Unlocking Finance for Nature-based Solutions (NbS) in Indian Cities

Overview and Early Recommendations

CPI | WRI India | CEEW

2026

INDIA FORUM FOR Nature BASED SOLUTIONS

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ACKNOWLEDGMENTS

The authors would like to thank experts working on climate adaptation finance and related sectors that participated in the stakeholder interviews and a hybrid-format Focus Group Discussion held in Mumbai in August 2025. These include Arti Dhar, Dr Anupama Shetty, Divya Pinge, Karishma Shelar, Kaveri Gogoi, Kumar Subramanian, Maya Chandrasekaran, Natasha Zarine, Neha Bhatia, Nidhi Upadhyaya, Pooja Tendulkar, Dr Pushp Bajaj, Rajesh Miglani, Rajvi Joshipura, Sandeep Bhattacharya, Sheeba Sen, Shivna Majmudar, Shravan Shankar, Sukanya Narain, Sunanda Madan, Tushar Thakkar, Umamaheshwaran Rajasekar, Vikram Gandhi and Yash Rohra. Additionally, we acknowledge the contributions of CPI, WRI India and CEEW colleagues- Vivek Sen, Neha Khanna, Sarath Babu, Payal Negi, Vishwas Chitale, Jaya Dhindaw, Priya Narayanan, and Lubaina Rangwala for their advice and internal review, Saumya Tiwari for editing, Tanuj Joshi for graphic design and Vedant Dhasmana for social media.

SUGGESTED CITATION

India Forum for NbS (2026). Unlocking Finance for Nature-based Solutions (NbS) in Indian Cities. Available online: https://www.climatepolicyinitiative.org/publication/unlocking-finance-for-nature-based-solutions-in-indian-cities/

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1. OVERVIEW

Introduction to urban NbS: 57% of the global population resides in cities, consuming over 75% of natural resources[1], facing a myriad of challenges ranging from unplanned development, poverty, inequality, and unemployment due to climate change and pollution (International Union for Conservation of Nature [IUCN], 2023). Indian cities are particularly at risk, with more than 80% of the urban population (Mohanty & Wadhawan, 2021) living in hazard-prone districts that face pressures of flood risk, water stress, water pollution, urban heat island (UHI) effect, and air pollution (Firstpost, 2021). Urban infrastructure in India faces severe climate-related damages, with projected losses of USD 5 billion by 2030 and USD 30 billion by 2070 from floods, alongside rising heat risks. In many cases, nature-based Solutions (NbS)[2] combined with physical infrastructure in green-grey approaches, it can increase development benefits, reduce lifecycle costs, contribute to carbon action, and improve environmental outcomes (World Bank, 2025). Implementation is also intrinsically linked to local economies- with the potential to create up to 32 million new jobs by 2030 (Jongman, et al.) through targeted investments. However, implementation at scale requires unlocking finance for urban NbS.

The state of global and domestic finance flows: According to UNEP's State of Finance for Nature 2023, global finance flows in NbS currently stand at just USD 220 billion annually in 2023 (United Nations Environment Programme [UNEP], 2026). NbS finance flow will need to at least triple by 2030 and increase fourfold by 2050 to meet global climate change, biodiversity, and land degradation targets (Jongman et al., 2021). To meet global climate change, biodiversity, and land degradation targets, the finance flows must rise to at least USD 571 billion annually by 2030 (UNEP, 2026). However, despite the clear rationale for scaling NbS, the total volume of finance flows to nature constitutes only 3% of total climate finance flows (Nature4Climate, 2024). Within that, only a limited proportion of NbS finance is currently channeled into urban areas. Additionally, as of 2023, public funds constituted 90% (USD 197 billion) of the total finance flows in NbS, and private finance only a modest 10% (USD 23 billion) (UNEP, 2026).

One of the key limitations of private sector funding is the lack of, or lower risk-adjusted, financial return on investments. Many ULBs also struggle to engage investors due to weak creditworthiness, limited technical capacity, and a lack of bankable project pipelines. Additionally, the absence of standardized methodologies, clear guidelines, and the overall fragmented understanding of various investment mechanisms for financing NbS further hampers investments.

In India, climate action is primarily financed by domestic resources, with most NbS projects funded through government expenditure and a mix of grants and loans from domestic and international development finance institutions. NbS interventions heavily rely on public finance, indicating a significant disparity between government and private sector contributions. Unlocking finance for urban NbS requires both optimization and catalytic use of public finance, and an increased share of investments from the private sector. This report situates urban NbS in India

1 The term 'Natural Resources' is generally defined by IUCN as 'materials or substances occurring in nature which can be exploited for economic gain'. Definitions also emphasize that nature and its resources encompass both living components (biodiversity) and non-living components (geodiversity).

