A New look on the Urbanisation and Environmental Rights in India: Contestations and Resolutions

Dr. Shubhajeet Shome [1]

Abstract

Urbanization in India has become a pivotal factor influencing economic development, social change, and environmental challenges. The growth of urban areas has heightened demands on land, water, air quality, and ecological stability, frequently putting environmental rights in contrast with developmental goals. This article presents a fresh viewpoint on urbanization and environmental rights in India. This article attempts to understand recent scenario of urban growth in India and its effect on urban environment. This paper examines various dimensions of present urban environmental situation in India. This paper also analyses how Constitutional and legal structures, judicial actions, and grassroots initiatives address environmental issues considering new avenues for sustainable and rights-oriented urban development.

I. Introduction

Urbanization in India is a complex and transformative part of the country's socio-economic history. It has evolved from ancient urban centres like the Indus Valley cities to colonial port towns and the industrial hubs that developed after independence, going through various historical phases. However, it is in the period following the 1991 liberalization that urban expansion has notably accelerated, driven by industrialization, globalization, migration, and the expansion of the service sector. At present, Indian cities act as catalysts for economic growth, innovation, and political power, while simultaneously showcasing significant inequalities and systemic issues.

Urbanization in India is characterized not merely by the growth of the urban population but also by the geographical spread of cities, the establishment of new

[1] Assistant Professor, Dept of Law, University of North Bengal, Siliguri, West Bengal

towns, and the transformation of rural areas into peri-urban zones.[2] Census statistics reveal a steady rise in India's urban population, with millions moving from rural regions in search of jobs, education, and better living standards. This shift from rural to urban environments is often motivated by agricultural challenges, uneven development across regions. As a result, cities have become sites of both aspiration and exclusion.[3]

In India, the growth of cities has a lot of informal parts. A lot of the city building happens without following official plans, which leads to slums, informal neighbourhoods, and illegal settlements. Even though these places are important for the city's economy, they often don't have basic services like housing, sanitation, clean water, and healthcare. This informality shows the contradictions in city development, where economic growth happens alongside tough living conditions and social issues.

Table:1
Population growth of five top cities in India in last three census

City (UA)	1991 Census	2001 Census	2011 Census
Mumbai	12596243	16434386	18394912
Delhi	8419084	12877470	16349831
Kolkata	11021918	13205697	14112536
Chennai	5421985	6560242	8696010
Bengaluru	4130288	5701446	8520435

Source: Census of India Various Years, Office of the Registrar General & Census Commissioner, India.

[2] Amitabh Kundu, *Urbanisation and Migration: An Analysis of Trend, Pattern and Policies in Asia*, INT'L INST. FOR ENV'T & DEV., Human Settlements Working Paper Series (2014).
[3] Annapurna Shaw & Ananya Das**, *Urban Growth and Spatial Transformation in India: Policies, Practices and Governance***, 53 ECON. & POL. WKLY. 45 (2018).

Table:2
Urban population growth percentage in last four census

Census Year	Urban Population in crores (approx.)	% of Total Population
1981	15.9	23.3
1991	21.7	25.7
2001	28.6	27.8
2011	37.7	31.2

Source: Census of India Various Years, Office of the Registrar General & Census Commissioner, India.

Table:3
Number of Urban Cities / Towns in India (Census-wise)

Census Year	Number of Urban Cities/Towns
1991	4889
2001	5161
2011	7935

Source: Census of India Various Years, Office of the Registrar General & Census Commissioner, India.

1991–2001: There was a steady increase thanks to organized urban development and slow reclassification. From 2001 to 2011, there was a major increase mainly because of the emergence of Census Towns—areas that meet urban criteria (such as population size, density, and a workforce that isn't agricultural) but weren't officially recognized as urban. This time period marks a big shift in how cities are growing in India, moving away from just focusing on big cities to also include the growth of smaller and medium-sized towns. These numbers indicate that urban growth in India is driven not only by huge cities but also by the rapid development of smaller urban regions..

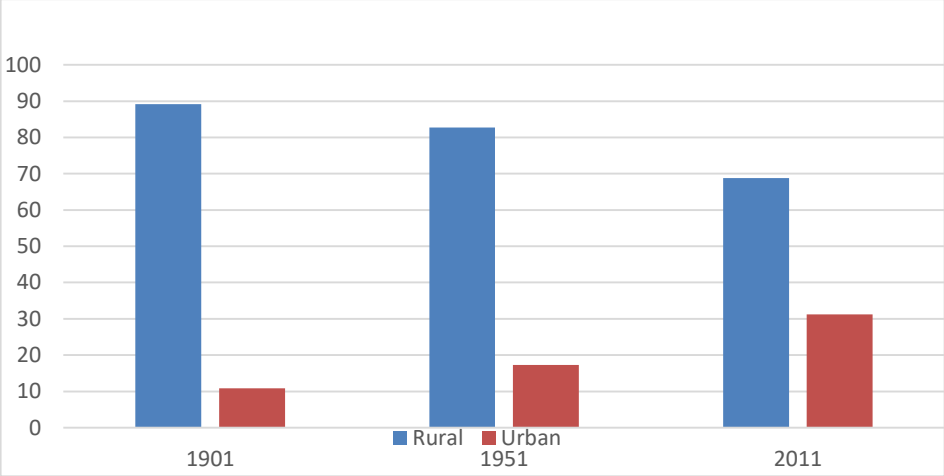
Table:4
Rural–Urban Population Distribution (Census-wise)

Census Year	Rural Population (%)	Urban Population (%)
1991	74.3	25.7
2001	72.2	27.8
2011	68.8	31.2

Source: Census of India Various Years, Office of the Registrar General & Census Commissioner, India.

In the past thirty years, India has gone through a gradual yet significant demographic shift. The upcoming challenge is to handle urban expansion while also promoting rural development, ensuring balanced regional planning, and maintaining environmental sustainability.

Figure:1
Urban and rural population rate in 1901, 1951, 2011



Source: Census of India Various Years, Office of the Registrar General & Census Commissioner, India.

