ICLEI
Local Governments for Sustainability

ICLEI SOUTH ASIA
Annual Report

April 2023 - March 2024

Contents

Who We Are

ICLEI – Local Governments for Sustainability is a global network of more than 2,500 local and regional governments committed to sustainable urban development. Active in 125+ countries, we influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development. Our members and team of experts work together through peer exchange, partnerships and capacity building to create systemic change for urban sustainability.

ICLEI - Local Governments for Sustainability, South Asia (ICLEI South Asia) comprises a multidisciplinary team of 79 staff members, including, climate change specialists, civil engineers, ecologists, energy managers, environmental engineers, environmental planners, power systems engineers, transportation engineers and urban planners. We work together to support South Asian cities on multiple aspects of sustainable development. We aim to build and serve a regional network of local governments to achieve tangible improvements in regional and global sustainability through local initiatives.

ICLEI SOUTH ASIA NETWORK

100+

Local and regional governments committed to sustainable urban development

countries

We work in India, Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka. We are also working with national and local governments in Cambodia, Indonesia, Lao PDR, and Mongolia

HANSA PATEL

Chairperson, ICLEI South Asia

As we navigate the challenges of a world increasingly defined by the climate crisis, the urgency for sustainable solutions has never been greater. The choices we make today — how we plan our cities, manage resources, and foster innovation — will determine our ability to secure a resilient future.

ICLEI South Asia continues to demonstrate unwavering commitment to this cause, supporting cities and communities across the region in meeting these challenges head-on. This past year, we expanded our reach and impact, guiding local governments in several cities across South Asia and Southeast Asia in developing climate action plans and biodiversity conservation strategies, advancing waste management, conserving critical ecosystems and habitats, promoting sustainable transport solutions, and redesigning urban areas for our children. Our work in new areas such as offshore wind, electric vehicle battery circularity, sustainable energy transition, gender, and community-led water security has provided fresh momentum to cities striving to achieve net-zero emissions and build inclusive communities.

We are on the cusp of an energy transition, with electric mobility, renewables, energy efficiency, and decarbonisation among several strategies being adopted. It is not yet clear how quickly, and at what scale, public- and private-sector actions will result in tangible changes at local, national, and global levels. What we do know is that this transition must be just and inclusive. The local governments in the ICLEI South Asia network are uniquely positioned to ensure that their policies tackle inequality as well as reduce carbon emissions, bringing everyone on board and accelerating the green transition.

The success of our initiatives is a testament to the power of collaboration with our members, partners, and donors. I am pleased to present the annual report for the fiscal year ending in March 2024, which encapsulates all the initiatives through which we have been driving meaningful change.

GINO VAN BEGIN

Secretary General,
ICLEI – Local Governments for Sustainability

Urban areas worldwide are increasingly vulnerable to the devastating impacts of a warming planet, even as they become hubs of rapid population and economic growth. The stakes are higher than ever in the face of extreme temperatures, incessant rainfall, flooding, climate-induced migration, and food and water insecurity.

These facts are not in question, but our actions are! We need to match the speed of climate change with radical action that aligns with sustainable development, social justice, and gender equity. We likely have the tools to get the job done, and more innovations are on the way, bolstered by artificial intelligence and locally-led climate solutions. At ICLEI, we believe that cities are not only on the front lines of climate challenges but also hold the key to innovative solutions. Local leaders, therefore, must be empowered to set ambitious climate targets and implement resilient strategies that address both mitigation and adaptation.

Working in one of the most vulnerable regions in the world, ICLEI South Asia has been fostering collaboration between national governments, municipalities, local entities, and various stakeholders for nearly two decades. It has been driving new perspectives and solutions to the social and environmental aspects of the poly-crisis affecting the world, championing renewables, green finance, gender equity, social inclusion, energy efficiency, and locally-led adaptation and conservation strategies, among many others. Together, we must continue to enhance ambition, build resilience, and support our cities in leading the way toward a climate-secure future.

EMANI KUMAR

Executive Director,
ICLEI South Asia, &
Deputy Secretary General, ICLEI

As I reflect on ICLEI South Asia's accomplishments during the 2023-24 fiscal year, I am deeply inspired by the substantial actions being taken towards adopting sustainable lifestyles. Our efforts have had a profound impact, marked by the creation of strong, cross-sector partnerships and the introduction of innovative approaches to confront urgent environment and development challenges in the region.

We made a tangible difference by engaging with over 75 local and regional governments across India, Bangladesh, Nepal, Bhutan and Sri Lanka, as well as Malaysia. Through various projects and strategic engagements, we extended our influence and advocacy throughout the region. Our work laid the foundation for the development of Climate Resilient City Action Plans, Green City Action Plans, City Biodiversity Index, Local Biodiversity Strategy and Action Plans, comprehensive energy resilience plans, and climate and disaster risk assessments. in various cities in the region. We drove actions on the adoption of electric mobility, mitigation of air pollution, and creation of urban forests. These initiatives have significantly contributed to local and global climate and SDG goals, particularly in advancing low-carbon development and enhancing urban resilience.

We also undertook crucial studies on the effects of climate change on children and caregivers, emphasising gender and social inclusion, highlighting the need for climate-resilient urban spaces that prioritise the well-being of young children, women and marginalised populations and amplifying their voice in local planning and decision making.

Innovation remains central to ICLEI South Asia's approach to sustainable development. We led several projects that applied customised methodologies, enabling local governments to customise their development efforts to their unique needs and contexts and facilitate peer learning and exchanges through training and capacity building initiatives on climate risk and resilience strategies.

We believe that meaningful relationships and open collaboration are essential to driving sustainable change. In 2023, we engaged with a broad spectrum of stakeholders, including community organisations, local governments, national agencies, international organisations, academic institutions, and private sector partners, and led by example by jointly organising key sessions at national and global fora. These partnerships were instrumental in enhancing our capacity to deliver impactful outcomes and fostering a shared sense of responsibility for climate action.

I am delighted to present the annual report for 2023-24. I thank all our supporters, donors and partners for their unwavering support and commitment to our mission. Let us continue working together to create a resilient future.

The ICLEI South Asian REXCOM 2024-2027

One of the governance bodies for ICLEI, the South Asian RexCom, or Regional Executive Committee, is the regional representation of ICLEI members in South Asia. It consists of four members and two advisors elected for the 2024-2027 period.

REXCom MEMBERS

Ugyen Dorji
Mayor, Thimphu Municipality, Bhutan

Bhim Prasad Dhungana
President, Municipal Association of Nepal, Nepal

Special Advisors

Shammoon Adam
Director General, Local Government Authority, The Maldives

Naynaben Pedhadiya
Mayor, Rajkot Municipal Corporation, India

Adv. M. Anilkumar
Mayor, Kochi Municipal Corporation

Hemanthi Goonasekera
CEO, Federation of Sri Lankan Local Government Authorities, Sri Lanka

JOIN US!

Local governments, and associations of local governments

Please visit our website: http://southasia.iclei.org/our-members/join-us.html
or write to us at: membership@iclei.org

Our Mission

To build and serve a worldwide movement of local governments to achieve tangible improvements in global sustainability with special focus on environmental conditions through cumulative local actions.

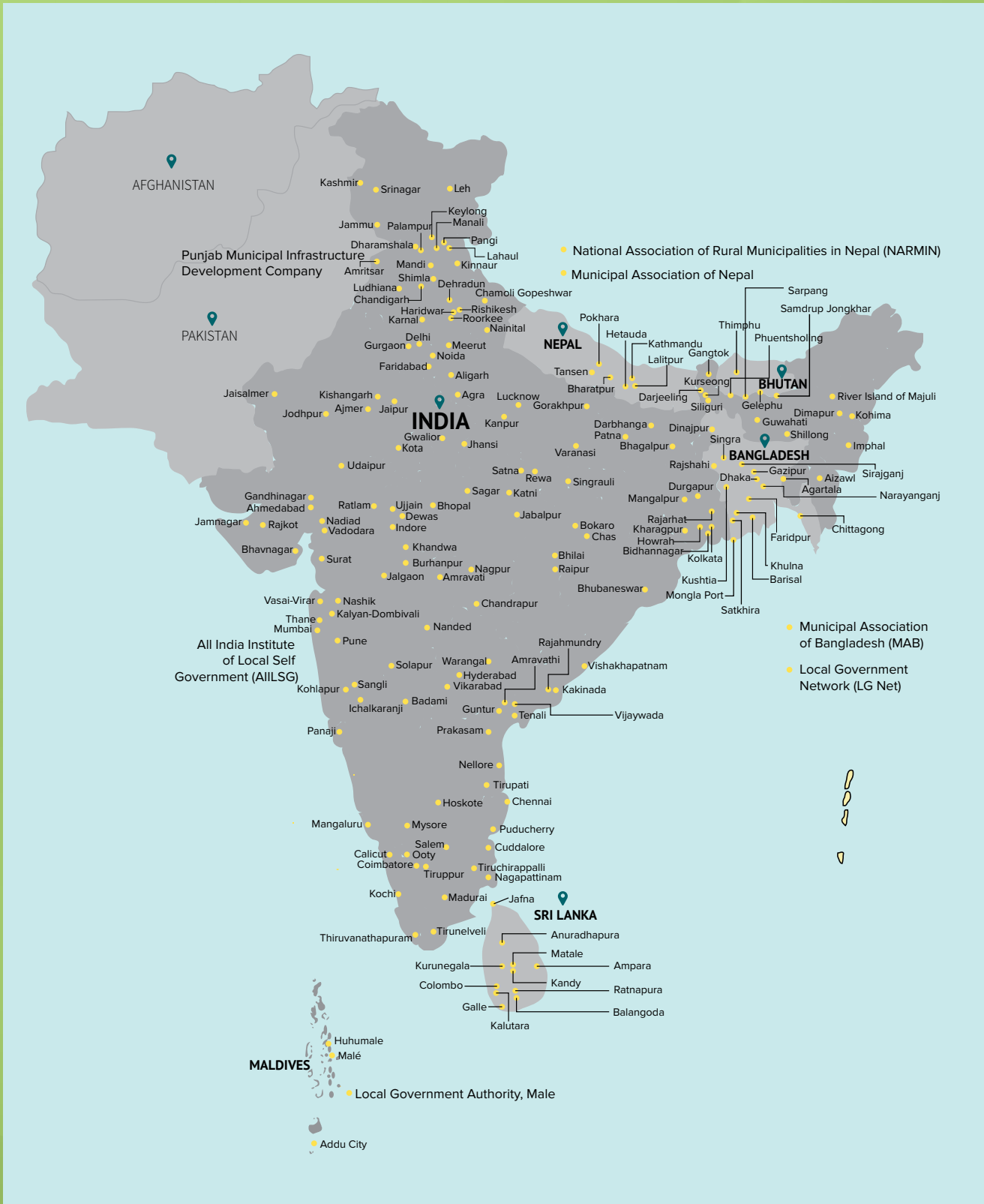
Our Vision

ICLEI envisions a world of sustainable cities that confront the realities of urbanisation, adapt to economic and demographic trends and prepare for the impacts of climate change and other urban challenges. This is why ICLEI unites local and regional governments in creating positive change through collective learning, exchange and capacity building.

