agroecological practices. These grassroots efforts have recently garnered support from the United Nations Population Fund (UNFPA). Located in Sri Lanka's dry zone, Monaragala, situated within Sri Lanka's dry zone, is particularly susceptible to the adverse effects of climate change. These challenges are further exacerbated by systemic issues, including unequal land rights, restricted access to credit, and exclusion from decision-making processes. Notwithstanding these obstacles, the Federation has persisted in its endeavors, functioning independently of government authorities and contributing meaningfully to the enhancement of climate resilience and gender parity among some of the nation's most vulnerable demographics (UNFPA Sri Lanka 2025). In summary, community and civil society-driven initiatives related to climate change are gaining momentum and demonstrating tangible potential, despite numerous constraints, including financial limitations and challenges in expanding their reach.

6. Major challenges

The majority of climate risk assessments for local government administrative boundaries have been conducted by international non-governmental organizations, with minimal documentation of LGA-led initiatives. Given that LGAs operate at the grassroots level and directly engage with communities, their limited participation and engagement in climate resilience activities is a significant gap. Research suggests that climate policies and programs are primarily framed at the national and regional levels (attesting to continued centralization), with only a handful of LGA-involved projects funded by INGOs (Mahanama et al. 2014). This disconnect likely stems from systemic issues, including insufficient political prioritization of local government in national climate planning, and gaps in awareness and technical capacity among LGA officials.

Given that LGAs operate at the grassroots level and directly engage with communities, their limited participation and engagement in climate resilience activities is a significant gap.

Furthermore, climate finance remains a significant challenge for climate-vulnerable countries, compounded – in Sri Lanka's case particularly – by domestic economic crises that strain public resources. For provincial councils and LGAs, this financial shortfall is exacerbated by a lack of access to international climate funds and limited decentralized revenue streams, forcing reliance on overstretched national budgets. These financial bottlenecks critically undermine the capacity of provincial councils and LGAs to implement climate-resilient initiatives and strengthen grassroots efforts, perpetuating cycles of vulnerability in communities most exposed to the risks and impact of climate change.

7. Way Forward

Given their proximity to affected communities, LGAs should take a more active role in climate adaptation and environmental governance. While national authorities provide overarching policy frameworks, effective implementation requires localized responses tailored to specific environmental challenges. LGAs, with their deep local knowledge of environmental risks and climate vulnerabilities, are best suited to this task, being well-placed to design interventions that address inter-provincial disparities often overlooked by top-down national policies. Consulting the local communities in these efforts should be a mandatory compliance feature, and communities should be involved in all possible stages of these initiatives.

Strengthening the role of LGAs in climate governance requires capacity-building, decentralized funding, and integration into national climate strategies. The 13th Amendment to the Constitution grants provincial councils' exclusive authority over environmental protection within their provinces – thus, LGAs remain vital frontline actors. By decentralizing climate action, LGAs would be able to respond swiftly to emerging environmental crises through community-led initiatives and targeted resource distribution. However, clear coordination mechanisms are essential to avoid fragmented and overlapping efforts. To this end, legal frameworks should clarify the role of provincial councils and LGAs in environmental governance, ensuring their input is institutionalized in national policy making. Ultimately, empowering LGAs would bridge the gap between national mandates and grassroots realities, ensuring more inclusive climate governance and action in Sri Lanka.

By decentralizing climate action, LGAs would be able to respond swiftly to emerging environmental crises through community-led initiatives and targeted resource distribution.

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Climate Change and Local Governments in South Asia

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