2 NbS: Actions that protect, restore, and sustainably manage natural or modified ecosystems within cities, using nature and its processes to deliver infrastructure and services. They address societal challenges such as climate resilience, biodiversity loss, and human well-being, while integrating ecological benefits with urban development and community needs.

within the broader financial policy, regulatory, and institutional environment to identify suitable entry points for their adoption and scaling. Additionally, it provides an analysis of financing instruments to understand their potential and limitations for adaptability to the urban Indian context. **Early recommendations include approaches to de-risk investments and deliver urban NbS at scale, and have been informed through the following activities:**

- In-depth literature review
- Analysis of best practices that can inform financing approaches for NbS in Indian cities
- Semi-structured interviews and a focused group discussion (FGD) to capture stakeholders' insights on urban NbS project development, implementation, and financing.

SCOPE AND APPROACH OF THE RESEARCH

This report is part of a larger ongoing study, which is still in progress. It is being published at this stage to share early insights and findings that are particularly relevant at this time. By releasing these preliminary results, we aim to provide valuable information to the field. At the same time, the whole study is still being conducted, ensuring that key developments are made accessible to the stakeholders without delay.

In addition, another complementary report is being published- *Guidebook and best practices repository.* Both reports can be read independently; however, when considered together, these reports offer a more comprehensive understanding of the landscape being studied. Both reports aim to enhance the understanding of the NbS policy and regulatory frameworks, and finance and business ecosystem, providing clarity on finance and business mechanisms that can support the delivery and scale of urban NbS.

2. POLICY AND REGULATORY FRAMEWORK

NbS has been a key focus at recent global events such as COP 30, highlighting its role in adaptation and resilience initiatives. India has announced an intention to set up a country platform as a unified climate finance mechanism. This is an initiative to strengthen its commitment to integrate NbS for adaptation into urban development initiatives by setting shared priorities, aligning stakeholders, and driving national policy and sub-national strategies to support global adaptation efforts, facilitated by the Green Climate Fund (GCF) (Mongabay, 2025).

At a national scale, updated Nationally Determined Contributions (NDCs) and National Biodiversity Strategies and Action Plans (NBSAPs), along with central government schemes such as the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), the Smart Cities Mission, and more recently, Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) have increasingly supported funding for NbS-related interventions. In parallel, several state governments, such as Tamil Nadu and Maharashtra, along with Urban Local Bodies (ULBs), have begun incorporating NbS components within municipal plans and budgetary frameworks, reflecting a broader shift towards nature-based urban development. Initiatives such as the

Ministry of Environment, Forest, and Climate Change (MOEFCC) green credit program and the Security and Exchange Board of India (SEBI) Green and ESG Debt securities framework encourage resource mobilization from the private sector. Programs and platforms such as the Climate Project Preparation Facility (CPPF) by the National Institute of Urban Affairs (NIUA) and the Ministry of Housing and Urban Affairs (MoHUA) signal promising solutions to access a pipeline of climate-aligned, investment-ready urban projects. **These actions provide the means to mainstream sustainable finance for accelerated climate action and direct funding towards urban NbS, presenting a growing array of investment opportunities.**

However, while these efforts are welcome, limited awareness and institutional capacity, along with the inability to converge policies and schemes for urban NbS components (such as livelihood opportunities and capacity building efforts), are among the barriers that hinder investments (Ministry of Housing and Urban Affairs, 2025). An understanding of the global, national, financial, and city-level policies, regulations, and schemes relevant to NbS financing and implementation (coupled with improved institutional capacity) can guide the synergistic use of policies, regulations, and strategies for governance and unlocking finance for urban NbS at scale. An overview of the same is presented below:

- At the Global level, policy literature shows that NbS efforts contribute to multiple sustainability goals (ICLEI, Cities and the Sustainable Development Goals; United Nations Environment Programme, 2022) and the Rio Conventions (IUCN, 2024 A). The 2023 Global Stocktake report, for example, under the United Nations Framework Convention on Climate Change (UNFCCC), recognizes NbS as central to climate adaptation (Bjerre, Atieno, & Rizvi, 2021) and mitigation (IUCN, n.a. 2) efforts, urging countries to mainstream and scale up integrated NbS approaches (UNFCCC, 2023). **The global policy discourse is increasingly recognizing NbS as a cost-effective measure for addressing a multitude of environmental and social issues faced by urban areas, including disaster risk reduction, climate change mitigation and adaptation, food and water security, and biodiversity protection** (IUCN, n.d. 1). **This builds a strong case to prioritize sustainable finance for NbS within governance agendas.**
- India's policy and regulatory paradigm is shaped by constitutional mandates (Bureau, 2014), national priorities, and international commitments such as the Kyoto Protocol on Climate Change (1997), and most recently the UN 2030 Agenda for Sustainable Development and the Paris Agreement on climate change. India's policymakers have set specific national targets and plans that have a component of nature and NbS within these international commitments. Additionally, India's environmental governance framework (legislation, policies, and schemes) spans several interconnected policy subsystems, including air, land, water, forests, biodiversity, and pollution[3]. **While these frameworks are available in the public domain, mapping and reviewing them is critical to bring out their potential for coordinated NbS financing action across multiple levels of governance and sectors.**
- While states such as Maharashtra and Tamil Nadu are taking proactive steps to deepen their commitments to NbS through dedicated frameworks to work with natural ecosystems in urban planning (State Planning Commission, 2025) and in State Action Plans on Climate Change (SAPCCs), Urban Local Bodies (ULBs) are starting to integrate nature and ecological