Our Members

ICLEI members are committed local and regional governments, representing diverse communities the world over. They guide our efforts to make sustainability fundamental to all development and to scale up sustainable urban development worldwide. ICLEI Members steer the direction of our work, shape our strategy and support the mission, mandate and principles set in our statutes. They are eligible to vote and take part in our network-wide governing bodies. Membership is open to all local and regional governments, as well as to their global, regional, national and subnational associations.

ICLEI South Asia is now a network of more than 100 local and regional governments. We encourage more cities to join our network. Please visit https://iclei.org/en/join.html or write to us at membership@iclei.org



Our Pathways

Zero Emission Development

Help curb climate change, reduce pollutants and greenhouse gas emissions in all activities, achieve climate neutrality and promote renewable energy and non-motorised solutions such as walking and cycling for sustainable passenger mobility.

Equitable Development

Help to build more just, liveable and inclusive urban communities, address poverty and pursue processes and patterns of an "inclusive development for all" that safeguard the natural support systems for human life.

Nature-Based Development

Protect and enhance the biodiversity and ecosystems in and around cities, which underpin key aspects of our local economies and upon which we depend for the well-being and resilience of our communities.

Resilient Development

Support cities to anticipate, prevent, absorb and recover from shocks and stresses, in particular those caused by rapid environmental, technological and social change, and to improve basic response structures.

Circular Development

Promote models of production and consumption to build sustainable societies that use recyclable, shareable and regenerative resources to meet the material / development needs of a growing population.

Zero Emission Development Pathway

Through this pathway, we work to reduce pollutants and emissions, aim to achieve climate neutrality, and promote renewable energy by divesting from fossil fuels and using nature-based solutions. We support low emission development that promotes sustainable passenger and freight mobility, giving priority to walking, cycling, public transit and shared mobility as part of equitable solutions.

The local governments in ICLEI South Asia's extensive network have set ambitious climate targets aligned with national and global targets, and we have been supporting them to develop effective and inclusive climate change responses and more sustainable ways of living. During the reporting period, we collaborated with over 35 municipalities, in addition to regional governments, in South and Southeast Asia to develop their climate action plans, greenhouse gas (GHG) inventories, and Green City Action Plans. We also focused on advancing the adoption of electric mobility, building energy efficiency (EE), air pollution management, and off-shore wind energy projects, among other sectors.

We have been supporting urban local bodies to enhance their ability to develop integrated climate-resilient planning and infrastructure and design innovative finance mechanisms through our **CapaCITIES project (Phase 2, September 2019 — December 2024)** for over five years. We supported eight project cities in developing their Net-zero Climate Resilient City Action Plans (CRCAP), implementing quick-win and co-financing projects, steering project development of bankable projects, reporting to various sub-national and national missions, and enhancing stakeholder capacities with training and workshops.

Showcasing Climate Action

July 2023, Ahmedabad, India: Chief Minister of Gujarat Shri. Bhupendra Bhai Patel released Ahmedabad's CRCAP during the inaugural session of the Urban 20 Mayoral Summit, in the presence of the Ambassador, Embassy of Switzerland to India and Bhutan, and more than 600 national and international delegates.

The city of Ahmedabad developed its Climate Resilient City Action Plan (Towards a Net-zero Future by 2070) - Ahmedabad Net-zero CRCAP, which was released by Chief Minister of Gujarat Shri. Bhupendra Bhai Patel during the inaugural session of the Urban 20 (U20) Mayoral Summit 2023, held in July in Ahmedabad, in the presence of the Ambassador, Embassy of Switzerland to India and Bhutan, and 600+ national and international delegates. We supported the development of the Ahmedabad Net-zero CRCAP. It is based on our Net-zero ClimateResilientCities (CRC) Action Planning Methodology that includes a comprehensive urban systems gap analysis, climate risk and vulnerability assessment with the impact of climate change on urban infrastructure, preparation of baseline GHG emissions and projections, including planning for future reductions through progressive action scenario and net-zero pathway, and identification of sectoral goals and target setting along with detailing of the potential adaptation and mitigation strategies and actions. This methodology supports climate action planning in line with the Government of India's net-zero targets by 2070.

Miyawaki urban forests were completed in Udaipur (Mohta Park) and Vadodara (Chhani Lake Area), and similar forests have been developed in Siliguri and Tiruchirapalli. The urban forest in Udaipur is serving as a model to train municipal gardeners and engineers on building similar forests across the city to improve green cover, resulting in both climate change mitigation and adaptation benefits.

Unlocking Solar Power

October 2024, Periyakulam Lake, Coimbatore, Tamil Nadu, India: The Coimbatore City Corporation issued a work order to ICLEI South Asia for the implementation of a 140-kWp Floating Solar PV plant at the lake, under the state's Namakku Naame scheme. The capacity of the pilot was then increased to 154 kWp to ensure policy compliance.

A 25 kWp rooftop Solar PV system has been developed on the Siliguri Municipal Corporation's main administrative building. This plant has the potential to mitigate around 32 tCO_2e of GHG emissions from municipal operations annually.

The city of Tiruchirappalli was supported in the construction of two knowledge and study centres, ensuring compliance with the Indian Green Building Council rating system standards. Assistance was also extended to the state-level Directorate of Municipal

Breathing Better

February 2024, Ahmedabad, India: A drawing competition was organised for students from government schools on the theme of 'Clean Air, Clean Earth', as part of the technical support provided to the Ahmedabad Municipal Corporation for preparing the city's Micro Action Plan for Clean Air.

Administration (DMA) office building to help it achieve a green building rating. Following these efforts, Tamil Nadu has expressed interest in securing green building ratings for several municipal buildings across the state.

Technical support was provided to a co-financing project aimed at restoring the Chettikulam Lake in Tiruchirapalli through nature-based solutions for improved stormwater management. Project development was completed for 11 bankable initiatives, alongside the preparation of 15 concept notes, eight city-level innovative financing mechanisms, and five state-level innovative financing mechanisms and policy recommendations. A Sustainable Energy Action Plan (SEAP) was developed for Coimbatore, which included a comparative analysis of renewable energy (RE) options, such as solar, wind, and hybrid systems, for optimal integration into the city's conventional municipal energy consumption, along with actionable recommendations. In addition, the SEAP report for Ahmedabad was prepared and submitted.

Ahmedabad Municipal Corporation (AMC) was supported in the development of a solar-powered opportunity/ on-route charging station for BRTS electric buses. This includes a 240kW electric charger along with 120kWp grid-connected solar PV system. We supported the AMC to improve operational efficiency, increase revenue, make significant energy savings and reduce GHG emissions, and to increase savings through reduced operational costs and related financial benefits.

Under the Rajkot Green Mobility programme, an e-auto co-financing initiative for providing subsidy to 100 beneficiaries for procuring e-autos, 100 e-autos were delivered to the beneficiaries, thus leveraging various national and state-level schemes, including the National Urban Livelihoods Mission, and the Government of Gujarat's Vajpayee Bankable Yojana to make e-autos affordable to drivers. The project is in line with the state government's vision of decarbonisation of transport and the national mission on transformative mobility.

Close collaboration was undertaken with state departments to develop state-level aggregated bankable projects and policy briefs, facilitating the scaling up of climate action and enabling replication of successful initiatives. The DMA, Tamil Nadu, launched the Tamil Nadu Urban Liveability Framework (TNULF), designed using the Basket of Solutions (BoS) tool from the Simplified CRC methodology. This framework was circulated among 22 municipal corporations across the state as a potential tool to assess cities' performance in service delivery, governance, and climate readiness.

CapaCITIES: Key Outcomes

- 8 Net-zero CRCAPs - Ahmedabad, Coimbatore, Rajkot, Siliguri, Tiruchirappalli, Tirunelveli, Udaipur, Vadodara
- 4 Simplified CRCAPs - Ahmedabad, Tiruchirappalli, Tirunelveli, Vadodara
- Climate Financing - Pre-feasibility assessments and preparation of bankable project reports; training modules and capacity building of cities on mobilising climate finance
- 2 Bankable Projects and 9 Pilot Projects - Technical assistance and funding support for developing and implementing pilot climate action interventions
- Knowledge Dissemination and Climate Action Reporting - Local, national and international reporting and dissemination of project outputs, best practices and lessons learned from planning and implementation of climate actions and climate financing.

In Gujarat, the urban development department was supported in analysing energy consumption patterns from municipal facilities across all 8 municipal corporations, while also showcasing sector-specific climate actions drawn from the Ahmedabad CRCAP. Technical assistance was extended to Ahmedabad, the U20 2023 chair city, in successfully organising the U20 Sherpa Meeting and the Mayoral Summit 2023. As part of this effort, and in partnership with the National Institute of Urban Affairs (NIUA), a plenary session and panel discussion titled "Building Climate Responsive and Resilient Cities" was held as a parallel event during the Mayoral Summit—emphasising the urgency of sustainable infrastructure, renewable energy, and resilient urban planning to protect communities from climate-related challenges.

The session also witnessed the release of State of Cities: Towards Low Carbon and Resilient Pathways, a report jointly developed with NIUA. The publication presents a global urban narrative, while highlighting the current climate actions and trajectories of 15 Indian cities.

We conducted city and state-level training on climate action planning and climate finance in all project cities except Siliguri, and supported all of them in reporting their climate actions to the CDP-ICLEI track. The project supports India's policies, programmes and missions such

as the National Action Plan for Climate Change, Smart Cities Mission, AMRUT, Jala Jeevan Mission, Swachh Bharat Mission, and Urban Outcomes Framework / Climate Smart Cities Assessment Framework (CSCAF).