II. Urbanization and environmental issues in India

Over the last thirty years, India has seen a steady rise in urbanization, showcasing significant shifts in its economy and society. The urban population jumped from 25.7% in 1991 to 27.8% in 2001 and then to 31.2% in 2011, with estimates suggesting it hit 35–36% by 2021. While India's urban growth rate is not as fast as that of many other developing nations. The huge number of people moving to cities each decade is staggering. This hike has put immense pressure on urban infrastructure, governance, and the environment.

The rapid pace of urbanization has sparked serious environmental challenges. Air pollution is one of the most pressing issues. It has fuelled by vehicle emissions,

industrial activities, and dust from construction which makes Indian cities some of the most polluted in the world.[4] Water scarcity is another critical issue, as the growing urban population drives up demand, while groundwater depletion, river pollution, and inadequate wastewater management supply. Many cities are grappling with regular water shortages and contaminated water sources.

Moreover, urban sprawl has resulted in the loss of green spaces, wetlands, and farmland, which disrupts local ecosystems and diminishes cities' natural ability to handle floods and heat. The shift from natural landscapes to concrete has lead to the urban heat island effect, leading to higher temperatures and increased energy consumption. Additionally, the swift production of solid waste and sewage without sufficient treatment facilities has caused pollution in land, water, and soil.

The recent urban growth in India has really changed its economic and social scene. This change has also brought about serious and interconnected environmental issues. In the last few decades, the fast population increase in cities, massive rural-to-urban migration, infrastructure expansion have put immense pressure on urban ecosystems. Consequently, Indian cities are now dealing with complicated environmental challenges. These endanger public health, ecological stability, and the sustainability of urban areas in the long run.[5]

One of the biggest urban environmental issues is air pollution. Indian cities rank among the most polluted globally, thanks to a mix of vehicle emissions, industrial activities, construction dust, and the burning of solid waste.[6] Cities like Delhi, Kanpur, and Patna often report particulate matter (PM2.5 and PM10) levels that are way above what the World Health Organization considers safe.[7] In Delhi, the winter smog triggered by vehicle pollution, industrial emissions, and stubble burning from nearby states. Long-term exposure to this polluted air has resulted

[4] United Nations Department of Economic and Social Affairs, World Urbanization Prospects: The 2018 Revision (U.N. DESA 2019)

[5] Ministry of Housing and Urban Affairs, Government of India, State of India's Environment: Urban Issues (2022).

[6] World Health Organization, WHO Global Air Quality Guidelines: Particulate Matter (PM2.5 and PM10), Ozone, Nitrogen Dioxide, Sulfur Dioxide and Carbon Monoxide (2021).

[7] Central Pollution Control Board (CPCB), National Air Quality Status and Trends in India (Ministry of Environment, Forest and Climate Change, Govt. of India 2020).

in a spike in respiratory illnesses, asthma, heart problems, and even premature deaths, turning air pollution into not just an environmental concern but a significant public health crisis.

According to AQI website top 10 polluted cities in the world are from India in2025. The condition is hazardous and very severe.[8]

Table:5
Top 10 polluted cities in the world are from India in 2025

Rank	City	AQI(US)	Status
1	Dahod	577	Hazardous
2	Jhargram	437	Hazardous
3	Ghazipur	358	Hazardous
4	Khalilbad	322	Hazardous
5	Kharagpur	317	Hazardous
6	Begusarai	314	Hazardous
7	Gorakhpur	304	Hazardous
8	Jaunpur	304	Hazardous
9	Anantnag	300	Severe
10	Akbarpur	297	Severe

Source: AQI.com

Water scarcity and pollution are also major urban environmental challenges. The rapid growth of cities has led to a higher demand for water for homes, industries, and businesses, while the sources of supply are dwindling due to overuse and contamination. The water crisis in Chennai back in 2019, when key reservoirs ran dry, showcased the fallout from unsustainable groundwater practices and poor urban water management.[9] Meanwhile, the pollution of urban water bodies has reached critical levels. Rivers like the Yamuna in Delhi are severely polluted with untreated sewage and industrial waste, making parts of them ecologically dead.[10] Likewise, lakes in Bengaluru, which were once vital to the city's water

[8] Air Quality Index (AQI) World's Most Polluted Cities 2025, https://www.aqi.in/world-most-polluted-cities/
[9] Central Pollution Control Board, *Status of Polluted River Stretches in India* (2025), Ministry of Environment, Forest and Climate Change, Government of India.
[10] NITI Aayog, *Composite Water Management Index: A Tool for Water Management* (2019), Government of India.

management, have become contaminated due to encroachment and waste dumping, diminishing their ability to recharge groundwater and manage floods. According to CPBC, 2025 report there are 296 polluted rivers in India.[11]

Table:6
Most polluted rivers in India

River	State	Critical Stretch	Peak BOD Level (mg/L)
Cooum	Tamil Nadu	Avadi to Sathyanagar	**345+**
Sabarmati	Gujarat	Raysan to Vautha	**292**
Yamuna	Delhi	Najafgarh Drain Outfall	**127**
Mithi	Maharashtra	Mumbai Metropolitan	**>30 (Priority I)**
Musi	Telangana	Hyderabad City Stretch	**>30 (Priority I)**
Hindon	Uttar Pradesh	NCR Industrial Region	**>30**
Chambal	Madhya Pradesh	Nagda to Gandhisagar	**>30 (Priority I)**
Sarabanga	Tamil Nadu	State-specific Priority	**>30 (Priority I)**
Ghaggar	Punjab / Haryana	Industrial/Municipal Border	**>30 (Priority I)**
Ganga	UP / Bihar	Kannauj to Varanasi	**Varies (Priority I)**

Source: Press Information Bureau, Government of India

The issue of managing solid waste has become more pressing due to changing consumption habits and growing urban populations. Indian cities produce millions of tonnes of solid waste each year. But waste segregation, recycling, and proper disposal methods are still lacking. In megacities like Mumbai, massive landfills such as Deonar are a problem with open dumping and regular landfill

[11] Central Pollution Control Board (CPCB), *Status of Polluted River Stretches in India* **(**2025**)**, Ministry of Environment, Forest and Climate Change, Government of India.

fires leading to pollution in the air, soil, and groundwater. Smaller cities and towns have it even tougher because of limited funds, technical skills, and coordination among various organizations. The practice of burning waste in open spaces, common in many urban areas, further deteriorates air quality and puts residents—especially those in informal settlements—at risk of toxic emissions.