3 Please refer to the 'Guidebook and Best Practices Repository' research document for detailed information on legislation, policy/ plans and schemes across scales and sectors.

principles into formal urban planning and implementation tools. These include Urban River Management Plans (URMPs)[4], City Development Plans (CDPs), Zonal Development Plans (ZDPs), Climate Action Plans, and Green Building Regulations incorporating solutions such as green buffers, urban forests, blue-green infrastructure (like wetlands and bioswales), and water-sensitive urban drainage. **By embedding these natural ecosystem elements into zoning norms, development codes, and climate strategies, cities have the potential to build institutional pathways to mainstream locally relevant NbS across urban landscapes.**

- **Additionally, while India's financial regulatory framework does not explicitly mention NbS. Still, it has elements of nature and human well-being that can be leveraged by NbS stakeholders to enhance financial resource mobilization for nature-related activities**. A mapping of key financial regulatory frameworks, such as Corporate Social Responsibility (CSR) regulation, MoEFCC's Green Credit Program, and SEBI's Business Responsibility and Sustainability Reporting (BRSR) Regulation, with potential applications for urban NbS, provides an enabling environment for private sector investments. However, market maturity and growth potential need to be assessed to build investor confidence.

In summary, India has a strong foundation of urban, nature, and infrastructure policies at the national, state, and city levels that can be leveraged for implementing NbS, but turning that potential into real impact will require greater policy coherence/ convergence, along with localized action for practical integration of NbS and cross-sectoral coordination.

3. FINANCE AND BUSINESS ECOSYSTEM FOR URBAN NBS

As stated earlier, investments in urban NbS will need to increase at least 2.5 times to USD 571 billion annually by 2030 to meet global climate change, biodiversity, and land degradation targets. Investment needs for nature are estimated to be the highest in Asia, with an additional USD 167 billion required annually by 2030 (UNEP, 2026). To build momentum for NbS finance, actors must make the case that investing in activities that prevent future costs due to climate change impacts (rather than only generating immediate cash flows) can deliver long-term economic, financial, and social value for the communities and stakeholders involved. **Furthermore, urban NbS is application-oriented and needs to be customized to complex and localized climate and socio-economic challenges. This requires coordinated efforts from different actors across all levels (supply, demand, and policy) and stages (concept development and technical assistance, implementation, maintenance, monitoring, and scale-up), through innovative financing models and iterative processes of dialogue and participation.**

4 National Mission for Clean Ganga (NMCG) and the National. Institute of Urban Affairs (NIUA) have developed a common URMP framework for all Ganga towns: http://urbanrivers.niua.org/themes/contrib/corporate_blue/pdf/URMP-Guidance-Document.pdf