As the South Asia Technical Coordinator of the **Global Covenant of Mayors for Climate and Energy (GCoM)**, (July 2022 - December 2023) we conducted the review of Sustainable Energy and Climate Action Plans (SECAPs) for six Indian cities: Bhavnagar, Surat, Gangtok, Gandhinagar, Vadodara, and Panaji. The SECAP is a planning document for reducing GHG emissions, enhancing climate resilience, and addressing energy poverty for a just transition. The recommendations have been useful for these cities in updating and finalising their climate action plans to receive GCoM Badges.

The city of Bhavnagar's Climate Resilient City Action Plan (CRCAP) is being developed in alignment with the Global Covenant of Mayors (GCoM)'s Common Reporting Framework. The 'South Asian Cities Climate Finance Landscape' was developed as a resource to guide cities in identifying and accessing opportunities for mobilising climate finance. Additionally, support was extended to South Asian cities in submitting expressions of interest and applications to project preparation facilities and financing mechanisms, including the GCoM Bankable Cities' Climate Projects, the City GAP Fund, and the Urban Transitions Mission.

The cities of Siliguri and Udaipur were supported in their priority projects under the GCoM Bankable Cities' Climate Projects initiative. We supported 10 South Asian cities to report on the CDP ICLEI Track during the reporting period. We also provided technical assistance and participated in GCoM events at the COP28 in Dubai, and organised webinars on climate action planning, waste management and rising vulnerability to heat stress in South Asian cities.

Technical expertise was extended to the **Greater Hyderabad Municipal Corporation (GHMC)** for the development of its **CRCAP**, in compliance with the GCoM Common Reporting Framework (CRF), and to support the GHMC in joining the GCoM and in reporting climate actions on state, national and global platforms such as the Urban Outcomes Framework. The development of the CRCAP, along with a baseline GHG emissions inventory and a Climate Risk Vulnerability Assessment (CRVA), will help the city government understand and effectively respond to climate change risks and impacts on the community and municipal utilities. The CRCAP will identify targets and strategies to help Hyderabad move towards net-zero greenhouse gas emissions and support India's 'net-zero by 2070' goal.

We engaged closely with the Vijayawada Municipal Corporation (VMC) and Kakinada Municipal Corporation (KMC) under the **Mainstreaming Climate Action in Three Cities in Andhra Pradesh** project (December 2021-November 2023). A Climate Core Team comprising representatives from city departments and a Stakeholder Committee were established in both cities to institutionalise the vision of preparing the CRCAPs of the two cities and their implementation.

Strategies for Building Ciimate Resilience

August 2023, Hyderabad, India: A stakeholder consultation meeting was organised to discuss the development of the CRCAP and Local Biodiversity City Action Plan for the Greater Hyderabad Municipal Corporation.

GHG inventories were developed for the two cities in alignment with the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (BASIC framework) and the GCoM CRF. Alongside the citywide inventories, emissions from municipal operations were also estimated, offering the cities a comprehensive understanding of emissions generated by their facilities and activities.

The CRVA of both cities was conducted, including comprehensive data collection across different urban systems related to service delivery and gaps, and literature review. The activities implemented under the grant help to enhance and deepen the cities' effort in mainstreaming climate considerations in the planning, implementation, and delivery of municipal services at the city level. The process of preparing the GHG inventory and the CRVA enhances awareness about sectoral contribution and drivers of emissions, impacts of identified climate risks on urban systems and service delivery, and different community groups.

Our collaboration with Ahmedabad led to a remarkable 40% improvement in air quality in the city in FY 2023-24, as compared to FY 2018-19. This was achieved by preparing and implementing detailed action plans for hotspot areas.

We continued to provide technical support to the Ahmedabad Municipal Corporation (AMC) for preparing the city's **Micro Action Plan for Clean Air**, (December 2021- April 2025) identifying air pollution hotspots through a scientific approach and preparing hotspot action plans, and provided support on compliance with the guidelines provided by the Ministry of Environment, Forest and Climate Change (MoEF&CC). Our collaboration with the AMC led to a remarkable 40% improvement in air quality in FY 2023-24, as compared to FY 2018-19. This was achieved by preparing and implementing detailed action plans for hotspot areas like Raikhad, Chandkheda, Maninagar, and the Pirana dump site in the city. We also supported the AMC in identifying on-site air pollution sources and for developing mobile-based air pollution source identification and monitoring applications for site officers.

A policy paper on 'Good Construction Practices' for the AMC was prepared with our support. The implementation of this policy will support the AMC in mitigating air pollution caused by the construction sector. Additionally, we supported the city in a pilot project on installing dust sensors to monitor and analyse the real-time particulate matter pollution caused during various stages of construction activities. A total of 20 sensors have been strategically deployed at various construction sites with a built-up area of more than 20,000 m² within the city. Our joint efforts with the AMC were recognised by the MoEF&CC, and the city has been awarded an additional INR 1.2-billion incentive grant for best performance in FY 2023-24. We also supported awareness and capacity-building programmes and community participation in air quality management efforts.

Sustainable Energy Transition

October 2023, Thimphu, Bhutan: A project initiation meeting was held with stakeholders to discuss the opportunities for supporting the local government in the preparation of a Sustainable Energy Transition roadmap.

Sustainable Transport

February 2024, Hamirpur, Himachal Pradesh, India: ICLEI South Asia extended assistance for fast-tracking the adoption of electric mobility in Himachal Pradesh.

Five cities – Ahmedabad and Gurugram in India, Thimphu in Bhutan, Dhaka in Bangladesh and Kathmandu in Nepal - are being supported in enhancing their institutional frameworks and technical capacities toward achieving ambitious climate and energy targets and improving their energy resilience under the **Sustainable Energy Transition (SET) in South Asia** (June 2023- June 2025) project. The project involves the maximisation of RE integration and EE improvements and the fostering of a SET ecosystem through capacity building, engagement with the private sector, and skill development for local communities, focusing on women and the youth. Key objectives include creating an evidence base and a roadmap for SET in the cities, focused on electricity consumption across residential, commercial and industrial sectors, municipal services and facilities, and transportation; identifying specific end-uses in power-intensive municipal services and facilities; and developing an implementation plan for maximum RE penetration and improvement of EE, with local strategies and implementation mechanisms, aligning to each city's short term and medium term climate and energy related goals and plans.

Ahmedabad, the deep-dive city, is receiving technical support for various activities, including the preparation of a SET Roadmap and an allied implementation plan, pilot demonstration project, and bankable project along with capacity building and peer-to-peer learning from US cities and across the project cities. The other four cities will benefit from capacity building and peer-to-peer learning and the establishment of institutional mechanisms for local SET.

We provided essential technical support to Dhaka North City Corporation (DNCC) and Dhaka South City Corporation (DSCC) in Bangladesh for the development of their Climate Action Plans (CAPs), under the project titled **Climate Action Plans for Dhaka North City Corporation and Dhaka South City Corporation** (August 2022-February 2023). Separate CAPs have been drafted for each city, identifying seven priority sectors and 27 comprehensive climate adaptation and mitigation strategies, aligned with national climate policies. Both corporations are committed to reducing GHG emissions by 70.6% from the baseline year of 2021-22 by 2050. The CAPs encompass emission reduction and adaptation strategies across energy, transportation, waste management, wastewater management, stormwater management, public health, and water supply sectors.

The project enhanced awareness and capacity within both corporations regarding the need for collaborative actions on emission reduction and resilience building during the CAP development process. This was achieved through stakeholder consultations and multiple meetings with internal and external officials. The process also increased the commitment of both cities to allocate more climate budgets and implement low-emission projects. Besides the draft CAPs, we also developed Climate Change Risk Assessment reports, GHG inventory reports as well as Needs Assessment reports for the two cities.

Under the **Support to Himachal Pradesh to Enable Accelerated Adoption of E-Mobility** project (June 2023- December 2025), we extended assistance for fast-tracking the adoption of electric mobility in the hilly state and focused on equipping local governments with the necessary tools and knowledge, such as identifying priority corridors for the development of charging networks. This includes efforts to ensure an equitable distribution of charging stations across regions, making them easily accessible to a broad spectrum of vehicles and users, sharing insights about daily runs, route predictability, charging infra requirements, and economic viability of two-wheelers, three-wheelers, along with intra-city buses.

The efforts of the cities in the TUMI project resulted in the deployment of 516 electric buses, with an immediate target of scaling it up to reach 1503 buses, which would comprise one-third of the operational e-bus fleet in India.

A map identifying potential locations for EV charging stations at various hotels in Shimla was also developed, laying the foundation for a strong EV infrastructure in this prominent tourist destination. A topographical map of Himachal Pradesh that we prepared shows the district-wise distribution of EV registrations up to November 2023, offering insights into the regional trends in the ownership of 'green' vehicles.

In another key initiative on e-mobility, we supported 11 cities – Bhopal, Bhubaneswar, Nashik, Navi Mumbai, Panaji, Kochi, Indore, Surat, Rajkot, Leh and Shimla – under the **Transformative Urban Mobility Initiative**

(TUMI) E-Bus Mission City Network project (April 2021-December 2025), to accelerate the transition toward e-bus fleets within public transport systems. The cities are receiving relevant information, shared knowledge and resources, including exclusive trainings, peer-to-peer exchanges, and more. While Surat aims to have a fully electrified bus fleet by 2025, Rajkot and Indore are working on introducing a mix of electric and CNG buses to phase out diesel-run buses. Bhubaneshwar's Capital Region Urban Transport, via its MO bus initiative, has taken the electrification of public transport as an opportunity to add a clause under which women will comprise 50% of its MO bus guides (conductors). Nashik is tapping clean air funding to operationalise its fleet of e-buses. We also developed a virtual study tour series on the transport revolution in Surat, with six separate modules based on different aspects of the e-bus induction and integration into the public transport system. The efforts of these all cities have resulted in the deployment of 516 electric buses, with an immediate target of scaling it up to reach 1503 buses, which would comprise one-third of the operational e-bus fleet in India.

Harnessing Wind Energy

ICLEI South Asia developed a roadmap to support early-stage development of the offshore wind energy ecosystem in Tamil Nadu. (Photo: Unsplash.com)

In a foray into a new work area, we worked with the government of Tamil Nadu and developed a roadmap for decision-makers and departments to steer and support early-stage development of the offshore wind (OSW) energy ecosystem in the state, under the **Roadmap on Offshore Wind Energy for Tamil Nadu** project (June 2023-May 2024). The state has been the front-runner in implementing RE projects, especially on-shore wind energy projects. Additionally, the state's coastline has been identified with higher OSW resources in studies conducted by national institutions such as the National Institute of Wind Energy, wherein the government of India recently published a tender for leasing a seabed zone for 4GW OSW installation capacity. We developed the roadmap by incorporating insights from extensive bilateral and joint consultations conducted with various OSW value-chain stakeholders, such as state-level energy, industries, and financing institutions as well as private sector stakeholders including technology providers and project developers.