The rapid growth of cities has also resulted decline of green spaces, wetlands, and urban biodiversity. It weakens the natural resilience of cities. Urban sprawl often means turning agricultural land, forests, and wetlands into residential and commercial areas. For instance, in Hyderabad, significant encroachment on lakes has severely cut down the city's ground wate level. While in Kolkata, the degradation of wetlands on the eastern side has made the area more prone to flooding. The reduction of urban greenery has a very bad effect on the urban heating issue which causes cities to be hotter than nearby rural areas. This not only raises the demand for cooling energy but also increases heat-related health issues, especially among the elderly, outdoor workers, and low-income communities.[12]

Over the past thirty years, the rapid urbanization in India has resulted in a significant loss of green spaces in urban regions. Since the early 1990s, factors such as economic liberalization, population growth, and migration from rural to urban areas have lead to the growth of cities. Consequently, agricultural land, urban forests, wetlands, and open green areas have been made into residential, commercial centres. Census data shows that India's urban population rose from 25.7% in 1991 to approximately 35% in 2021 which creates a heavy load on urban areas.[13]

Satellite-based research clearly illustrates of decreasing in tree cover across major Indian cities. In Kolkata, tree cover fell from about 23.4% in the early 1990s to about 7.3% by the 2010s, while the built-up area surged by nearly 190%.[14] Likewise, Ahmedabad experienced a decline in tree cover from around

[12] Ananya Roy, Urbanization and Land Transformation in India, 52 Econ. & Pol. Wkly**.** 45, 48–50 (2017).
[13] Shubham Jain et al., Mapping Urban Green Cover Change Using Remote Sensing: Evidence from Indian Cities, 114 **J.** Envtl. Mgmt**.** 343, 347–49 (2019).
[14] Debojyoti Chakraborty & Sujit Kumar Ghosh, Urban Expansion and Loss of Tree Cover in Kolkata Metropolitan Area, 38 Envtl. Monitoring & Assessment 112, 118–21 (2018).

46% to 24% over two decades as urban infrastructure expanded rapidly.[15] These statistics underscore how urban development has directly supplanted green spaces with concrete structures.

Other cities exhibit the same alarming trend. Bhopal, once celebrated for its natural greenery and lakes, saw a decrease in green cover from approximately 66% to nearly 22% within about twenty years.[16] In Hyderabad, tree cover diminished from around 2.7% to 1.6%, reflecting significant pressure from IT parks, highways, and housing developments.[17] These losses tells that even cities with varying geographic and economic characteristics have experienced similar declines in urban green spaces.

The quality of green spaces has also declined. Research conducted in Ahmedabad indicates that dense vegetation has decreased by nearly 78% from 2001 to 2023. Specifically, between 2011 and 2020, the city experienced a loss of approximately 30 square kilometers of green cover, while built-up areas expanded by over 87 square kilometers.[18]

The reduction of green spaces has significantly diminished per-capita green space in Indian cities. Urban planning guidelines in India advocate for 10–12 square meters of green space per individual, whereas the World Health Organization recommends a minimum of 9 square meters.[19] But numerous Indian cities are well below this standard. In various metropolitan regions, the available green space often measures less than 2 square meters per person, highlighting both population pressure and insufficient protection of open land.

From an environmental perspective, the decrease in urban green spaces has exacerbated air pollution, elevated urban temperatures, and increased flooding occurrences. A reduction in tree cover leads to a lack of carbon absorption and

[15] Sneha Patel & Ramesh Kumar, Impact of Rapid Urbanization on Green Spaces in Ahmedabad, 41 Sustainable Cities & Soc'y 396, 402–05 (2020).
[16] Ministry of Housing & Urban Affairs, *Urban Environmental Profile: Bhopal* 27–31 (Gov't of India 2019).
[17] S. Ramachandraiah & V. Prasad, Infrastructure Growth and Urban Ecology in Hyderabad, 55 *Econ. & Pol. Wkly*. 60, 63–65 (2020).
[18] Neha Shah et al., Spatio-Temporal Analysis of Vegetation Loss in Ahmedabad City (2001–2023), 176 Remote Sensing Applications: Soc'y & Env't 105, 109–12 (2024).
[19] Intergovernmental Panel on Climate Change, *AR6: Impacts, Adaptation and Vulnerability* 1423–27 (Cambridge Univ. Press 2022).

dust filtration in the city areas. It is worsening air quality crises in cities like Delhi.

Table:7
Top cities with green cover in last 3 decades

City	Estimated Green Cover (~1995-2001)	Estimated Green Cover (2024-2025)	Primary Driver of Loss
Ahmedabad	~46.0%	**~18.0%**	Industrial expansion & residential sprawl.
Bengaluru	~68.0%	**~10.0%**	"Silicon Valley" boom; 88% loss of vegetation since 1973.
Chennai	~32.0%	**~15.0%**	Infrastructure projects & post-cyclone degradation.
Delhi (NCR)	~20.0%	**~13.0%***	Road widening & illegal encroachment in the Ridge.
Hyderabad	~18.0%	**~9.0%**	IT corridors and suburban real estate development.
Kolkata	~23.0%	**~7.0%**	High-density construction and wetland conversion.
Mumbai	~35.0%	**~24.0%**	Linear infra projects (Metro/Coastal Road) & slum sprawl.