Table 1: Stakeholders for financing urban NbS

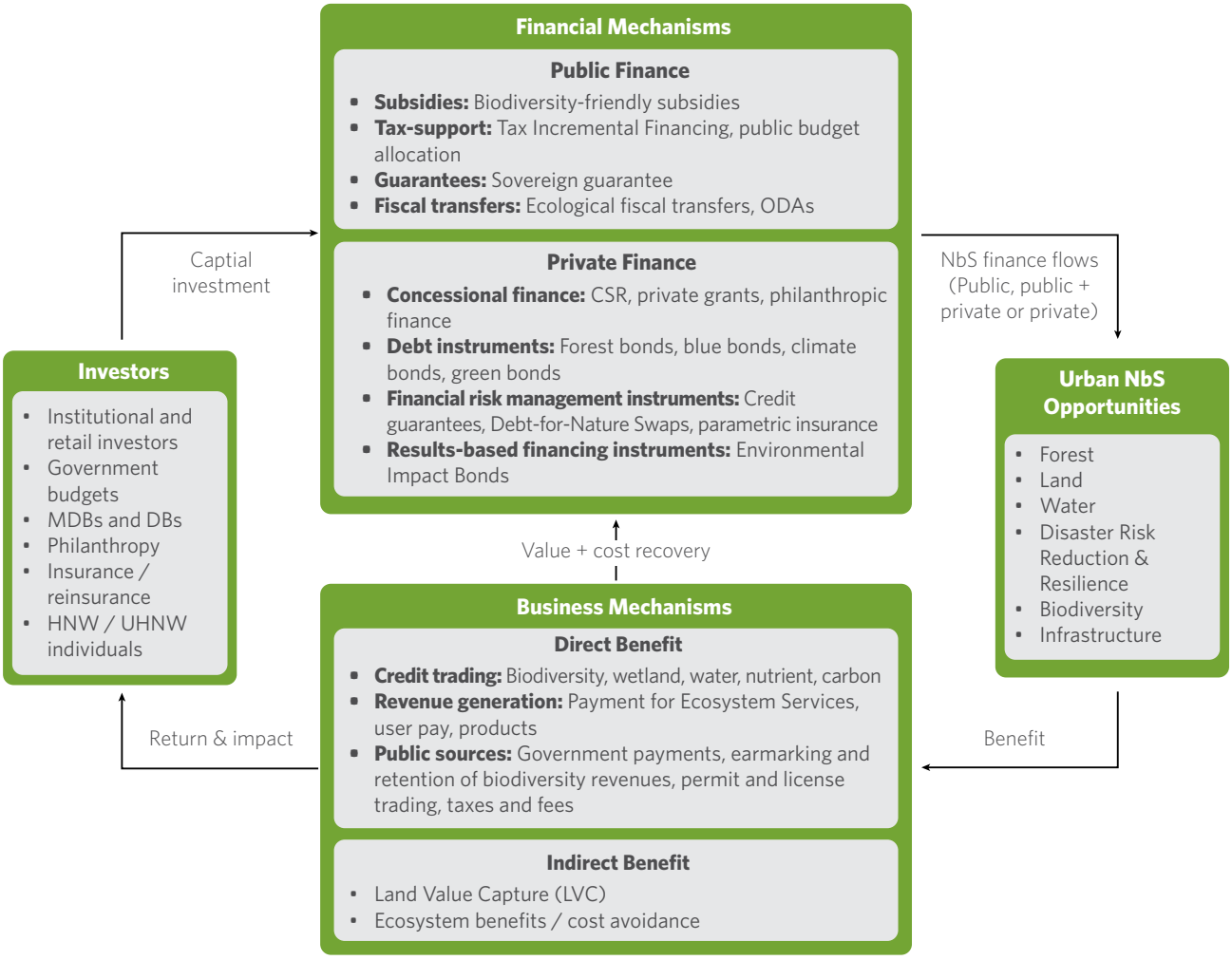
Category	Stakeholder Group	Role in Development	Role in Financing
Supply-side[5]	**Multilateral & National Banks**	Provide technical and financial support, set standards	Offer loans, grants, and risk mitigation instruments
	International Climate Funds	Align projects with climate goals to provide concessional finance	Offer grants and concessional loans to lower-risk
	Private Sector & CSR Funds	Innovation in financing and project development	Invest through ESG funds, green bonds, and CSR initiatives
	Philanthropies	De-risking, co-financing, demonstrating bankability	Grants, early-stage, catalytic capital
Demand-side[6]	**NGOs & Civil Society**	Stakeholder engagement; community mobilization	Channeling finances; implementing advocacy
Policy-side[7]	**Public Sector**	Policy formulation; urban planning	Budget allocations for seed funding and risk-sharing; leveraging private investments

There is no one-size-fits-all approach to designing urban NbS, as solutions can and should be developed for varied objectives (environmental, social, economic) in response to local needs and climate risks. **Mapping stages of an NbS project with the financing cycle can help both developers and investors gain clearer insights into what to anticipate and how to respond at each step of the project lifecycle[8].** This alignment not only strengthens individual projects but also lays the groundwork for unlocking NbS finance more effectively across urban contexts.

Additionally, understanding the availability and access to innovative[9] and credible financial mechanisms[10] and business mechanisms[11] can help attract both private and public capital investments across project stages (See figure 1 for the functioning of NbS financing and business ecosystem). Investments can be from multiple sources- public, private, or blended sources and through numerous financial instruments, including debt, equity, grants, and risk management tools that can operate independently or in combination (for risk reduction and management) (BioFin, n.a). Each instrument carries inherent risk-return profiles, structures, and incentives that vary based on the context, project type, and financing needs.

5 Entities that provide or allocate capital, public and private, to NbS projects, or that otherwise direct investment flows.
6 Entities that receive funding and/or are responsible for on-the-ground implementation of NbS interventions.
7 Regulatory bodies and intermediaries that govern, mediate, and coordinate investment flows between demand and supply actors.
8 Please refer to the 'Guidebook and Best Practices Repository' research document for detailed information on Financing cycle of urban NbS projects.
9 The World Bank definition for innovation in the design of finance and business mechanisms involves 'non-traditional applications of solidarity, PPPs, and catalytic mechanisms to support fund raising by tapping new sources and engaging investors beyond the financial dimension of transactions, as partners and stakeholders in development; or deliver financial solutions to development problems'.
10 Financial mechanisms evaluate the financial feasibility of an NbS project and making the case for capital allocation. Such financing mechanisms can be from multiple sources of financing- public, private or blended sources and through multiple financial instruments including debt, equity, grants, and risk management tools that can operate independently or in combination.
11 Business mechanisms focus on how a project creates, delivers, and captures value and recovers cost. By establishing clear value and return propositions, business mechanisms ensure that the environmental, social, and economic benefits of NbS projects are properly recognized, communicated, and monetized, thereby answering the fundamental question of who will pay for these solutions and why.