The roadmap provides recommendations across themes such as governance, policy framework, technology, supply chain, employment and skilling, finance, and community engagement. It also captures the ongoing state-level initiatives and schemes such as the 'Naan Mudhalvan' scheme for upskilling, and MSME schemes that can support the establishment of a robust OSW ecosystem in the state. We have also included several global initiatives and case studies that have enabled the successful implementation of OSW projects in the regions. We also analysed the short-, mid- and long-term OSW potential along with the OSW energy off-take potential across different consumer categories in the state and beyond.

Nagpur City has embarked on an ambitious journey towards sustainable development by launching the **Zero Carbon Buildings Action Plan (ZCBAP)** (June 2022-May 2023). It sets a precedent for the state of Maharashtra, and is also a pioneering effort to boost building sector decarbonisation, contributing to India's net zero by 2070 target. We provided technical assistance in developing this plan, which includes a holistic roadmap covering public buildings, government-led affordable housing, commercial buildings as well as homes, and an implementation strategy to achieve net-zero buildings city-wide by 2050. The ZCBAP is structured around a phased approach consisting of targeted interventions at various stages of a building's life cycle. The roadmap further includes actions to help reduce greenhouse gas (GHG) emissions in the context of the choice of building materials, and how buildings are designed, built, managed, and deconstructed.

Additionally, the plan underscores comprehensive strategies such as capacity building and financially enabling measures to support the implementation of action plan interventions, ensuring that the stakeholders are equipped to implement and sustain green building practices, which are vital for the city-wide decarbonization efforts.

Transforming Cities for a Sustainable Tomorrow

September 2023, New Delhi: Honourable Union Minister Mr. Hardeep Singh Puri inaugurated the UrbanShift Asia Forum, which focused on 'Financing Climate Action in Urban Areas'.

Under the **Developing Green City Action Plans (GCAP) to Accelerate Post-COVID-19 Competitiveness and Resilience (Subproject 1)** project (December 2022-March 2024), we initiated work on developing the GCAPs of the cities of Penang, Langkawi, Kota Bharu and Kuching in Malaysia. Institutional mechanisms were set up at different levels of governance, data collection templates developed and data collection and management were institutionalised at the city level. City profiles and needs assessment have been developed, as well as baseline GHG emissions inventory, besides skills enhancement/ training needs assessment. Policy dialogue and outreach workshops were held with the private sector, local communities, civil society, and youth. The GCAP implementation consortium organised training workshops to build the capacity of local government officials on the approach and process of GCAP preparation and implementation. The workshop utilised the assessed urban systems' profile and gaps, GHG emissions inventory estimates, and identified climate risks and vulnerabilities.

The projects align with Malayasia's national, regional and global frameworks and processes, such as 12MP, UN-SDG 2030, ASEAN Sustainable Urbanisation Strategy, IMT-GT SUDF, BIMP-EAGA, and ASEAN Sustainable Urban Strategy. We showcased our work during the UN's Asia Pacific Climate Week (APCW) 2023, held in Malaysia, at a session on 'Implementing Green City Action Plans (GCAP) for a Climate-Resilient Future', convened jointly with the Indonesia-Malaysia-Thailand-Growth Triangle (IMT-GT) Joint Business Council, Malaysia and the Asian Development Bank.

As part of the Secretariat services for the **Asia LEDS Partnership** project (January 2016-ongoing), we organised capacity-building webinars and workshops on electric mobility, as well as technical trainings and regional peer learning on EV battery circularity, and a study tour showcasing EV Battery Innovation in India. The study tour focused on EV manufacturing and EV reclaiming facility, and was attended by eight Leadership Group for Clean Transport in Asia (LG-CTA) member countries.

Virtual sessions were organised on navigating key considerations for developing a green hydrogen landscape and the role of the private sector in promoting electric mobility in India

The ALP also provided technical assistance to the Philippines by reviewing the green hydrogen framework policy, guiding future developments in green hydrogen, and assessing the existing EV charging infrastructure policies and regulations to inform the country's government strategies. To support informed decision-making, the ALP developed an Energy Efficiency Investment Decision-Making Calculator for government buildings in the Philippines, enhancing the country's capacity for EE investments.

Another session that we organized at the APCW was on "Empowering Sustainable Transportation: Clean Mobility Solutions in Asia-Pacific", which showcased a collaborative commitment to address climate challenges, and emphasised the importance of immediate and collective action in achieving clean and sustainable mobility solutions in the region. The session highlighted the ALP Leadership Group for Clean Transport in Asia (LG-CTA) initiative, showcasing the Clean Mobility Community of Practice—a platform dedicated to fostering capacity building among its members.

ICLEI South Asia manages the global platform activities of **UrbanShift** in (November 2020- October 2025). India by providing support to the cities of Pune, Surat, Chennai (primary cities), Agra and Puducherry (secondary cities). With support from the Ministry of Housing and Urban Affairs (MoHUA) and NIUA, we conducted the UrbanShift Asia Forum in September 2023. The forum was inaugurated by Honourable Minister Mr. Hardeep Singh Puri and was attended by more than 250 delegates from diverse national governments, including representatives from key departments, and urban centres from nine countries, as well as international organisations, think-tanks, NGOs, financial institutions, and the private sector. The highlights of the forum, which focused on 'Financing Climate Action in Urban Areas' were the sessions such as City Business Hub, Investors Roundtable, City Academies (Accommodating Urban Growth and Accessing Climate Finance), along with a site visit to the Integrated Command and Control Centre, New Delhi Municipal Corporation.

The UrbanShift Asia Forum provided a platform for cities and regional leaders to exchange ideas about these challenges such as rapid urbanization and climate-linked extreme weather events, identify solutions that can be replicated, and explore potential support from UrbanShift in areas of knowledge enhancement, capacity building, financial aid, and collaboration with the private sector.

We conducted pilot studies in the Indian cities of Gurugram and Meerut to map the air quality at a few locations using low-cost air quality monitors, as part of the **Building City Leadership on Clean Air Action in Delhi-NCR** project (June 2021-May 2023). The locations were identified in consultation with the cities. The air quality data was analysed and a set of recommendations was developed for both cities to help improve air quality at those locations. We also prepared a conceptual plan for developing a low-emission zone in an area around a women's college in Delhi. It was submitted to the Municipal Corporation of Delhi and the Public Works Department, and discussions were held with the concerned officials for their input.

Under the **Bihar State Waste Sector GHG Emissions Inventory and Action Plan** project (April 2022- March 2023), we helped the state of Bihar develop a Low-Carbon Action Plan (LCAP) for its waste and domestic wastewater sector. As one of the partner agencies, we collated data of existing domestic wastewater and solid waste management systems, both at the urban and rural levels in the state. The data was used to develop a GHG emissions inventory for these sectors. Based on the inventory and discussions with the key stakeholders, a list of low-carbon interventions and recommendations for strengthening the waste sector was proposed in the LCAP. The then Chief Minister of Bihar Mr. Nitish Kumar unveiled the comprehensive "Climate Resilient and Low Carbon Development Pathway for the state of Bihar," the first of its kind in the country , in March 2024.

Under the **ADB TA – Mitigation Calculator for Resilience Tool** initiative (June 2023- February 2024), we developed 85+ calculators for estimating GHG emissions reductions from climate resilience actions across nine thematic sectors: EE, RE, public buildings and lighting, buildings, transport, solid waste, wastewater and drainage, water and urban greening. The calculators included additional features, including cost estimates and emissions projections, to help cities better understand the long-term impacts and costs associated with the implementation of the actions. The project contributed to building an understanding and knowledge base about the impacts of actions pertinent to cities.

Funding Partners

1. CapaCITIES-II – Swiss Agency for Development and Cooperation
2. Technical Coordinator for Global Covenant of Mayors for Climate and Energy – European Commission (Via DAI)
3. Development of Climate Resilient City Action Plan for Greater Hyderabad Municipal Corporation (GHMC) – GHMC
4. Mainstreaming Climate Action in Three Cities in Andhra Pradesh – C40 Cities Climate Leadership Group, Inc.
5. Sustainable Energy Transition (SET) in South Asia – USAID through the South Asia Regional Energy Partnership (SAREP) programme
6. International Sustainable Energy Foundation support to Himachal Pradesh to Enable Accelerated Adoption of E-Mobility
7. TUMI E- Bus City Mission Network – German Ministry for Economic Cooperation and Development (BMZ)
8. Zero Carbon Buildings Accelerator – World Resources Institute
9. Malaysia GCAP Subproject 1 – Asian Development Bank
10. Asia LEDS Partnership – National Renewable Energy Laboratory
11. UrbanShift – Global Environment Facility
12. Building City Leadership on Clean Air Action in Delhi-NCR – Clean Air Fund
13. Climate Action Plans for Dhaka North and South City Corporations – C40 Cities Climate Leadership Group, Inc.
14. ADB TA – Mitigation Calculator for Resilience Tool – Asian Development Bank

Nature-Based Development Pathway

We partner with local and regional governments to protect and enhance the biodiversity and ecosystems in and around our cities, upon which we depend for the well-being and resilience of our communities. We support efforts to prioritise healthy local environments in policy and planning, seek out blue-green infrastructure options, and promote green zones to reconnect and engage with nature in our urban world.

Through sustained engagement, we supported more than a dozen cities across multiple Indian states, including Goa, in advancing their biodiversity agendas by developing Natural Asset Maps, People's Biodiversity Registers, and the City Biodiversity Index (CBI). We helped to build capacity in strategic planning, action, and investment by developing Local Biodiversity Strategy and Action Plans (LBSAP), supporting ecological restoration, conducting ecosystem service assessments and training, and developing insightful knowledge products.

Under the second phase of the **INTERACT-Bio project** (December 2016 – December 2024), we took integrated action on biodiversity, improved the utilisation and management of nature in fast-growing cities and the areas around them, and provided expanding regions with nature-based solutions and associated long-term benefits. The project was implemented in six cities: Kochi (model city), Panaji, Mangalore, Gangtok, Jammu, and Srinagar.

We supported the development of the LBSAPs of Jammu and Srinagar under the project. In Kochi, a pilot project for the restoration of the Thevara-Perandur canal**,** which was contaminated with the dumping of organic waste, was initiated; one organic waste converter was installed, and approval from the donor was secured for installing floating wetlands.