Source: **Energy & Wetlands Research Group at the Centre for Ecological Sciences (CES), Indian Institute of Science (IISc), Bengaluru**

Urban flooding and drainage issues have become significant environmental threats, particularly with climate change in the mix. Extreme rainfall is happening more often, but our urban infrastructure isn't keeping up. Cities like Mumbai and Chennai face regular flooding because of encroachment on floodplains, blocked natural drainage paths, and poor storm water management systems. Flooding

messes with transportation, damages property, taints drinking water, and boosts the spread of water-borne illnesses, hitting slum residents and low-income communities the hardest in vulnerable areas.[20]

These environmental problems are interlinked social inequality and governance issues. Informal settlements usually don't have access to clean water, sanitation, waste collection, or green spaces. It makes their residents more vulnerable to pollution, heat stress, and flooding.[21] The weak enforcement of environmental laws, poor urban governance, and lack of public involvement make things even critical. Although initiatives like the Smart Cities Mission, National Clean Air Programme, and urban river rejuvenation projects are positive moves, their success hinges on effective implementation and coordination across various government levels.

Urbanization in India has significantly transformed the avian environment over the past thirty years, resulting in a phenomenon referred to as "biotic homogenisation." The State of India's Birds 2023 report indicates that nearly 60% of bird species have experienced a long-term decline.[22] This decline is primarily due to urban development that destroys specialized habitats such as grasslands and wetlands. As native trees are replaced by ornamental plants, birds that depend on specific nesting locations or insect diets are gradually being forced out of urban areas.

A prominent example of this decline is the House Sparrow, which has undergone a severe population decrease in major metropolitan areas. The shift from traditional bungalows with modern, airtight glass buildings has eradicated their conventional nesting sites. Likewise, birds and raptors have experienced a decline exceeding 25%, as the use of pesticides in urban gardens. Migratory birds that once visited urban wetlands are also disappearing as these water bodies are encroached upon for real estate development.

Species such as the Feral Rock Pigeon, House Crow, and Asian Koel have seen population increases of up to 75% since the year 2000. These birds adapt

[20] Gautam Bhan, *In the Public's Interest: Evictions, Citizenship, and Inequality in Contemporary Delhi* 112–35 (Univ. of Ga. Press 2016).
[21] D. Srinivas et al., *Urban Flooding in Indian Cities: Causes, Impacts and Adaptation Strategies*, 47 *Econ. & Pol. Wkly***.** 54 (2012).
[22] *State of India's Birds 2023*, Bombay Nat. Hist. Soc'y & BirdLife Int'l (2023).

effectively to human waste and artificial structures. But their prevalence often comes at the cost of biodiversity, as they outcompete or prey on the eggs of smaller, rarer species. This change has resulted in Indian cities having a greater total number of birds, yet significantly fewer unique species compared to three decades ago.

Table:8
Birds species population decline in urban areas

Category	Population Trend	Key Species	Primary Cause of Shift
Habitat Specialists	**Severe Decline**	House Sparrow, Woodpeckers, Thrushes	Loss of nesting crevices in modern glass buildings and native trees.
Wetland & Shorebirds	**50%–80% Decline**	Sarus Crane, Black-bellied Tern, Ducks	Conversion of urban marshes and floodplains into real estate.
Dietary Specialists	**>25% Decline**	Raptors (Eagles/Hawks), Insectivores	Pesticide use and loss of diverse insect/small mammal populations.
Migratory Species	**Steady Decline**	Rosy Starling, Arctic shorebirds	Light pollution disorientation and loss of stopover water bodies.
Urban Generalists	**Rapid Increase**	Feral Pigeon, House Crow, Asian Koel	High adaptability to human waste, "heat islands," and artificial structures.

Range Expanders	**Increasing**	Indian Peafowl	Adaptation to peri-urban gardens and intentional human feeding.

Source: The Times of India

III. Existing Urban environmental rights in India

The constitutional framework for preserving the urban environment in India is rooted in Article 21, which the judiciary has interpreted to signify that the "Right to Life" is not fully realized without the Right to a Clean Environment. In the Indian constitutional framework of 2026, the safeguarding of the urban environment is fundamentally rooted in Article 21, which pertains to the Right to Life. The Supreme Court helds that the right to a dignified existence is meaningless without access to clean air, safe drinking water, and an environment free from pollution.[23]

A significant shift came up in 2024–2025, when the judiciary acknowledged the "Right against the adverse effects of climate change" as a separate fundamental right. This development empowers urban residents to legally contest systemic shortcomings—such as insufficient heat action plans or the destruction of flood-retaining wetlands—as direct infringements of their constitutional rights.

The Right to Equality enshrined in Article 14 also plays an essential role in urban environmental justice. Courts now recognize that environmental degradation, including toxic air and inadequate sanitation disproportionately affects vulnerable urban communities, such as slum residents and daily wage workers. By invoking Article 14, the judiciary ensures that urban planning and pollution control initiatives are not arbitrary, and that the "environmental burden" is not unjustly imposed on the impoverished. This has resulted in more stringent requirements for equitable waste management and the preservation of public "green lungs" throughout all socio-economic areas of a city.[24]

Moreover, the Freedom to Trade as outlined in Article 19(1)(g) is no longer an unconditional protection for urban industries. The courts have ruled that while

[23] Maneka Gandhi v. Union of India**,** (1978) 1 S.C.C. 248 (India).
[24] M.C. Mehta v. Union of India (Oleum Gas Leak Case**)**, (1987) 1 S.C.C. 395 (India).

individuals have the right to engage in business, this right is subject to "reasonable restrictions". It aimed at safeguarding public health. Under the "Polluter Pays" principle, urban businesses that discharge pollutants into rivers such as the Yamuna or Mithi, or emit harmful smoke, face immediate closure or substantial fines.[25] The judiciary asserts that the right to conduct business cannot be upheld at the expense of the collective right of a city's inhabitants to enjoy clean air.