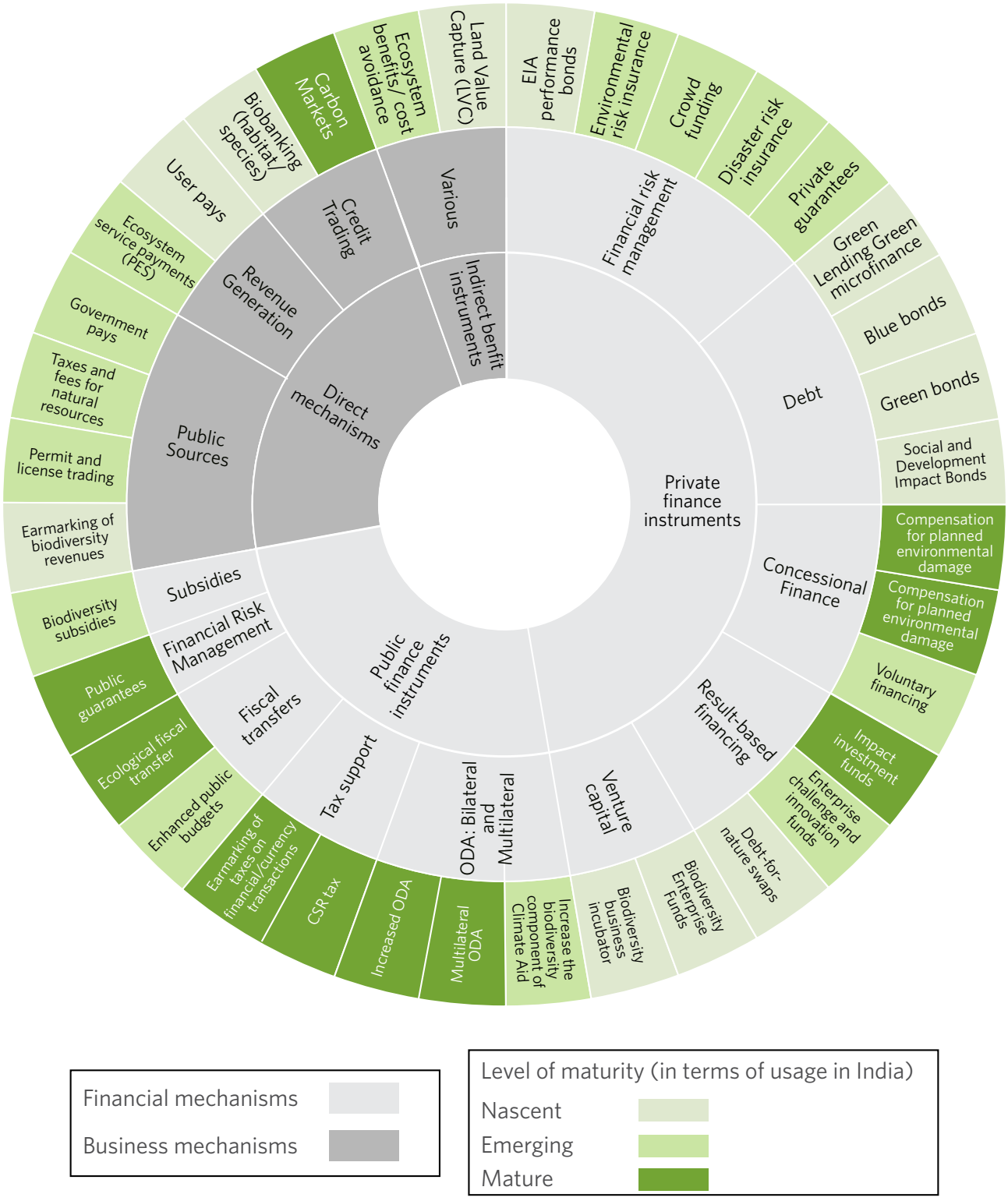
Figure 1: Urban NbS Financing and Business Ecosystem



Adapted from Conservation Finance: Moving beyond donor funding toward an investor-driven approach and Financing Nature: Closing the Global Biodiversity Financing Gap report

However, the selection of appropriate and effective financial mechanisms from the growing list of consolidated, emerging, and non-traditional mechanisms (see Figure 2 for the catalogue of financial and business mechanisms) to fund urban NbS often poses a challenge for practitioners. **This is usually due to the lack of contextual evidence, technical know-how, project management experience, fluency with project financing, and access to a supportive network of partners.** Along with financing considerations, various factors such as the project type, local socio-economic and governance context, stakeholders, and the benefits the project sets out to deliver are crucial determinants. By showcasing how financial instruments can be tailored to meet diverse NbS needs, this study supports various stakeholders seeking to understand options available today to build climate resilience. Examples of various financial and business mechanisms for urban NbS interventions, highlighting their level of maturity/usage in the Indian context, are included in the diagram below. Such strategies can facilitate the flow of capital into urban NbS projects and improve the value proposition, including cost recovery mechanisms, over the life of the project. Please refer to the *'Guidebook and Best Practices Repository'* research document for more information on these instruments.

