

Civic Issues in Bengaluru

Rakesh Kumar¹, Dr. Shivanand²

¹241MSCD01008, Semester IV

²Professor, Centre of Distance and Online Education, Jain (Deemed-to-be University), Bengaluru, India

Abstract: *This project report examines the pressing civic issues facing Bengaluru as it transitions into 2025, a period marked by rapid urbanization and population growth. Despite its reputation as India's Silicon Valley, the city grapples with significant challenges that threaten its livability and sustainability. Key issues identified include severe infrastructure deficiencies, particularly in road maintenance and public transport; ineffective waste management practices; acute water scarcity juxtaposed with flooding; a lack of local governance due to prolonged absence of elected representatives; and public safety concerns stemming from inadequate facilities. The report highlights the urgent demands from community leaders and residents for improved coordination among civic agencies, increased investments in infrastructure, and citizen-centric urban planning. Recommendations include conducting overdue BBMP elections, implementing the Greater Bengaluru Governance Bill for enhanced governance, and fostering sustainable urban initiatives through regular public consultations. By addressing these challenges, Bengaluru can work towards realizing its potential as a globally competitive city while ensuring a better quality of life for its residents^[1].*

Keywords: Bengaluru, Urban Growth, Civic Issues, Local Governance, Sustainable Planning

1. Introduction

Bengaluru, often dubbed the Silicon Valley of India, has witnessed remarkable growth and urbanization, establishing itself as a prominent global city. However, this rapid expansion has brought forth a host of civic challenges that threaten the city's livability and sustainability. As of early 2025, Bengaluru faces significant issues, including deteriorating infrastructure, ineffective waste management, water scarcity, and public safety concerns. The city's road conditions are particularly alarming, with potholes and flooding becoming common complaints among residents. Additionally, the public transport system remains inadequate, leaving many commuters reliant on outdated and overcrowded options.

The absence of local governance for over four years has further exacerbated these challenges, creating a disconnect between citizens and the authorities responsible for their welfare. Residents are increasingly vocal about their demands for change, seeking improved coordination among government agencies and enhanced investments in infrastructure. Community leaders advocate for citizen-centric urban planning that prioritizes sustainability and accessibility. This report aims to provide a comprehensive overview of the major civic issues facing Bengaluru while highlighting the urgent need for effective governance and community engagement. By addressing these pressing challenges, Bengaluru can work towards fulfilling its aspirations as a global city while ensuring a better quality of life for its residents^[1].

2. Need and Significance of the Study

The need for this project report on civic issues in Bengaluru arises from the city's rapid urbanization and the accompanying challenges that threaten its livability and sustainability. As Bengaluru continues to grow as a global hub, it faces significant infrastructural deficiencies, waste management problems, water scarcity, and public safety concerns. These issues not only affect the quality of life for

residents but also hinder the city's potential to thrive as a modern metropolis.

The significance of addressing these civic challenges cannot be overstated. Effective governance is essential to restore accountability and responsiveness in civic administration, particularly in light of the prolonged absence of elected representatives in the Bruhat Bengaluru Mahanagara Palike (BBMP). This disconnect has led to widespread frustration among residents, who are increasingly advocating for their voices to be heard through community engagement and participatory governance.

By highlighting the current civic issues and community demands, this report aims to provide actionable insights for policymakers and stakeholders. It underscores the importance of improved coordination among government agencies, increased investment in infrastructure, and citizen-centric urban planning. Ultimately, addressing these pressing challenges is crucial for Bengaluru to realize its aspirations as a livable and sustainable city, ensuring a better quality of life for its residents while fostering inclusive growth^[1].

3. List of Major Civic Issues in Bengaluru

3.1 Infrastructure and Urban Planning Issues

1) Traffic Congestion and Road Infrastructure

- Bengaluru ranks 3rd globally in the 2024 TomTom Traffic Index.
- Average travel time for 10 km: **34 minutes and 10 seconds** (a 50-second increase from 2023).
- Congestion peaks at **68%** during evening rush hours.
- 1.23 crore** registered vehicles; **7.22 lakh** new vehicles added in 2024–25.
- 2,000 vehicles** added daily; vehicle density: **823 vehicles per km** of road.
- Graph:** *Traffic congestion comparison showing travel time for 10 km distance across major Indian cities in 2024.*

- **Diagram:** *Distribution of registered vehicles in Bengaluru by type (two-wheelers, cars, buses, etc.).*

2) Poor Road Conditions

- **5,670 potholes** identified as of May 2024; **2,302** reported by August 2024 (only **155 fixed**).
- **South Zone (476 potholes)** and **Mahadevapura (465 potholes)** most affected.
- **Graph:** *Distribution of potholes across BBMP zones.*

3) Inadequate Pedestrian Infrastructure

- **Only 58%** of surveyed streets have walkable footpaths.
- **20%** of roads lack footpaths; **42%** of existing footpaths unwalkable.
- **279 out of 3,256 intersections (9%)** have usable pedestrian crossings.