We provided technical expertise for developing the **CBI of Itanagar** (March 2022- April 2023)**, Bhopal** (March 2023- April 2024) and **Indore** (March 2023- April 2024); the **LBSAPs of Bhopal** (October 2023- October 2024) and **Indore** (October 2023- October 2024) **are being prepared.** The projects focused on assessing the status of biodiversity governance, evaluating the health of natural ecosystems and building the capacities of stakeholders in using nature-based solutions to address climate change. We are also developing the CBI of Bengaluru city under the **Sustainable Urban Development in the Backdrop of Climate Change in Bengaluru - Mainstreaming Biodiversity Conservation into Urban Planning** project (April 2023-March 2024)**.** The project will also help

Sustainable Management of Urban Biodiversity

June 2023, Noida, India: The development of Noida city's Local Bioversity Strategy and Action Plan, City Bioversity Index, and Illustrated Natural Asset Map will help support ecological restoration of degraded ecosystems.

Conserving Unique Ecosystems

September 2023, Goa, India: The 'Need for an Urban Policy on Khazans' project aims to improve the condition of khazans and develop actionable points that will help plan strategic interventions to mainstream khazan management and conservation into urban planning.

mainstream biodiversity conservation into climate-informed urban planning and build the stakeholders' capacity to use nature-based solutions.

We also worked on developing the **People's Biodiversity Register (PBR) of Delhi** (April 2023 – April 2024). Data on all 32 formats, including biodiversity, traditional knowledge, landscape, and peoplescape, was collected and compiled after primary and secondary data collection. A natural asset map of the city has also been developed.

Under the **Goa People's Biodiversity Register** (July 2017 – January 2026) project, 8 PBR reports were completed. Some of the key knowledge products developed include a video series on "How to Do PBRs" and a pocket guide on "Wild Edible Plants of Goa". Fourteen PBRs, developed earlier, were validated by the respective local governments. The project aligns with the objectives of the National Biodiversity Action Plan and State Biodiversity Strategy and Action Plan, as well as the Traditional Knowledge Bill, 2022.

A preliminary map of the area currently under **Khazan** cultivation in Goa has been developed under the **Need for an Urban Policy on Khazans- Ensuring Sustainable and Climate-Resilient Urban Development** project (April 2021- April 2024). A time-series analysis of the changes that have happened in land use over two decades was developed, and pre- and post-monsoon biodiversity surveys (birds, butterflies, dragonflies, spiders, reptiles, mammals, amphibians, and insects) were conducted. The project emphasises how traditional/ indigenous knowledge is not obsolete, but has modern applications in the fight against climate change and biodiversity loss, and has close linkages with targets of the Kunming-Montreal Global Biodiversity Framework.

For the **Study to Document Diversity of Grasses in Grassland Ecosystems in the Protected Areas in Goa** project (October 2023- October 2024)**,** we selected the study sites in consultation with the Goa Forest Department, and conducted quadrat sampling for grasses and vegetation analysis for diversity, abundance, frequency and density. Such documentation of lesser-known flora increases our understanding of the habitat and the significance of grasslands in an ecosystem. The second phase of the project, which focuses on grasslands in the protected areas in Goa, is presently being implemented and the grass diversity in these areas is being documented.

We developed the CBI and the Illustrated Natural Asset Map of Hyderabad under a project that assessed the biodiversity, tree population and green cover of the area under the **Greater Hyderabad Municipal Corporation (GHMC)** (March 2022- April 2024)**.** We are also supporting the city in the development of its LBSAP, for which critical blue-green infrastructure was identified. Strategies and actions that will improve the health of each of these critical ecosystems and ecosystem services are being developed. The LBSAP will help to achieve the National Biodiversity Targets, and the targets of the Post 2020 Global Biodiversity Framework, and the Convention on Biological Diversity.

Saving Critical Ecosystems

We have developed Noida city's LBSAP, CBI and Illustrated Natural Asset Map under the **Promoting Conservation and Sustainable Management of Urban Biodiversity in Noida** project (April 2023-March 2024). The development of the LBSAP led to the identification of seven critical ecosystems: Wetlands, Urban Forests, River Yamuna, Botanical Gardens and Parks, Okhla Bird Sanctuary, Avenue Trees, and Agriculture, as well as the services they provide, and the threats they are facing. The LBSAP provides ecosystem-wise action points that should be implemented to improve the health of each ecosystem. The CBI of Noida also provides recommendations on how the city can improve the urban biodiversity as well as the governance of the same. The Illustrated Natural Asset Map of Noida depicts the biodiversity wealth of the city. The same has also been developed into an interactive map and is hosted on our website.

Ecosystem service assessments in one restored urban forest (Harit Upvan) and one restored wetland (Police Lines Wetland) were carried out. Through detailed biodiversity surveys, on-ground assessments, questionnaire surveys and key personnel interviews, the ecosystem services being derived from these restored sites were mapped and then economically evaluated. A cost-benefit analysis was carried out to show that the benefits obtained are far higher than the economic inputs that went into the restoration work. The ecosystem assessment reports provide quantitative evidence that supports ecological restoration of degraded ecosystems.

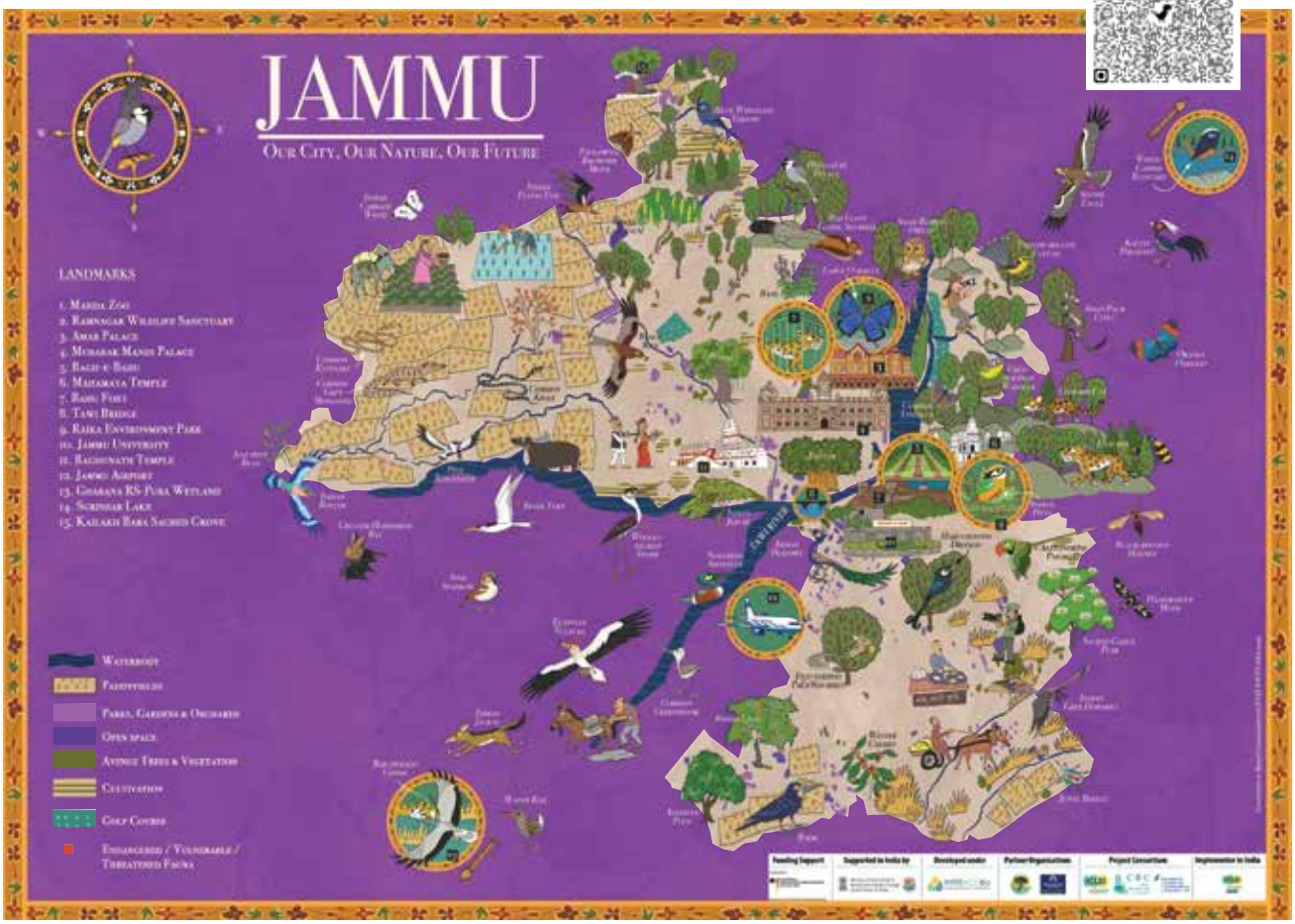
Investing in Natural Capital

- We conducted ecosystem service assessments in a restored urban forest and a restored wetland in Noida.
- Survey found that the restoration programmes have had a major positive impact on the local environment and people's lives, fostering a deep reconnection with nature.
- There has been significant improvement in biodiversity, aesthetics, and water quality, leading to cleaner air and a healthier environment.
- The ecosystem service valuation reinforced the importance of ecological restoration of degraded landscapes and habitat conservation.