Figure 2: Catalogue of Financial and Business Mechanisms for urban NbS



Source: *Adapted from BIOFIN's Catalogue of Finance Solutions and World Bank Group's Financing Climate Adaptation and Nature-Based Solutions.*

Please refer to the Guidebook and Best Practices Repository for definitions and applications of the instruments mentioned in this diagram.

In summary, multiple challenges deter the adoption and financing of NbS at scale, many of which lie at the intersection of existing market failures, inadequate policy push, and lack of benefit sharing between stakeholders and communities. While urban NbS financing and business mechanisms are gaining traction, unsubstantiated environmental claims or greenwashing due to the lack of standardization and guidance are further barriers to the implementation and scaling up of NbS (UNEP FI, 2024).

Despite these barriers, certain institutional, financial, and implementation-related success factors show promise to build scalable and sustainable NbS projects (Kleve K, 2025). These include early-stage efforts that focus on strengthening implementation teams, educating investors, piloting innovative models to demonstrate profitability, and recognizing that no single financing approach will suit all contexts.

4. URBAN NBS BEST PRACTICES-FINANCIAL AND BUSINESS MECHANISMS

In addition to identifying available financial and business mechanisms, a repository of best practices has been developed to provide evidence on the application of these mechanisms and leveraging success factors to de-risk investments. The potential of instruments such as green bonds, public–private partnerships (PPPs), blended finance, pooled funds, and insurance-based risk management to unlock finance for urban NbS has been analyzed through project examples in India and other geographies. The list of projects included here extends beyond the urban context, to also learn from mechanisms that were successful in mobilizing finance in peri-urban and rural areas. This is owing to the lack of sufficient evidence of innovative financing approaches for urban NbS. Four thematic areas were used to analyze the practices:

- **Definitional factors** (such as NbS fit)
- **Diversity factors** (such as local factors mix or governance mechanisms)
- **Performance Factors** (such as scaling-up and sustainability, and maladaptation), and
- **Financing Factors** (such as bankability and investment mobilization, and innovative financing mechanisms), examining access to finance across the NbS project lifecycle.

Further analysis offered insights into the relevance of these practices to the urban Indian context, highlighting qualitative and quantitative factors that contribute to innovation and scale. Some of the findings that emerged include the following:

- **Rigorous performance projections and reporting methods:** Although cost-intensive, rigorous performance projections and reporting methods are critical to ensure the financial sustainability of models, making it easier for investors to understand risks and benefits. The Farmers for Forest model (Farmers for Forests, n.d.) for access to carbon markets, the Environmental Impact Bond by DC Waters (DC Water Green Bond Framework, 2021), and the municipal bond for the integrated stormwater drainage project (Asian Development Bank [ADB], 2021) by the Greater Chennai Corporation offer approaches for accurate evaluation of projected impacts, building investor confidence.

- **Identification of land to aggregate project outcomes:** In cities, factors such as land availability remain a challenge where aggregation of bankable projects (a minimum of 2000 hectares) is critical to ensure feasibility.
- **Strengthening ULB capacity to access finance and replicate successful models**: Success for scaling instruments such as bond-based financing and mechanisms such as Tax Increment Financing (TIF) depends on strengthening ULB creditworthiness, ensuring transparent land valuation systems, and creating enabling regulatory frameworks that integrate NbS into mainstream urban financing.
- **Linking risk transfer mechanisms with NbS:** While innovative risk transfer mechanisms like parametric insurance schemes are being piloted in Indian cities, the adoption of the product requires enhancing climate literacy. There is potential to combine risk transfer (e.g., insurance) with risk reduction (e.g., hazard mitigation through natural infrastructure recovery) as seen in the Vida Manglar blue carbon project in Colombia.
- **Alignment of de-risking instruments with relevant NbS project stages:** Involving insurance companies and risk managers early on in the project development process to incorporate relevant climate insurance products, thus promoting resilience and adaptation; encouraging reinsurance players to support these efforts.
- **Equitable distribution of project benefits:** PES models such as the Vida Manglar blue carbon project in Colombia offer a way to share benefits with communities equitably- 92% of carbon credit proceeds are returned directly to local communities. However, the complexities of implementing community-led projects and the long gestation periods typically associated with them pose challenges to scale.

In summary, this section aims to guide both the public and private sectors by identifying potential factors that have guided the flow of capital for urban NbS delivery. By exploring how different financial models and instruments are applied to other climate risks across contexts, this study can inform the selection, design, and management of similar financial instruments and approaches for climate resilience. For more information on the projects listed above, please refer to the *'Guidebook and Best Practices Repository'* research document.