3.2 Water and Environmental Issues

1) Water Crisis

- **Daily water requirement:** 2,600 million liters per day (MLD).
- **Supply:** Cauvery River (1,460 MLD), borewells (1,392 MLD).
- **6,997 out of 16,781 borewells** have dried up.
- **257 city pockets** affected, especially **Mahadevapura zone** (Bellandur, Whitefield, Varthur, Marathahalli).
- **Graph:** *Comparison of daily water requirement vs. actual supply from different sources.*

2) Air Pollution

- **Air Quality Index (AQI):** 59 (moderate).
- **PM2.5:** 13–18 $\mu\text{g}/\text{m}^3$; **PM10:** 53–56 $\mu\text{g}/\text{m}^3$.
- **Better than:** New Delhi (AQI 87–123), Mumbai (AQI 78), Kolkata (AQI 72–82).
- **Graph:** *Air quality comparison across major Indian cities.*

3.3 Waste Management and Sanitation

1) Solid Waste Generation

- **6,233 tonnes** of waste generated daily.
- **Projected to reach 13,911 tonnes** daily by 2031.
- **Composition:** 64% wet waste, 27% dry waste, 9% domestic hazardous/inert waste.
- **Graph:** *Projected waste composition for Bengaluru.*

2) Construction and Demolition Waste

- **1,500–2,000 tonnes** generated daily.
- **Seven new waste management sites** required within BBMP limits.

3.4 Housing and Social Issues

1) Slum Population and Housing Crisis

- **435 notified slums** in Bengaluru Urban.
- **Estimated 25–35%** of population lives in slums (official: 16.45%).
- **Slums increased from 473 (2003) to 597 (2013); 1.7 lakh households.**
- **Graph:** *Bengaluru's exponential population growth from 1949 to 2024.*

2) Rapid Population Growth

- **Population:** 750,000 (1949) to 14 million (2024).
- **Growth rate:** 47.18% (third most populous city in India).
- **Projected population:** 20.3 million by 2031 (124.4% increase from 2011).

3.5 Governance and Administrative Issues

1) Human Rights Violations

- **3,537 cases** reported in 2023–2024 (highest in Karnataka).
- **Increase from 1,515 (2023) to 2,022 (2024).**
- **Only 17 cases** received compensation recommendations.
- **Graph:** *Trend of human rights violation cases in Bengaluru Urban (2023–2024).*

2) Corruption

- **Previously ranked most corrupt city among 200 Indian cities.**
- **Revenue offices:** 259 bribe reports; property registration bribes: ₹5,000–₹20,000.

4. Proposed Solutions and Recommendations

The following recommendations respond directly to each civic issue documented above. They combine immediate corrective measures with structural, long-term reforms, and are anchored in policy instruments and infrastructure programmes already underway in Bengaluru- so that every problem identified is matched with a credible, evidence-based pathway to resolution.

4.1 Infrastructure and Urban Planning Solutions

1) Traffic Congestion and Road Infrastructure

- Accelerate mass transit: fast-track **Namma Metro Phase 3** (44.65 km, 31 stations, ₹15,611 crore) and the **Bengaluru Suburban Rail Project (K-RIDE)** to shift commuters off private vehicles.
- Induct **5,000 electric buses** under the PM E-DRIVE scheme and expand BMTC frequency with dedicated **bus-priority lanes** on high-density corridors (ORR, Whitefield, Electronic City).
- Deploy **AI-based adaptive signal control** and an integrated traffic command-and-control centre; stagger office hours in IT corridors to flatten the 68% peak-hour congestion.
- Enable **multimodal integration** (metro + bus + feeder + cycle) through a single mobility card and guaranteed last-mile connectivity.
- Curb the 2,000 daily vehicle additions via **parking-pricing reform**, low-emission zones, and structured incentives for carpooling and hybrid work.

2) Poor Road Conditions

- Adopt the **TenderSURE model** of engineered, utility-integrated roads with defined-life contracts and enforceable contractor accountability.
- Launch a **geo-tagged pothole-tracking app** with a public dashboard and a time-bound repair SLA (48–72 hours), backed by penalties for non-compliance.