The implementation of these rights is facilitated by Articles 32 and 226, which grant citizens the authority to seek recourse from the Supreme Court or High Courts through Public Interest Litigations (PILs).[26] This "Right to Constitutional Remedies" has transformed ordinary citizens into "environmental watchdogs." In the years 2025 and 2026, this has led to numerous significant interventions by the National Green Tribunal (NGT), including the cessation of unlawful construction on the Aravalli Ridge and the imposition of penalties on municipal authorities for their failure to manage "legacy waste" mountains that contaminate urban groundwater.

To implement these principles effectively, the 74th Constitutional Amendment Act empowers Urban Local Bodies (ULBs) to monitor environmental protection. This decentralization facilitates localized efforts like the Nagar Van Yojana, which aims to creates 1,000 urban forests throughout India by 2027. By granting municipal corporations the constitutional authority to manage their own green lungs. The enforcement of these rights is significantly adopted by the National Green Tribunal (NGT). In 2025, both the NGT and the Supreme Court have become increasingly assertive in applying the "Polluter Pays" principle, levying substantial fines on municipal authorities for neglecting legacy waste management or permitting the encroachment of wetlands. This judicial activism guarantees that constitutional rights are upheld and environmental standards are maintained.

[25] Vellore Citizens' Welfare Forum v. Union of India**,** (1996) 5 S.C.C. 647 (India).
[26] Bandhua Mukti Morcha v. Union of India**,** (1984) 3 S.C.C. 161 (India).

Table:9
Directive Principles for Urban Environmental Protection

Article	Constitutional Mandate	Application in Urban Areas (2025–26)
Article 48A	**Protection and Improvement of Environment**	The primary directive for the State to protect forests and wildlife, used to justify **Urban Forest (Nagar Van)** projects.
Article 47	**Duty to Raise the Level of Nutrition and Public Health**	Mandates the improvement of public health, which the courts link to providing **smoke-free air** and **clean drinking water**.
Article 38	**Promoting Public Welfare**	Directs the State to minimize inequalities; used to ensure **equitable access** to green spaces and sanitation in slums.

IV. The role judiciary to protect urban environment in India

The judiciary's function in safeguarding urban environmental interests is fundamentally anchored in the Constitution of India. While the Constitution did not initially acknowledge environmental rights explicitly, judicial interpretation has effectively addressed this deficiency. Article 21, which ensures the right to life and personal liberty, has been broadly construed to encompass the right to a clean, healthy, and pollution-free environment.[27] This interpretation has established a constitutional foundation for judicial involvement in urban environmental issues. Furthermore, the judiciary has held the Directive Principles of State Policy, especially Articles 48A and 47, along with the Fundamental Duties outlined in Article 51A(g), which is for both the State and citizens to safeguard and enhance the natural environment. Fundamental rights with directive principles, the courts have elevated environmental protection to a constitutional obligation.

[27] M.C. Mehta v. Union of India, (1987) 1 S.C.C. 395 (India).

Table:10
Landmark Judicial Verdicts (January – June 2025)

No.	Case Name	Date of Verdict	Key Judicial Ruling / Principle	Urban Environmental Impact
1	***Vanashakti v. Union of India***	**May 16, 2025**	Quashed a 2017 notification and 2021 memorandum allowing **retrospective (ex post facto)** environmental clearances.	Declared that building projects started without prior clearance are illegal and cannot be regularised later.
2	***M.K. Ranjitsinh v. Union of India***	**April 20, 2025**	Recognized a distinct fundamental right to be **"free from the adverse effects of climate change"**.	Empowers urban citizens to litigate against systemic failures like heat islands or flooding as rights violations.
3	***M.C. Mehta v. Union of India (Solid Waste)***	**May 2025**	Declared a **"Public Health Emergency"** in Delhi due to the massive gap in daily waste processing.	Directed strict source-segregation of waste and held municipal officials personally accountable for landfill growth.
4	***NGT v. DDA (Yamuna Encroachment)***	**February 6, 2025**	Ordered immediate removal of encroachments on the **Yamuna floodplains** in Delhi.	Restricts urban construction on floodplains to protect river ecology and

				mitigate urban flood risks.
5	***Waris Chemicals v. UPPCB***	**January 9, 2025**	Ruled that the NGT must remand miscalculated environmental compensation cases to Pollution Boards for re-calculation.	Standardizes how urban industrial polluters are fined, ensuring legal due process in penalty assessments.
6	***Kerala CZMA v. P.M. Sukhilesh***	**January 7, 2025**	Upheld the quashing of **Coastal Regulation Zone (CRZ)** clearances for construction in mangrove areas.	Reaffirms the protection of "green buffers" in coastal cities against municipal or private infrastructure.
7	***NGT v. MoEFCC (Brick Kiln Mining)***	**February 25, 2025**	Directed the Centre to clarify the legal position on environmental clearances for **soil mining** by brick kilns.	Aims to regulate the sourcing of building materials for urban expansion to prevent topsoil degradation.
8	***S. Muralidharan v. PCCF***	**January 10, 2025**	Constituted a **Special Investigation Team (SIT)** to probe illegal mining and brick kilns in peri-urban corridors.	Directly addresses human-animal conflicts caused by urban sprawl and industrial

				encroachment on city outskirts.
9	***M.C. Mehta (Fuel Stickers)***	**January 3, 2025**	Re-emphasized the implementation of **colour-coded stickers** for petrol and diesel vehicles in metros.	Aims to streamline urban traffic management during high-pollution periods (e.g., GRAP implementation).
10	***Environment Protection Rules Amendment***	**March 26, 2025**	Notification of stricter emission and effluent standards for **industrial plants** within urban limits.	Legally mandates lower pollutant discharge levels for caustic soda and similar urban-adjacent industries.

A notable contribution of the judiciary has been its proactive in environmental litigation. The Supreme Court, through Public Interest Litigations (PILs), has allowed concerned citizens, environmental organizations, and social activists to petition the court on behalf of affected urban communities.[28] This hashas democratized access to environmental justice and facilitated judicial scrutiny of urban governance.