Funding Partners

1. Development of People's Biodiversity Register of Delhi - Municipal Corporation of Delhi
2. INTERACT-Bio – BMUV through the International Climate Initiative (IKI)
3. Development of Local Biodiversity Strategy and Action Plans and City Biodiversity Index of Bhopal and Indore – Madhya Pradesh State Biodiversity Board
4. Development of City Biodiversity Index of Itanagar – Arunachal Pradesh Biodiversity Board
5. Sustainable Urban Development in the Backdrop of Climate Change in Bengaluru – Mainstreaming Biodiversity Conservation into Urban Planning – Bengaluru Sustainability Forum
6. Goa People's Biodiversity Registers – Goa State Biodiversity Board
7. Need for an Urban Policy on Khazans – Azim Premji University
8. Study to Document Diversity of Grasses in Grasslands of Goa – Research and Utilisation Department, Goa Forest Department
9. City Biodiversity Index and Green Cover Mapping in Hyderabad – Greater Hyderabad Municipal Corporation
10. Promoting Conservation and Sustainable Management of Urban Biodiversity in Noida – HCL Foundation


NOIDA
Natural Asset Map
LANDMARKS:
1. Rose Garden
2. Mansarovar Park
3. Okhla Bird Sanctuary
4. Rashtriya Dalit Prerna Sthal
5. Noida Botanical Garden
6. Sector 54 City Park Wetland
7. D Park
8. Triphala Park
9. Sector 50 Wetland
10. Meghdootam Park
11. Harit Upvan
12. Noida Authority
13. HCL
14. Noida Biodiversity Park
15. Surajpur Wetland
FLORA:
A. Butea monosperma (Palash)
B. Ficus benghalensis (Banyan)
C. Plumeria rubra (Frangipani)
D. Pongamia pinnata (Pongam)
E. Pithecellobium dulce (Monkeypod)
F. Typha angustifolia
G. Fimbristylis cymosa
H. Cenchrus ciliaris
I. Azadirachta indica (Neem)
J. Saccharum bengalense
K. Ziziphus mauritiana (Indian Jujube)
L. Prosopis cineraria (Khejri)
M. Cyperus kyllingia
N. Cassia fistula (Amaltas)
Municipal boundary
Threatened / Vulnerable / Endangered species
Rivers
Paddyfields
Mixed Cultivation
Supported by
HCLFoundation
Project implemented by
ICLEI
Illustrated by Rohan Chakravarty for ICLEI South Asia, 2023


JAMMU
Our City, Our Nature, Our Future
LANDMARKS
1. Mansa Zoo
2. Ramnagar Wildlife Sanctuary
3. Amar Palace
4. Mubarak Mandi Palace
5. Bagh-e-Bahu
6. Maitamata Temple
7. Bahu Fort
8. Tawi Bridge
9. Raika Environment Park
10. Jammu University
11. Raghunath Temple
12. Jammu Airport
13. Gharana RS-Pura Wetland
14. Sidhsar Lake
15. Kailash Bara Sacred Grove
Waterbody
Paddyfields
Parks, Gardens & Orchards
Open space
Avenue Trees & Vegetation
Cultivation
Golf Course
Endangered / Vulnerable / Threatened Fauna


N
W
E
S
Landmarks
1. Dachigam National Park
2. Shalimar Bagh
3. Naseem Bagh
4. Anchar Lake
5. Hazratbal Dargah
6. Nishat Bagh
7. Kiuthal Sar
8. Hari Parvat and Durrani Fort
9. Nigeen Lake
10. Dal Lake
11. Char Chinar
12. Indira Gandhi Memorial Tulip Gardens
13. Hokera Bird Sanctuary
14. Ali Masjid
15. Jamia Masjid
16. Shankaracharya Hill and Temple
17. Pari Mahal
18. Chashmeshahi Garden
19. Zabarwan Hills
20. Nowgam Marshes
21. (Tol) Wular Lake
SRINAGAR
Our City, Our Nature, Our Future
Srinagar Municipal Boundary
Waterbody
Paddy and cultivated marshes
Plantation
Forest
Scrubs
Grounds and parks
Golf course
Marshes
Terrace garden
Endangered/ Threatened/ Vulnerable Fauna

Equitable Development Pathway

Through this pathway, we support local and regional governments to pursue policies and strategies that focus on ensuring that the natural and built environments in and around cities improve livability and safety, promote human health, and mitigate the transmission of diseases. We help to improve equitable access to safe and nutritious food, quality education, clean water and sanitation, sustainable energy, clean air and productive soil for all, and climate-resilient infrastructures, and to create and sustain human-centred, safe, resilient, socially and culturally vibrant communities, where diversity, distinct identities, and solidarity are woven into the social fabric.

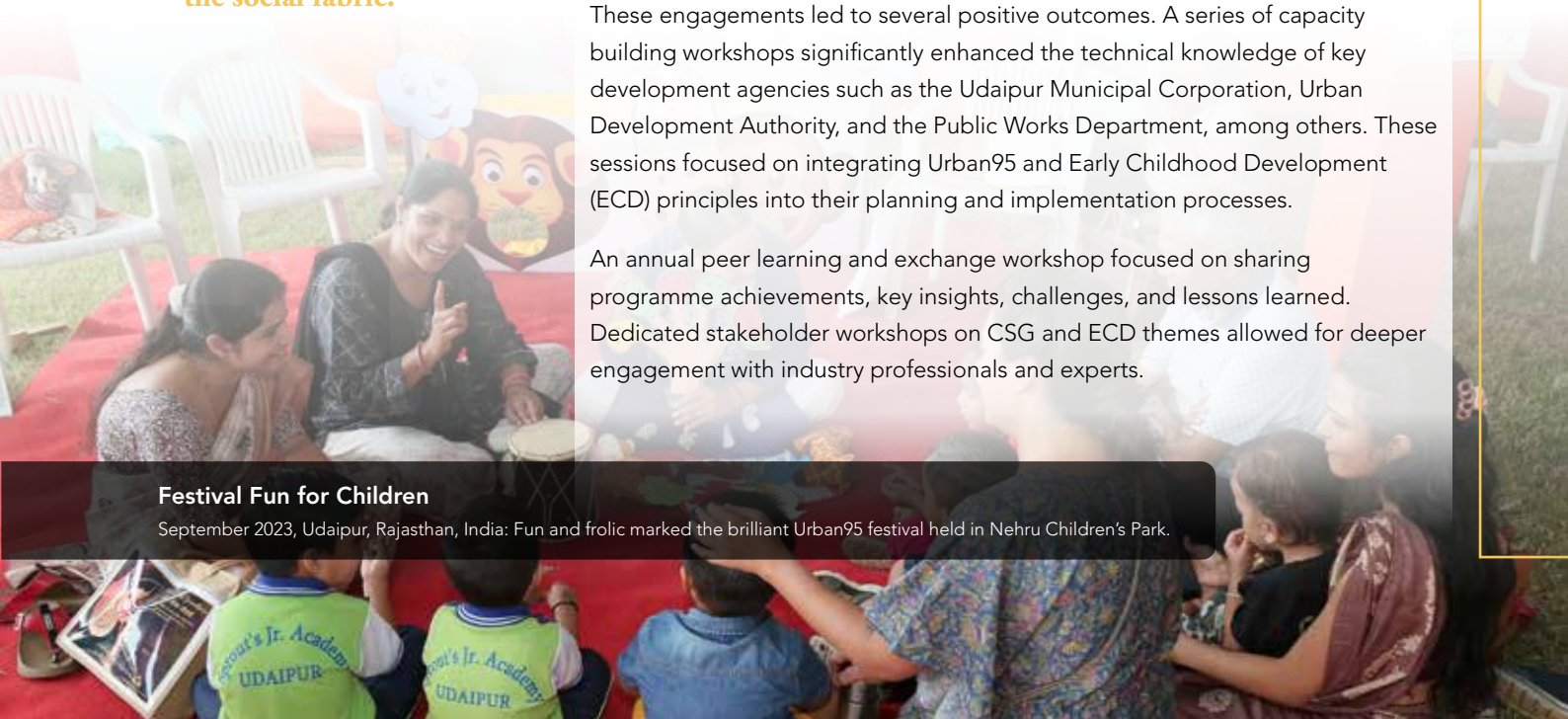
Technical advisory services were provided to the Asian Development Bank (ADB) in developing a **Framework on Capacity Building of Urban Administrations for Financing Cities of Tomorrow,** to enhance cities' capacity to finance inclusive, resilient, and sustainable infrastructure for the Infrastructure Working Group of G20 in 2023. The parameters considered included current urban development challenges, such as the need to meet emerging development needs while addressing issues such as the climate emergency and limited resource availability. The proposed framework adopts the Plan-Do-Check-Act (PDCA) method, comprising steps such as recognising key functions and critical elements; assessing capacity needs and gaps; developing a capacity-building programme; implementing the programme, and monitoring and evaluating the programme. The framework identifies potential tools, methodologies, and/or programs—available internationally—that can be leveraged to meet capacity-building needs.

The second phase of the **Urban95** programme (February 2021- January 2024) in Udaipur focused on implementing and scaling up various lighthouse projects. We implemented three tactical interventions at an anganwadi centre, primary healthcare centre, and in a neighbourhood that is proposed to be transformed into a Child Priority Zone. Institutional documents such as the first-of-its-kind Child Safety Guidelines (CSG) on child safety at home and in the urban environment, an Early Childhood Development (ECD) Policy Framework, and an Infant, Toddler and their Caregiver (ITC) Master Checklist were also developed.

As part of our efforts to help transform Udaipur into a truly child-friendly city, we organised a range of workshops, stakeholder engagements, and public activities aimed at increasing awareness, building technical capacity, and generating stronger support from key city stakeholders and the community at large.

These engagements led to several positive outcomes. A series of capacity building workshops significantly enhanced the technical knowledge of key development agencies such as the Udaipur Municipal Corporation, Urban Development Authority, and the Public Works Department, among others. These sessions focused on integrating Urban95 and Early Childhood Development (ECD) principles into their planning and implementation processes.

An annual peer learning and exchange workshop focused on sharing programme achievements, key insights, challenges, and lessons learned. Dedicated stakeholder workshops on CSG and ECD themes allowed for deeper engagement with industry professionals and experts.



Festival Fun for Children

September 2023, Udaipur, Rajasthan, India: Fun and frolic marked the brilliant Urban95 festival held in Nehru Children's Park.

February 2024, Panaji, Goa, India: ICLEI South Asia and Imagine Panaji Smart City Development Limited organised a workshop to underscore the need to rethink urban spaces in the face of climate change and the evolving needs of families, particularly young children. The workshop highlighted the findings of two studies: 'Study on Young Children and Climate' and the 'Usage of Public Spaces by Young Children, their Caregivers and Pregnant Women'.

In addition, the second edition of the Urban95 Udaipur Kids Festival created an interactive and stimulating environment for young children and their caregivers, supporting physical and cognitive development through play and learning.

Collectively, these initiatives helped raise public awareness around the importance of creating inclusive, child- and caregiver-friendly urban spaces. They also underlined the critical need for incorporating the ITC lens into the planning and development of public infrastructure.