- Shift arterial roads to durable **white-topping/concretisation** with mandatory multi-year defect-liability warranties.
- Create a **unified road-cutting coordination cell** so BWSSB, BESCOM and OFC works no longer repeatedly damage resurfaced roads.

3) Inadequate Pedestrian Infrastructure

- Enforce the **DULT Pedestrian Policy**: continuous, unobstructed, minimum-width footpaths on all arterial and sub-arterial roads, raising walkable coverage from 58% toward universal access.
- Build safe, signalised and table-top **pedestrian crossings** across the 3,256 intersections, prioritising the 91% that currently lack usable crossings.
- Mandate **universal-access (Divyangjan-friendly) design** and clear encroachments through ward-level enforcement.
- Expand **non-motorised-transport (NMT) and cycle networks** integrated with transit stations.

4.2 Water and Environmental Solutions

1) Water Crisis

- Complete and extend the **Cauvery Water Supply Scheme Stage V** (₹4,336 crore, JICA-funded) to deliver additional treated water to peripheral zones, including the worst-hit Mahadevapura area.
- Mandate and audit **rainwater harvesting** on all buildings and recharge the 6,997 dried borewells through structured aquifer recharge.
- Scale **treated-wastewater reuse**: route STP output to industrial, construction and lake-filling demand to reduce pressure on freshwater sources.
- Rejuvenate **lakes and rajakaluves (storm-water drains)** to recharge groundwater and simultaneously mitigate the flooding that accompanies scarcity.
- Cut **Non-Revenue Water** (leakage and theft) through universal metering, pressure management and pipeline modernisation.

2) Air Pollution

- Preserve the moderate AQI (59) by expanding the **electric-bus fleet**, phasing out end-of-life diesel vehicles, and strictly enforcing construction-dust norms.
- Expand the real-time **CAAQMS monitoring network** and plant green buffers along high-traffic corridors.
- Promote **urban afforestation (Miyawaki forests)** and protect existing tree cover during infrastructure works.

4.3 Waste Management and Sanitation Solutions

1) Solid Waste Generation

- Enforce **100% source segregation** with decentralised, ward-level composting and biomethanation — essential given that 64% of waste is wet.
- Scale **waste-to-energy and material-recovery facilities** to handle the projected doubling to 13,911 tonnes per day by 2031.
- Strengthen **Extended Producer Responsibility (EPR)** for plastics and formally integrate informal waste-pickers into the collection chain.

- Deploy **GPS-tracked collection** and transparent tipping-fee contracts with citizen grievance dashboards to curb illegal dumping.

2) Construction and Demolition Waste

- Operationalise the seven required **C&D processing plants** and mandate the use of recycled aggregates in public works.
- Enforce the **C&D Waste Management Rules, 2016**, with on-site segregation, licensed haulage, and penalties for dumping in lakes and drains.

4.4 Housing and Social Solutions

1) Slum Population and Housing Crisis

- Scale affordable and **in-situ slum redevelopment under PMAY-U 2.0** with secure land tenure and full basic services.
- Integrate slum households into **water, sanitation and electricity grids** — upgrade in place rather than displace.
- Create a transparent **beneficiary database and rental-housing stock** for the city's large migrant workforce.

2) Rapid Population Growth

- Adopt **polycentric, transit-oriented development (TOD)** to decongest the core and distribute growth along transit corridors.
- Strengthen **Bengaluru Metropolitan Region and satellite-town / STRR** planning to absorb projected growth to 20.3 million by 2031.
- Align the **Revised Master Plan 2031** with phased infrastructure delivery so services scale with population.

4.5 Governance and Administrative Solutions

1) Restoring Local Democracy and Coordination

- Conduct the long-overdue civic elections and operationalise the **Greater Bengaluru Governance Act, 2024** — five City Corporations under a single Greater Bengaluru Authority (GBA) for coordinated service delivery.
- Empower **Ward Committees and Area Sabhas** for participatory, grassroots governance consistent with the 74th Constitutional Amendment.
- Bring parastatals (**BWSSB, BESCOM, BMTC, BMRCL**) under GBA coordination to end the fragmentation between civic agencies.

2) Human Rights Violations

- Strengthen the **Karnataka State Human Rights Commission** with faster case disposal, adequate staffing, and time-bound compensation — against only 17 compensation recommendations in 3,537 cases.
- Institute **independent police oversight**, custodial-safety audits, and transparent public reporting.