5. RECOMMENDATIONS

Early recommendations included in this section provide ways to tackle the barriers highlighted in previous sections and to strengthen the investment case for urban NbS. **These are presented under four themes: (1) Improving the enabling environment for NbS, (2) Integrating NbS in project development, (3) Improving project bankability and feasibility, and (4) Diversifying financing sources.**

1. **Improving the enabling environment for NbS:** Introducing reforms to make urban NbS more attractive to investors through certifications and standards that encourage innovation; securing land and carbon rights through long-term Memorandums of Understanding (MoUs) with governments; and integrated social support frameworks for financial literacy and risk mitigation through partnerships with local collectives.

Improving the enabling environment for NbS	
Theme	Recommendations
Policy and regulatory support	**Incentives:** Including reforms such as certification and standards to encourage innovation. These can leverage the existing policy and regulatory environment to bring out NbS considerations more explicitly.
	Due diligence: Developing processes that allow for data exchange, where funders could share information through standardized platforms and industry-specific data repositories to gain a more comprehensive understanding of climate risks.
Governance	**Long-term Government Agreements:** Establishing long-term Memorandums of Understanding (MoUs) with governments, for example, to secure land and carbon rights critical for NbS projects with a carbon trading business model.
Knowledge and capacity	**Synthesis of learnings:** Platforms to highlight the experiences of investors and project developers who have utilized financing methods from comparable sectors and geographies can provide valuable models to support urban NbS. The Global Innovation Lab for Climate Finance is an example that identifies, develops, and launches innovative finance instruments to drive private investment for action on climate change and sustainable development.
	Capacity building: Improving awareness of what NbS constitutes, including clear criteria and design and operational factors, to avoid risks such as maladaptation. Climate cells anchored with state/ city environment departments can bring on board urban experts to provide guidelines for NbS for adaptation. The Bruhat Bengaluru Mahanagara Palike (BBMP) launched the Climate Action Fellows program in 2024 to enhance the capacities of the Climate Action Cell and work on ward-level climate action plans.
Benefits to local communities	**Payout mechanisms for local community participation:** Empowering and providing a corpus of resources to regional institutions such as Panchayats, Municipalities, and urban quasi-administrative bodies to strengthen access to NbS finance, improve governance processes, and assist in beneficiary identification and payout systems.

2. **Integrating NbS in project development (design, planning, and implementation phase): Integration of community knowledge in the design and planning stage; technical partnerships to support product development, innovation,** and alignment with local and regional urban plans are examples that add significant value, overcoming investor concerns.

Integrating NbS in project development (design, planning, and implementation phase)	
Theme	Recommendations
Design and planning	**Prioritizing close collaboration:** Collaboration and partnership with local communities is a fundamental aspect of bankable NbS projects, through approaches that are inclusive, integrating communities into project models.
	Integrating biodiversity conservation and socio-economic outcomes: Recognizing the inherent connections between environmental and socio-economic outcomes and integrating methods to achieve desired outcomes in the design of NbS projects.
	Identifying viable alternative livelihoods: Employing a participatory approach to identify alternative livelihoods that deliver measurable benefits for both biodiversity and local communities.
Implementation	**Leveraging technical partnerships:** Strengthening partnerships with relevant research institutions, academic organizations, and government agencies for support in product improvement, innovation, and alignment with local/ regional development plans.
	Enhancing the commercial and technical capacities: Enhancing the capacity of project teams and continuous development of these competencies to design viable business models is critical to overcoming investor concerns. This also addresses barriers to project financing faced by emerging NbS enterprises.

3. **Improving project bankability and feasibility:** Improving project bankability and feasibility primarily involves comprehensive planning, rigorous risk assessment, transparent financial modelling, and strategic distribution of risks to build confidence with potential investors.

Improving project bankability and feasibility	
Theme	Recommendations
Project structuring	**Clarity in project design and financing structuring:** Projects should be treated as infrastructure investments with transparent definitions of the problem, solution, benefits, timeline, execution strategy, responsible actors, and repayment mechanisms. A scalable national platform for project preparation is essential. NIUA with WRI India has launched the Climate Project Preparation Facility for adaptation and resilience projects, in addition to mitigation projects in Indian cities. This facility also equips Indian cities with the tools and technical expertise to prepare bankable climate adaptation projects.
Ring fencing to de-risk	**Protecting assets:** Segregating project funds from broader financial risks to minimize investment risk and increase confidence among institutional and private investors. Ring-fencing can be supported by development banks (e.g., NABARD, Green Bank) with public policy or grant banking as additional de-risking tools.
Adjusted Investment Expectations	**Context-specific funding strategy and return expectations:** NbS projects, especially in remote or ecologically critical areas, often require investors to accept lower returns, smaller investment sizes, and longer tenors due to operational challenges.
Intersectionality and co-benefit mapping	**Cross-sectoral coordination:** Integrating NbS principles across sectors, including healthcare funding, green job creation, and livelihoods, to maximize synergistic benefits like increased property values and improved public health. Equitable distribution of benefits.
Designing replicable business and finance models	**Standards to structure sustainable finance:** Designing NbS financing models with scalability and replicability across different urban local bodies (ULBs) by standardizing processes, roles, and data management.