The judiciary has established core principles of environmental law like the polluter pays principle, precautionary principle, and public trust doctrine. These principles have been enforcing in cases related to urban pollution, industrial emissions, vehicular pollution, and encroachments on public land. In doing so,

[28] Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 S.C.C. 647 (India).

the courts have held polluting industries, municipal authorities, and government agencies accountable.[29]

Urban air pollution has emerged as one of the most litigated environmental concerns in India. The judiciary has been crucial in directing executive to manage vehicular emissions, regulate industrial pollution, and enhance fuel standards. Significant judicial directives have resulted in the adoption of cleaner fuels, the retirement of older vehicles, the relocation of hazardous industries in major cities.

Water pollution in urban originates from untreated sewage, industrial discharges, and the encroachment of water bodies. It has come under judicial examination. Courts have mandated the creation of sewage treatment facilities, the shutdown of pollution making sources and the purification of rivers, lakes, and wetlands. Judicial actions have been crucial in acknowledging urban water bodies as ecological treasures rather than mere real estate prospects.

Unplanned urban expansion and unlawful constructions causing significant dangers to the urban environment. The judiciary has intervened to curb unauthorized building activities, encroachments on forest areas, floodplains, and wetlands. Courts have stressed that urban development should align with environmental sustainability and statutory planning standards.

The judiciary has reinforced the rule of law in urban planning by holding municipal corporations and development authorities accountable [30] Judicial rulings have frequently called for the demolition of illegal structures, the safeguarding of green spaces, and compliance with zoning laws. Such interventions are highlighting the judiciary's role in the developmental demands with environmental conservation.

V. Urban environmental protection in 74th amendment act, 1992

The swift rate of urbanization in India following independence exerted extraordinary pressure on urban infrastructure, public health, and the natural environment. Cities grew without sufficient planning, resulting in significant challenges such as air and water pollution, improper waste disposal, reduction of

[29] M.I. Builders Pvt. Ltd. v. Radhey Shyam Sahu, (1999) 6 S.C.C. 464 (India).
[30] Municipal Council, Ratlam v. Vardhichand, (1980) 4 S.C.C. 162 (India).

green spaces, encroachment on wetlands, and a decline in the quality of urban life.

Acknowledging the necessity for a decentralized and participatory urban governance system capable of tackling these issues, the Indian Constitution was revised through the Seventy-Fourth Constitutional Amendment Act of 1992. This amendment represented a pivotal moment in urban governance by conferring constitutional status upon Urban Local Bodies (ULBs) and establishing the institutional groundwork for urban environmental protection.

The 74th Constitutional Amendment incorporated Part IX-A (Articles 243P–243ZG) into the Constitution, thereby transforming municipalities from simple statutory entities into constitutionally recognized self-governing institutions. This constitutional recognition is significant for environmental protection in urban areas. By elevating municipalities to constitutional status, the amendment ensured continuity, stability in urban governance, which are crucial for effective long-term environmental planning and sustainable development.

Urban environmental issues are basically local concerns such as waste management, sanitation, drainage, water supply which have a direct impact on everyday urban life. The amendment recognized this fact by decentralizing powers and responsibilities to the municipal level, where challenges can be addressed more effectively and contextually. Consequently, environmental protection became integrated within the larger framework of democratic decentralization.

Article 243Q requires the creation of three categories of municipalities: Municipal Corporations for larger urban regions, Municipal Councils for smaller urban locales, and Nagar Panchayats for areas transitioning from rural to urban classification. This categorization ensures that urban environmental governance is linked to the size, population, and developmental of various urban regions.

By constitutionally establishing these entities, the amendment has assigned them the duty of delivering essential civic services that significantly impact environmental quality. Responsibilities such as sanitation, drainage, solid waste management, maintenance of water bodies, and land use regulation are firmly within the purview of municipalities. Consequently, the responsibility for environmental protection in urban areas is no longer solely that of state

governments or centralized agencies but is delegated to local democratic institutions.

Article 243W grants State Legislatures to give municipalities the powers and responsibilities necessary for them to operate as self-governing entities. This provision is vital for urban environmental protection, as it lays the constitutional groundwork for the delegation of environmental functions to the local level.

The Article empowers municipalities to undertake functions in the Twelfth Schedule, many of which are fundamentally linked to environmental management. These functions such as urban planning, land use regulation, provision of water for domestic and industrial needs, public health, sanitation, solid waste management, urban forestry, and environmental protection. Through Article 243W, environmental governance is interconnected with economic development and social justice, emphasizing that environmental protection is a core component of sustainable urban development rather than a secondary issue.

The Twelfth Schedule lists eighteen functional areas, serves as the foundation of municipal environmental responsibility. Numerous entries either directly or indirectly pertain to urban environmental protection. Urban planning and land-use regulation are essential in preventing chaotic development and ecological harm. The functions related to water supply and sanitation guarantee access to clean water and help avert pollution of water bodies. Solid waste management and conservancy tackle one of the most urgent environmental issues faced by Indian cities. Urban forestry and environmental protection strive to maintain green spaces and ecological equilibrium within urban settings.

By integrating these functions into the Constitution, the amendment has raised environmental responsibilities from optional administrative duties to constitutionally acknowledged obligations. This transformation is crucial as it compels State Governments to delegate powers, functions, and financial resources to municipalities, thus empowering them to effectively conduct their environmental responsibilities.

Another significant aspect of the 74th Amendment regarding urban environmental protection is its focus on democratic participation. The provisions for ward committees, regular elections, and the reservation of seats for women and marginalized groups foster inclusive governance and encourage citizen engagement in decision-making processes. Environmental challenges such as

waste segregation, water conservation, and pollution control necessitate active community involvement for successful execution.

Ward committees, in particular, act as forums for tackling local environmental issues, including drainage concerns, waste buildup, and encroachment on public areas. By institutionalizing grassroots participation, the amendment enhances accountability and responsiveness in environmental governance.