3) Corruption

- Digitise and fully automate revenue and property services (**Kaveri 2.0, e-Khata**) to remove discretionary human interfaces that enable bribery.

- Enforce the **Karnataka Sakala (guaranteed services) Act** with penalties for delay, and strengthen the Lokayukta and Anti-Corruption Bureau.
- Publish **open budgets, e-tendering and social audits** to enable citizen oversight.

Taken together, these interventions form a phased roadmap: **immediate** fixes (pothole SLAs, source segregation, election notification), **medium-term** build-outs (Metro Phase 3, Cauvery Stage V, C&D plants), and **structural** reforms (GBA operationalisation, TOD-based master planning). Sustained impact depends on evidence-based resource allocation and statistical monitoring systems that track progress across every intervention area.

5. Brief Project Report

Aim/Objective

To analyze and document the multifaceted civic issues affecting Bengaluru through comprehensive data analysis, evaluate their quantitative impact on quality of life, and understand the systemic challenges hindering effective urban governance in India's rapidly growing IT capital.

Procedure

- **Statistical analysis** of recent government reports and civic body performance data.
- **Quantitative review** of citizen grievance records and public complaints.
- **Comprehensive examination** of infrastructure assessment reports and surveys.
- **Analysis of governance reform initiatives** including population and vehicle growth trends.

Methodology

- **Quantitative Analysis:** Statistical evaluation of traffic congestion metrics, water supply/demand ratios, waste generation projections, vehicle registration trends, and infrastructure deficits using official data sources.
- **Comparative Analysis:** Benchmarking against national urban governance standards and inter-city comparisons for air quality and traffic congestion.
- **Temporal Analysis:** Historical trend analysis of population growth, slum expansion, and human rights violations over multiple decades.

Data Collection

Primary Quantitative Sources:

- TomTom Traffic Index 2024
- BBMP infrastructure surveys
- Karnataka State Human Rights Commission records
- Transport Department vehicle registration databases

Secondary Statistical Sources:

- Bangalore Water Supply and Sewerage Board data
- Air quality monitoring data
- Masterplan 2031 waste generation projections
- Census and demographic studies on slum populations

Discussion

- Exponential Unplanned Urbanization:** Population explosion from 750,000 (1949) to 14 million (2024) without proportional infrastructure development.
- Vehicle Growth Crisis:** Daily addition of 2,000 vehicles; vehicle density: 823 per km; 34-minute travel time for 10 km.
- Infrastructure Deficit:** Only 58% of roads have walkable footpaths; 5,670+ potholes; 50% reduction in water input capacity.
- Governance Scale Mismatch:** Single municipal corporation managing 14 million people across 435 slums; rising human rights violations (33% increase from 2023 to 2024).
- Critical Impacts:**
 - **Economic:** Traffic congestion causes 117 hours lost annually per commuter.
 - **Environmental:** Water shortage of 252 MLD daily.
 - **Social:** 25–35% of population in substandard slum conditions.
 - **Health:** Moderate air quality (AQI 59), though better than national average.

6. Conclusion

Statistical analysis reveals that Bengaluru faces unprecedented urban challenges stemming from rapid demographic transition without adequate infrastructure scaling. The city's growth trajectory from 750,000 to 14 million residents over 75 years has created systemic stress across all civic domains.

Key Quantified Findings:

- **Traffic congestion:** 3rd globally; 34-minute travel time for 10 km.
- **Vehicle density:** 823 per km; 2,000 daily additions.
- **Water deficit:** 252 MLD against requirement of 2,600 MLD.
- **Infrastructure backlog:** 5,670+ potholes; 42% unwalkable footpaths.
- **Waste generation:** Projected to double from 6,233 to 13,911 tonnes daily by 2031.

Evidence-Based Priority Interventions:

- **Traffic Management:** Immediate intervention required given annual increase in travel times.
- **Water Security:** Addressing 50% reduction in borewell capacity affecting 257 city pockets.
- **Infrastructure Repair:** Systematic pothole filling program targeting 2,302+ identified locations.
- **Pedestrian Safety:** Expanding walkable footpath coverage from current 58% to universal access.

The comprehensive data analysis confirms that addressing Bengaluru's civic challenges requires evidence-based resource allocation, with statistical monitoring systems to track progress across all intervention areas.