In India, young children (especially in the under-five age group) and their caregivers are becoming increasingly vulnerable to the health impacts of climate change and air pollution, particularly in urban areas. These were among the findings of two important studies that we conducted: **Study on Young Children and Climate** (SYCC) and **Usage of Public Spaces by Young Children, their Caregivers and Pregnant Women**. The first study, conducted jointly with Jawaharlal Nehru University, Indian Institute of Technology Gandhinagar, IIT Kharagpur, and IIT Roorkee, analysed the adverse effects of climate change and air pollution on young children (aged 0-5) and their caregivers, especially around ECD sites in Delhi, Gandhinagar, Kharagpur and Roorkee. The study found that while ECD sites offer some protection, they still subject children to considerable levels of pollutants and excessive heat, underlining the need for more robust climate-adaptive measures in urban planning

The second study analysed the usage of public spaces by young children, their caregivers, and pregnant women across 18 Indian cities, and found that nearly 60% of the children covered by the survey primarily use neighbourhood streets for play due to better accessibility and safety than parks and playgrounds, as Indian urban planning tends to concentrate more on spaces for teenagers. Recommendations from both studies emphasised the need for integrated policies, funding sources, better planning and design, infrastructure enhancements, evaluation, and community engagement.

The studies emphasised the need for inclusive and informed decision-making by prioritising marginalised young children and utilising quality research; equitable policy development that respects children's rights and considers varying vulnerabilities; and a multisectoral approach ensuring long-term accountability.

We disseminated the findings of the two significant studies in four workshops organised in Guwahati, Kochi, New Delhi and Panjim, where stakeholders—including policymakers—converged to brainstorm solutions and recommendations for creating climate-resilient and child-friendly public spaces.

Funding Partners

1. Framework on Capacity Building of Urban Administrations for Financing Cities of Tomorrow - Asian Development Bank
2. Urban95 – Van Leer Foundation (VLF)
3. Study on Young Children and Climate – VLF
4. Usage of Public Spaces by Young Children, Their Caregivers and Pregnant Women – VLF

Resilient Development Pathway

Through this pathway, we support local and regional governments to incorporate resilience as a core part of their strategies and to lay the groundwork for recovery following shocks and stresses. We help to strengthen essential systems, ultimately improving cities' ability to safeguard their citizens from man-made and natural hazards. We pursue a transparent and inclusive approach that will enhance trust in institutions and the processes that support them.

Efforts to advance climate-resilient and inclusive development, gender justice, effective waste management, and science-based climate action and adaptation gained momentum through strengthened partnerships with local governments in four South Asian countries.

In its third phase, our **Climate and Development Knowledge Network (CDKN)** Asia programme (July 2022-May 2027) strengthened partnerships with cities and municipal associations in India, Nepal, Bangladesh and Sri Lanka, and initiated activities in two selected municipalities in each of these countries. The programme focused on integrating gender equality and social inclusion (GESI) concepts in different climate resilience, adaptation, and disaster risk reduction (DRR) planning processes in all the target countries. For this, we are providing technical handholding support, as well as training and capacity building of local government officials to help develop local-level action plans. We are using our own tools for these planning processes.

In Bangladesh, we focused on enhancing collaboration and partnership with the Municipal Association of Bangladesh (MAB) and international organisations like the United Nations Office for Disaster Risk Reduction (UNDRR). We are providing technical support to the two selected municipalities in Bangladesh - Lalmonirhat and Nilphamari - to develop DRR action plans that integrate GESI and ecosystem-based adaptation, with focus on climate-induced disasters. We have developed city profiles that will be validated by the municipalities through stakeholder consultation.

In India, we are working with Andhra Pradesh's Vijayawada and Kakinada cities, which are developing their climate-resilient action plans, and intend to develop an addendum that looks at integrating GESI aspects and nature-based or ecosystem-based interventions.

Focus on Climate Finance

September 2023, Dhaka, Bangladesh: ICLEI South Asia, in collaboration with GIZ Bangladesh, hosted two sessions at the third International Conference on Urban and Regional Planning, as part of the CRISC project.

Advancing Locally-led Climate Action

The CDKN programme in Asia focuses on integrating GESI concepts in climate resilience and adaptation processes in India, Bangladesh, Nepal and Sri Lanka.

(Photo: Bangladesh/Pexels.com)

In Nepal, we are supporting Dhulikhel and Karjanha municipalities in developing local adaptation plans of action (LAPAs) based on the LAPA framework methodology developed by the Government of Nepal and the ClimateResilientCities (CRC) Methodology of ICLEI. A draft city profile has been prepared for the two municipalities using secondary data. The local government officials were invited to training workshops on climate resilience and adaptation in Bangkok and Nepal, both organised under the Making Cities Resilient 2030 (MCR2030) Campaign.

In Sri Lanka, we are supporting the municipalities of Kandy and Nuwara Eliya in developing their climate resilience plans. We assessed the National Climate Change Policy and the National Adaptation Plan for Climate Change of Sri Lanka, and are collecting baseline data that will be part of the resilience action plans.

At the regional level, we engaged with partners such as the UNDRR, the United Nations Environment Programme, the International Union for Conservation of Nature, the National Institute of Urban Affairs, India, the ADB, AITRRC AP, and others to enhance the outreach and scale-up of locally-led adaptation actions. We conducted several sessions in regional and international conferences such as at the Eighth Asia Pacific Urban Forum, 8th Asia-Pacific Climate Change Adaptation Forum, and the Asia Pacific Climate Week.

Along with representatives of project cities from Nepal and Bangladesh, the CDKN Asia team participated in the Regional Training Workshop on Building Cities' Resilience to Climate and Disaster Risk in Bangkok and presented on tools for preparing action plans for climate and disaster resilience.

We led discourses on locally led adaptation at various international conferences by conducting sessions that highlighted various knowledge materials developed under the previous CDKN phase such as the Compendium on Nature-Based Solutions, the Climate Finance Compendium and the Voluntary Local Reviews for the cities of Singra in Bangladesh and Dhulikhel in Nepal. We also organised webinars on mainstreaming GESI in climate actions during the U20 Manthan Series in May 2023 and Daring Cities conference in August 2023.

Additionally, we are supporting the **Knowledge Brokering for Asia through the CLARE Research For Impact (R4I) Hub** (August 2023-July 2025)**.** We are identifying and promoting the uptake of existing knowledge, tools, and data to meet the needs of

Reducing Disaster Risks

CDKN: Making a Difference

- Supported 8 cities in four countries to develop GESI, nature-based climate action plans, city profiles and LAPAs
- Partnered with global campaign MCR2030 on providing training for developing GESI-integrated resilience action plans
- Organised international discourses to highlight and the importance of access to climate finance and mainstreaming GESI in climate actions

February 2024, Nilphamari, Bangladesh: ICLEI South Asia and the Municipal Association of Bangladesh organised a consultation workshop as part of CDKN phase-3 to discuss the development of a climate-resilient disaster risk reduction action plan for the city.

decision makers and others supporting science-based climate action in India, Nepal and Bangladesh. During the reporting period, we initiated work on three sub-projects. One of these projects involves assisting Narayanganj city in Bangladesh in developing a gender-sensitive Heat Action Plan (HAP) to strengthen local resilience to heat stress. The HAP can be incorporated into the municipal budget, and will list actions to address heat resilience at the regional, city and neighbourhood levels, raise awareness of heat-related challenges among stakeholders as well as city officials, and help to reduce heat-related risks to public health and water resources.

Another sub-project is in Rajkot, India, which has identified street vendors as being particularly vulnerable to increasing heat, with compounding issues related to gender inequality. We are partnering with Mahila Housing Trust to support the city to develop a Climate Resilient and Gender Equitable and Inclusive Street Vending Plan to build climate resilience in the street vending community. The plan will build upon the regulations in the Street Vendors Act, 2014 and the Gujarat Street Vendors Scheme, 2014 by integrating climate risks and the differential gender impacts that street vendors experience, and identifying potential solutions.

In Nepal, we are partnering with the Municipal Association of Nepal to build the capacity of the seven provincial municipal learning centres in developing inclusive and nature-sensitive LAPAs for municipalities. This will directly contribute towards achieving Nepal's NDC target of preparing and implementing climate-resilient and gender-responsive adaptation plans in all its 753 local governments by 2030. Under this project, we are preparing a training module, a Train-the-Trainer Programme, and a guidance document for preparing LAPAs that integrate concepts of GESI and EbA.

Under the **Climate Resilient Inclusive Smart Cities (CRISC)** programme (December 2020- September 2023), we implemented a project in Satkhira and Sirajganj municipalities in Bangladesh. The project focused on fostering dialogue processes and knowledge exchange among the project cities to enhance their capacity of developing climate-resilient and gender-inclusive urban development plans, investment plans and master plans.

We developed three comprehensive training modules in English and Bengali, covering the basic concepts of urban planning, localisation of the Sustainable Development Goals with a focus on social inclusion, and a technical understanding of climate change and its integration into local and national planning processes. The project also substantially increased the capabilities of local government officials to evaluate the risks associated with climate change, incorporate resilience strategies into urban development and enhance technical expertise for developing climate-resilient cities. It helped to bridge policy gaps and empower stakeholders, in line with Bangladesh's commitment to international climate change agreements and various national policies and plans.

Key Outputs

- 14 training sessions conducted for batches of municipal officials and policymakers in target cities
- Package of training materials – handout, training manual, trainer's handbook and additional materials in English and Bengali
- Three training modules on i) Relevance of Urban Planning in Implementation of National Development Plans; ii) Technical Understanding of Climate Change Adaptation in Cities; and iii) Localising Sustainable Development Goals in Cities: Social Inclusion
- Web-based training platform built on the first two modules on urban planning and climate change adaptation
- Policy review report on Building Climate Resilience in Bangladesh: Addressing Challenges and Guiding the Implementation of National and Local Policies

Enhancing Water Security

January 2024, Darjeeling, West Bengal, India: The Community Led Action Plan (CLAP) Project for Climate Resilient Water Security in four tea estates in Darjeeling and Kurseong in West Bengal aims to address the water crisis being faced by local communities.

Venturing out of municipal boundaries, we launched the **Community Led Action Plan (CLAP) Project for Climate Resilient Water Security** (January 2024-December 2026) in four tea estates in Darjeeling and Kurseong in West Bengal to address the water crisis being faced by local communities through traditional knowledge and community-led practices. The aim is to build the capacity of the local communities as barefoot hydrogeologists, and to create a platform for local governments to engage with communities and other stakeholders to co-create and implement water security plans, besides their scaling up and sustainability. The project has linkages to sub-national, national and international programmes such as Jal Dharo Jal Bharo, Jal Jeevan Mission, AMRUT, Swachh Bharat Mission and WASH programmes of different international agencies.