Environmental protection necessitates significant financial investment for the development, upkeep, and advancement of infrastructure and technology. The 74th Amendment addresses this requirement through the establishment of State Finance Commissions as outlined in Article 243Y. These commissions propose strategies to enhance the financial stability of municipalities, which includes the distribution of state revenues and grants-in-aid.

Despite the uneven distribution of financial resources among states, the constitutional framework allows municipalities to gather funds for environmental initiatives such as sewage treatment facilities, solid waste management plants, rainwater harvesting systems, and urban greening projects. The connection between financial independence and environmental sustainability highlights the comprehensive nature of the amendment in relation to urban governance.

Although the 74th Constitutional Amendment does not specifically reference environmental rights, it functions alongside Article 21 of the Constitution, which affirms the right to life. The judiciary has consistently interpreted Article 21 to encompass the right to a clean, healthy, and pollution-free environment. This judicial interpretation carries significant implications for the environmental duties of municipalities as outlined in Part IX-A.

Municipal shortcomings in areas such as waste management, sanitation, water supply, and pollution control can now be contested as infringements of the fundamental right to life. Courts have frequently instructed municipal authorities to fulfill their statutory and constitutional responsibilities to safeguard urban environments. Consequently, the environmental roles of municipalities gain enforceable constitutional importance, shifting environmental governance from a mere policy goal to a legal obligation.

VI. Several cities in India are demonstrating concern and undertaking initiatives to safeguard the urban environment:

Several Indian cities are increasingly demonstrating a robust commitment to protecting the urban environment by incorporating sustainability into urban planning, governance, and daily civic activities.[31]

The rapid pace of urbanization, increasing population density, growth in vehicular numbers, and unplanned infrastructure development have exerted tremendous pressure on air, water, land, and biodiversity within urban areas. In response, urban local authorities, with the support of judicial interventions, national initiatives, and citizen movements, are progressively transitioning from short-term reactive measures to proactive, long-term environmental strategies.[32] These efforts signify a growing recognition that environmental protection is intrinsically linked to public health, economic productivity, and social well-being in urban settings.

Cities like Indore, Surat, and Bhopal have emerged as national leaders in solid waste management and urban sanitation. Indore's approach of achieving 100 percent door-to-door waste collection and enforcing strict source segregation.[33] The city has converted organic waste into energy and compost, fostering a circular economy that not only generates employment but also safeguards the environment. Surat is learning from its historical plague outbreak, has integrated waste management with advanced drainage systems, sewage treatment facilities, and real-time digital monitoring which greatly enhancing public health and flood resilience. Bhopal has bolstered wet-waste processing, landfill remediation, and public engagement in cleanliness initiatives, illustrating how administrative efficiency and citizen collaboration can enhance urban environmental results.

In southern India, cities like Bengaluru, Chennai, and Hyderabad are placing a strong emphasis on urban ecology, water conservation, and climate resilience. Bengaluru, historically referred to as the 'city of lakes,' has launched extensive

[31] Shaw, A. & Das, A., Urban Growth and Spatial Transformation in India: Policies, Practices and Governance, 53 *Econ. & Pol. Wkly.* 45 (2018).
[32] Asok Kumar Sarkar, Urbanization and Environmental Challenges in India, 52 *Econ. & Pol. Wkly.* 34 (2017).
[33] Ministry of Hous. & Urb. Affs., Swachh Bharat Mission (Urban): Guidelines and Framework (Gov't of India 2019).

lake rejuvenation initiatives aimed at restoring contaminated water bodies.[34] Numerous projects benefit from the support of resident welfare associations, non-governmental organizations, and corporate social responsibility efforts, resulting in enhanced groundwater recharge, revival of biodiversity, and the creation of recreational areas.

Chennai is often impacted by severe climate events such as floods and droughts. Rainwater harvesting a mandatory urban practice, increased urban forests through Miyawaki plantations, rehabilitated coastal mangroves.[35] Hyderabad has encouraged urban afforestation through the establishment of green belts, biodiversity parks, and large-scale tree-planting campaigns, which help alleviate the urban heat island effect and lower air pollution levels.

Air pollution and sustainable transportation have emerged as urgent issues in major metropolitan areas such as Delhi, Pune, and Ahmedabad. Delhi, is one of the most severe urban air quality challenges globally. It has implemented electric buses, expanded CNG-based public transport, installed rooftop solar panels on government buildings, and enforced stringent regulations on construction dust and industrial emissions. The city has also enhanced air-quality monitoring systems and emergency response protocols during periods of high pollution.[36]

Pune has focused on non-motorized and public transport by creating dedicated cycling lanes, pedestrian-friendly streets, and transit-oriented development, thereby decreasing dependence on private vehicles. Ahmedabad's Bus Rapid Transit System (BRTS) has enhanced mass mobility, reduced carbon emissions, and illustrated how integrated transport planning can effectively tackle both congestion and environmental degradation.[37]

In eastern and coastal India, cities like Kolkata, Visakhapatnam, and Bhubaneswar are placing significant emphasis on the protection of wetlands, management of coastal areas, and governance of environmental issues through

[34] Centre for Science & Environment, Rejuvenation of Urban Water Bodies: Case Studies from Indian Cities (2019).
[35] Chennai Metropolitan Development Authority, Second Master Plan for Chennai Metropolitan Area 2026 (Gov't of Tamil Nadu 2008)
[36] Ministry of Environment, Forest & Climate Change, National Clean Air Programme (NCAP) (Gov't of India 2019).
[37] World Bank, Ahmedabad Bus Rapid Transit System: Sustainable Urban Transport Case Study (2017).

community involvement. The conservation of the East Kolkata Wetlands holds global ecological significance, as this distinctive ecosystem naturally processes urban wastewater, sustains fisheries, and offers livelihoods while serving as a flood buffer for the city.[38] Judicial protection and municipal regulations have been instrumental in eliminating large-scale encroachment. Visakhapatnam has initiated beach clean-up campaigns, established plastic-free zones, implemented urban hill conservation programs, and taken measures to protect coastal biodiversity. Bhubaneswar has incorporated green spaces, focused on heritage conservation, and adopted climate-responsive urban design, gaining recognition for its balanced approach to development alongside environmental protection.