4. **Diversification of financing sources:** Diversification of financing sources is a strategy to reduce risk and build resilience by securing capital from multiple avenues (like loans, equity, grants, crowdfunding) instead of relying on just one, ensuring stability, flexibility, and consistent access to funds for operations, investments, and scale. It moves businesses beyond single-source dependency (e.g., just public funds) to build robust financial health.

Diversification of financing sources	
Theme	**Recommendations and stakeholder insights**
Targeted public investments	**Optimizing public funding:** Promoting government investment in NbS, especially where market incentives are weak, resources are public goods, and for de-risking NbS investments. If there is no direct pathway to commercialization, developmental outcomes are important; city-level financial mechanisms, such as bonds, taxes, and other sources, become relevant. Indonesia has issued blue bonds for coastal protection, sustainable management of fisheries and aquaculture, marine biodiversity conservation, and mangrove rehabilitation, and Miami's forever bonds aim at investing in 'Parks and Recreation' and 'Storm Sewers'.
Grant funding and technical assistance	**Catalytic public and concessional finance:** Vital for early-stage NbS projects to reach a stage where they can sustain debt and equity financing alone. Lifecycle financing may progress from grants and concessional capital to outcome-based finance and carbon revenue.

Diversification of financing sources	
Theme	**Recommendations and stakeholder insights**
Linking NbS Benefits with Revenue Sources	**Identify the financial value of NbS co-benefits for sustainable funding models:** Innovative financing can connect water management benefits to land value taxes, property tax allocations, or tourism-linked revenue models. India's Value Capture Financing Framework offers potential but is underutilized for NbS.
	Incorporate co-benefits through premiums instead of direct monetization: Identify ancillary revenue streams, such as transportation linked to NbS canal restoration, as opportunities to improve financial sustainability. **Value chain creation:** Developing value chains across the project lifecycle, providing diverse returns to governments, philanthropies (when commercial feasibility is lacking), and the private sector.

6. POTENTIAL AREAS FOR FUTURE RESEARCH

While this research offers an overview of the financial and regulatory landscape for urban NbS, a review of market conditions and institutional structures for policy/ scheme convergence needs to be conducted. To address this, potential areas for research that will be undertaken in the coming months include the following:

- **A further assessment of market conditions and a geography-specific policy landscape that may influence the uptake of instruments remains to be carried out**. This will be done through a selection of case studies during the next stages of the study.
- **Additional inputs on qualitative and quantitative financial factors that impact the design of business cases for urban NbS** (stakeholder roles, access to finance, cost-benefit analysis, funding mixes, etc.) will be conducted for more targeted recommendations for different stakeholders.
- **Developing platforms and modalities for stakeholder collaboration to work** with multiple instruments remains to be further explored- this is critical to determine how to shift investment behaviors and apply the guidance shared through this project.
- While the testing of finance and business models within select geographies is out of the scope of this research, it remains critical to **understand how local factors play a role in mobilizing finance for urban NbS.**

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Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance Climate Policy Initiative (CPI) is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has six offices around the world in Brazil, India, Indonesia, South Africa, the United Kingdom, and the United States. and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has six offices around the world in Brazil, India, Indonesia, South Africa, the United Kingdom, and the United States.

WRI India, an independent charity legally registered as the India Resources Trust, provides objective information and practical proposals to foster environmentally sound and socially equitable development. Through research, analysis, and recommendations, WRI India puts ideas into action to build transformative solutions to protect the earth, promote livelihoods, and enhance human well-being.

The Council on Energy, Environment and Water (CEEW) is one of Asia's leading not-for-profit policy research institutions and among the world's top climate think tanks. The Council uses data, integrated analysis, and strategic outreach to explain — and change — the use, reuse, and misuse of resources. The Council addresses pressing global challenges through an integrated and internationally focused approach. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with the wider public. CEEW has a footprint in over 20 Indian states and has repeatedly featured among the world's best managed and independent think tanks

The India Forum for Nature-based Solutions is a coalition of research, practice and finance organizations working to scale up the adoption of Nature-based Solutions (NbS) to shape climate resilient cities and communities in India. The larger vision of the Forum is to climate proof 100 million residents and infrastructure worth $100 billion in Indian cities by 2030. To achieve this, the Forum supports peer-to-peer exchange of best practices, technical training, knowledge sharing and research towards strengthening local knowledge and building evidence around the use of NbS for urban services and resilience in Indian cities.

The Funding and Finance Task force within the India Forum for Nature-based Solutions was established to address key barriers to investing in urban NbS that broadly include limited evidence of innovative finance models; access to data and standardized metrics to evaluate benefits; limited technical capacities and financial assistance during early-stage project preparation; and lengthy timeframes for projects to become profitable. The Forum aims to address such barriers through the development of tools and knowledge that can guide the design of reliable business cases and unlock sustainable finance, potentially increasing the share of commercial, concessional and public funds for urban NbS.