Funding Partners

1. CDKN – Directorate-General for International Cooperation, The Netherlands and International Development Research Centre, Canada
2. Knowledge Brokering for Asia through the CLARE Research For Impact (R4I) Hub – The Foreign, Commonwealth and Development Office, the UK, and International Development Research Centre, Canada
3. CRISC – Federal Ministry for Economic Cooperation and Development (BMZ) commissioned by GIZ Regional Office in Bangladesh
4. Community Led Action Plan Project for Climate Resilient Water Security – Oak Foundation

Circular Development Pathway

Through this pathway, we help local and regional governments to adopt resource looping, adaptation and ecological regeneration. We encourage them to transition from the linear take-make-dispose model of production and consumption and to decouple economic growth from resource depletion and environmental harm. We encourage cities to take steps towards equitable access to resources and create closed-loop urban and peri-urban systems.

We researched current practices, policies, schemes and business models in waste management and solutions, and interviewed 12 Indian waste processing businesses under the **Current Practices and Business Models Handbook for bio-methanation, composting, material recovery facility (MRF) and low-value plastic recycling** project.

The findings of the research were compiled in a handbook titled 'Handbook for Biomethanation, Composting, Material Recovery Facility and Low-Value Plastic Recycling: Current Practices and Business Models'. The handbook is a valuable source of information on biomethanation, composting, material recovery facility, and low value plastic recycling technologies currently being implemented in India. It recognises the on-ground challenges and provides crucial recommendations that should be adopted across the project cycle as well as at the policy and regulatory level, thus creating an enabling environment for financially viable municipal solid waste (MSW) processing businesses.

The project's overall objective was to generate awareness and build capacity among decision-makers, policy-makers and other stakeholders involved in the waste landscape, and potentially enable them to contribute to the country's Swachh Bharat Mission and global commitments, including SDGs 11, 12, 13 and 14. The handbook specifically targets SDG 11.6 on reducing the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management and SDG 12.5 on substantially reducing waste generation through prevention, reduction, recycling, and reuse of waste.

The Alliance + ICLEI Developing Plastic Waste-Free Cites project (November 2020-March 2023) provided technical support to selected Indian and South East Asian Cities -- Warangal and Surat (India), Iloilo City (The Philippines), Iskandar Regional Development Authority (Malaysia), and Jambi City (Indonesia) for strengthening its plastic waste management system. The project facilitated the formulation of a Plastic Waste Management Strategy and Action Plan (PWMSAP) in all the 5 cities. In Warangal city, a bankable project was developed to enable the recovery and recycling of plastic waste from the municipal waste stream. The project is to be implemented through funds accessible to the city.

Funded by the SDC supported CapaCITIES II project, we worked with Rajkot Municipal Corporation in **assessing existing waste management practices** and formulating a techno-financially viable and circular economy-enabled integrated MSW management project proposal that was submitted for funding to the CITIIS 2.0 facility. The project was successfully selected under the programme, advancing Rajkot towards a resource-efficient, circular, inclusive, and holistic MSW management system.

Funding Partners

1. Current Practices and Business Models Hand-book for bio-methanation, composting, material recovery facility (MRF) and low-value plastic recycling – GIZ
2. 2. Assessing Existing Waste Management Practices in Rajkot - SDC through CapaCITIES II project

The Year in Review

100+ Municipalities

supported across 6 countries in facilitating local actions, aiding governments in understanding climate responsibilities, advising on technology investments, and identifying potential funding sources

40+ Cities

provided technical expertise in development of Climate Action Plans, Climate Resilience plans, Heat Action Plans, Green City Action Plans, Local Adaption Plans, City Biodiversity Index, and Local Biodiversity Strategy Action Plans

USD 163.85 Million+

in climate action budgeting by CapaCITIES project cities, as influenced by the project or based on CRCAP actions

USD 14.3 Million

incentive grant to Ahmedabad from GOI for best performance in improving air quality, in joint efforts with ICLEI South Asia

18 States and 3 Union Territories of India

where we worked to bolster climate resilience, reduce emissions, and drive sustainable development

60+ knowledge products

including guidance documents, policy briefs and papers, training manuals, handbooks, guidelines and studies

... and Looking Ahead

New Areas of work -- Offshore Wind Energy; Managing Disaster Loss and Damage; Battery Energy Storage; Pumped Hydro; Noise Pollution; Scientific inputs into Master Plan; Biodiversity impacts through OSW; Rural-urban water management; Just Transitions; Road Safety and Children; Low Emission Zones.

Publications

Ahmedabad's Climate Resilient City Action Plan (Towards a Net-zero Future by 2070) focuses on reducing GHG emissions, enhancing urban adaptive capacities, planning for climate-resilient infrastructure, and promoting circularity and resource efficiency. The comprehensive roadmap will help to transform Gujarat's capital into a climate-resilient city with net zero emissions by 2070.

The Low Carbon Action Plan for the Waste Sector of Bihar supports the state of Bihar in strengthening its waste management services, maximising resource utilisation, improving efficiency, enhancing social well-being, and promoting a circular economy. The LCAP recommends short-term low-carbon measures, to be implemented by 2030, to help achieve state and national goals.

The City Biodiversity Index - Itanagar provides strategic guidance for effective management of the rich biodiversity and ecosystem services in the capital city of Arunachal Pradesh. Twenty-three indicators in the index measure the city's native biodiversity, the ecosystem services being provided, and biodiversity governance.

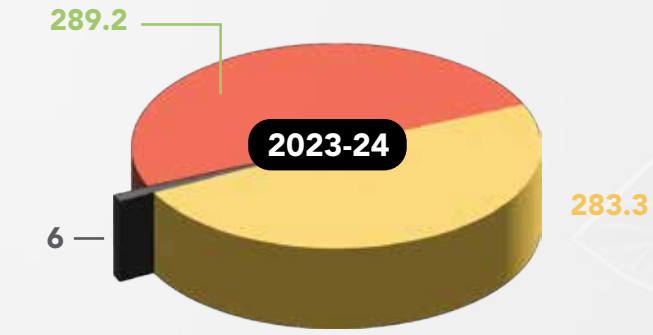
The Guidelines for the Development of Miyawaki Forest provide the overarching guidelines that city governments need to follow to develop urban forests using the Miyawaki technique, which includes developing avenue plantations, shelterbelts, and windbreaks.

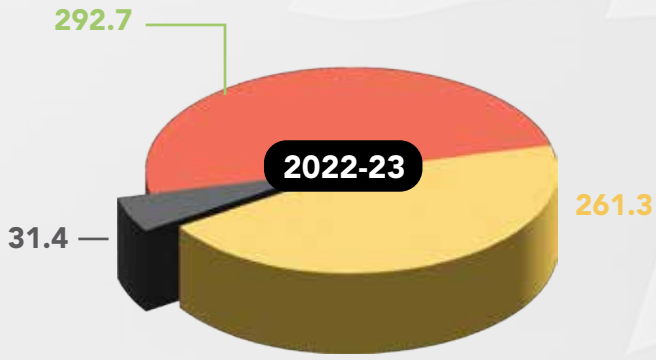
The **Noida Illustrated Natural Asset Map** brings out in visually appealing detail the landmarks, various species of flora and fauna, paddy fields, rivers and wetlands, threatened species, and areas under mixed cultivation. It has been developed to communicate the significance and need to conserve urban biodiversity.

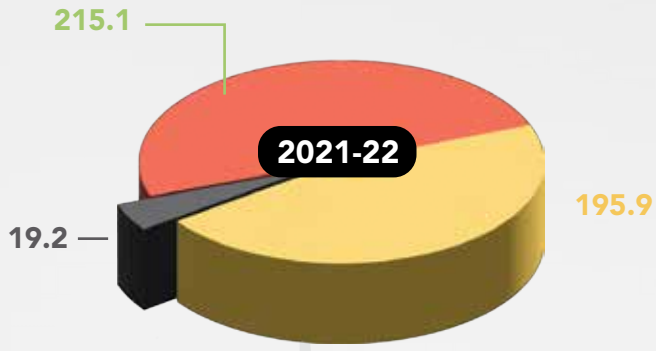
The **State of Cities - Towards Low Carbon and Resilient Pathways** report, developed jointly with the National Institute of Urban Affairs, is a first-of-its-kind graphical report that takes you through the story of cities globally, and further to the current state of 15 Indian cities with their climate interventions.

The **Zero Carbon Buildings Action Plan – Nagpur** is a roadmap for decarbonising the city's rapidly growing building and construction sector. It comprises transformative actions and strategies that aim to achieve net-zero buildings city-wide by 2050.

Three-Year Financials







In Million Rupees

Turnover Expenses Surplus

Making Headlines

दैनिक नवज्योति

सिटी चाइल्ड सेफ्टी गाइड लाइन पर जुटे एक्सपर्ट्स, दिए सुझाव

રવિવાર ભાસ્કર 18-02-2024

અમદાવાદ 2070 સુધીમાં નેટ ઝીરો માટે શું કરી શકે?

शहर को चाइल्ड फ्रेंडली बनाने कई नवाचारों पर सहमति

ओल्ड व वॉल सिटी होगी प्रदूषणमुक्त

ई-व्हीकल के साथ ही फोर व्हीलर के प्रवेश रोकेंगे

GSCPCR urges action on pollution risks

CALLS FOR CHILD-CENTRIC APPROACH IN URBAN PLANNING & POLICIES

THE GOAN / NETWORK

PANAJI

GSCPCR appeal backed by studies highlighting the disproportionate impact of environmental factors on children's health and development

If greenhouse gases not cut by 2026, city will face sharp rise in temp, flash floods: NIUA study

- Nagpur can achieve a 20% cut in its annual GHG emissions by 2025-26
- Residential and water supply sectors are highest contributors to city's GHG emission

Residential bldgs use most energy, are highest emitters

THANE RISKS EXTREME WEATHER IN YRS AHEAD

City भास्कर

किड्स फेस्टिवल आज से : 150 आंगनवाड़ी व 20 स्कूलों के बच्चे होंगे शामिल, आर्ट एंड क्राफ्ट-पेंटिंग समेत कई गेम्स होंगे

Green Goal As Orange City Takes Lead In India

Nagpur 1st to launch zero carbon plan for buildings

PCMC only Maha city to receive four-star rating for climate action

The report not only underscores an urgent need for resilient climate action, but also highlights the crucial role cities play in attracting investments for low carbon transitions.

NITESH VAGHA

Hyderabad scores better on biodiversity

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January 2024, Sariska Tiger Reserve, Rajasthan, India.

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