In addition to the initiatives undertaken by individual cities, institutional support at the national level has been vital in promoting urban environmental protection. Programs such as the Smart Cities Mission, AMRUT, Swachh Bharat Mission (Urban), and climate-oriented assessment frameworks encourage the adoption of renewable energy, the construction of green buildings, water-sensitive urban design, and governance driven by technology. These programs offer funding, establish performance benchmarks, and create platforms for knowledge sharing that empower cities to implement best practices. Environmental impact assessments, urban climate action plans, and data-driven decision-making tools are to be integrated into municipal governance frameworks.[39]

VII. Conclusion

Environmental degradation in urban areas of India has become one of the most pressing challenges of the 21st century. The rapid pace of urbanization, coupled with population growth, industrial development, and unregulated expansion, has exerted tremendous pressure on natural resources and urban ecosystems. Cities that were once seen as engines of economic progress are now grappling with significant environmental issues, including air and water pollution, loss of green spaces, improper waste management, depletion of groundwater, noise pollution, and heightened susceptibility to climate change. The repercussions of this degradation are evident in the form of increasing health issues, recurrent urban flooding, heat waves, water shortages, and a general deterioration in the quality

[38] Ramsar Convention Secretariat, The East Kolkata Wetlands: A Ramsar Site of International Importance (2018).
[39] World Bank, Urban Development in India: Challenges and Opportunities (2018).

of life for urban inhabitants, especially those from economically disadvantaged backgrounds.

To combat environmental degradation in urban areas, a strategic and integrated method is crucial. Firstly, urban planning should emphasize environmental sustainability. Cities ought to implement scientific land-use planning that safeguards wetlands, urban forests, river floodplains, and green spaces. Green infrastructure such as urban parks, green roofs, and biodiversity corridors should be regarded as vital public assets. The control of air and water pollution necessitates more rigorous enforcement of environmental regulations. It is essential to enhance public transportation systems on private vehicles like electric mobility, cycling, and infrastructure that is friendly to pedestrians.

Industries are required to implement cleaner technologies, and there should be consistent monitoring of emissions and effluents, accompanied by transparent public reporting. There is an urgent need for reform in solid waste management. The focus should be on waste segregation at the source, recycling, composting, and minimizing the use of single-use plastics. Urban local authorities must be equipped with sufficient financial resources, technical knowledge, and workforce to manage waste effectively.

Water resource management should be crucial for prioritizing conservation and reuse. Key strategies include rainwater harvesting, wastewater recycling, safeguarding urban water bodies, and regulating groundwater extraction to ensure long-term water security.[40] It is important to promote climate-resilient urban design to tackle floods, heat stress, and extreme weather conditions. Fostering public awareness and community involvement is crucial for sustainable urban environments. Citizens should be actively engaged in environmental decision-making through local governance structures. Environmental education is crucial to the application of digital technologies for monitoring and collaboration among government, the private sector, and civil society can greatly enhance outcomes.

Enhancing institutional governance and accountability is crucial for effectively tackling urban environmental challenges in India. Urban Local Bodies (ULBs),

[40] T. V. Ramachandra et al., Rainwater Harvesting and Urban Water Management**,** *Indian Institute of Science, Centre for Ecological Sciences* (2002).

although constitutionally empowered, frequently lack administrative independence and coordination among various agencies responsible for transport, housing, water, pollution control, and disaster management. The establishment of integrated urban environmental authorities or the enhancement of inter-departmental coordination mechanisms can facilitate coherent policy execution.

Another vital aspect is the urban economic development. Urban expansion in India has predominantly connected to a resource-intensive and pollution-laden model. A transition towards a green urban economy is focusing on renewable energy, energy-efficient buildings, and sustainable industries. Municipalities should encourage green building initiatives through tax incentives, promote solar rooftops, and implement energy-efficient street lighting and public infrastructure. These initiatives not only create environmental strain but also create green employment opportunities and promote inclusive economic growth.

Urban housing policies should be in accordance with environmental sustainability. The growth of unbridle activities often takes place in ecologically sensitive regions such as wetlands, riverbanks, and floodplains and increasing vulnerability to disasters. Affordable housing strategies should emphasize compact, transit-oriented development and environmentally secure locations. Slum redevelopment initiatives must incorporate sanitation, access to clean water, waste management, and green spaces to ensure both environmental protection and social equity.

Climate change represents a growing threat to Indian cities, rendering urban climate governance a crucial aspect of environmental policy. Increasing temperatures, unpredictable rainfall, urban flooding, and rising sea levels are progressively impacting metropolitan and coastal areas. Urban planning must integrate climate adaptation and mitigation strategies, which include enhancing urban tree cover, restoring natural drainage systems, preserving mangroves in coastal regions, and advocating for heat-resilient building designs.

Local climate action plans, in alignment with national climate commitments, can empower cities to serve as frontline responders to climate-related risks. Technological advancements can greatly improve urban environmental management. The implementation of smart technologies, such as real-time monitoring of air and water quality, geographic information systems (GIS) for

land-use planning, and data-driven waste management systems, can enhance efficiency and accountability. Furthermore, digital platforms can facilitate citizen reporting of environmental infractions, promoting participatory governance and transparency. Nevertheless, technological solutions must be important to prevent socio-economic inequalities.

The role of law enforcement and judicial oversight in urban environmental protection is equally vital. Environmental laws and municipal regulations must be enforced to prevent violations such as illegal construction, encroachment on water bodies, and improper waste disposal. Courts have taken an active role in protecting urban environments, but sustainable solutions necessitate administrative commitment rather than merely reactive litigation. Strengthening municipal enforcement mechanisms and establishing environmental courts at the local level can ensure prompt resolution of grievances. In nutshell, reversing environmental degradation in urban centres across India is an urgent necessity. It is important to pursue sustainable, environmentally conscious urban development to ensure healthy cities and an improved quality of life for current and future generations.