7. Graphs and Diagrams

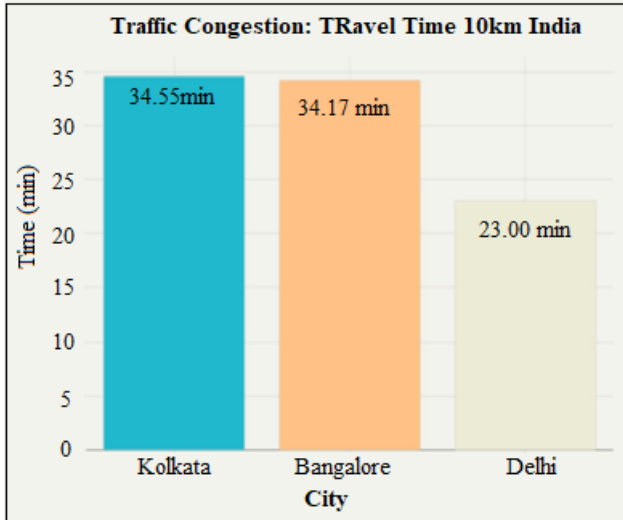
Below are descriptions and suggested formats for each graph/diagram. In your Word document, use the "Insert Chart" or "Insert Picture" feature to add these visuals.

1) Traffic Congestion Comparison

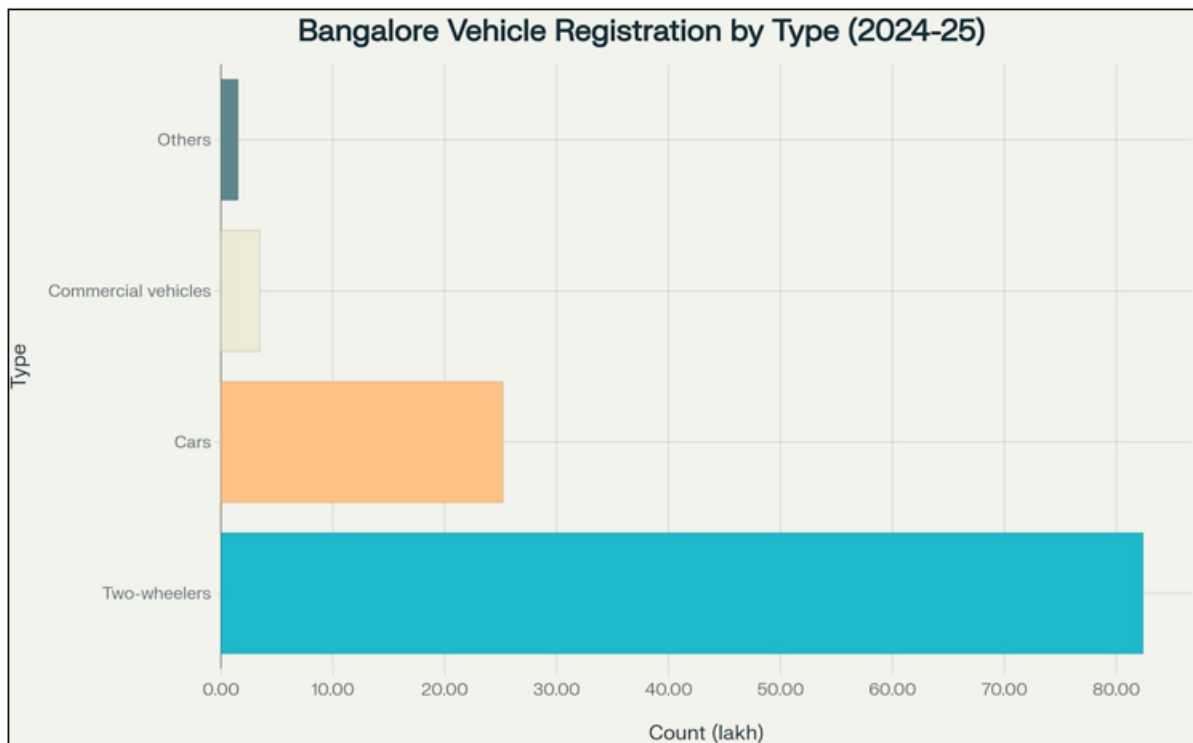
City	Travel Time (min)
Bengaluru	34.2
Delhi	[No data]
Mumbai	[No data]
Kolkata	34.5
Chennai	[No data]

2) Distribution of Registered Vehicles

Vehicle Type	Percentage
Two-wheelers	70%
Cars	25%
Buses	3%
Others	2%



Source: TomTom Traffic Index 2024

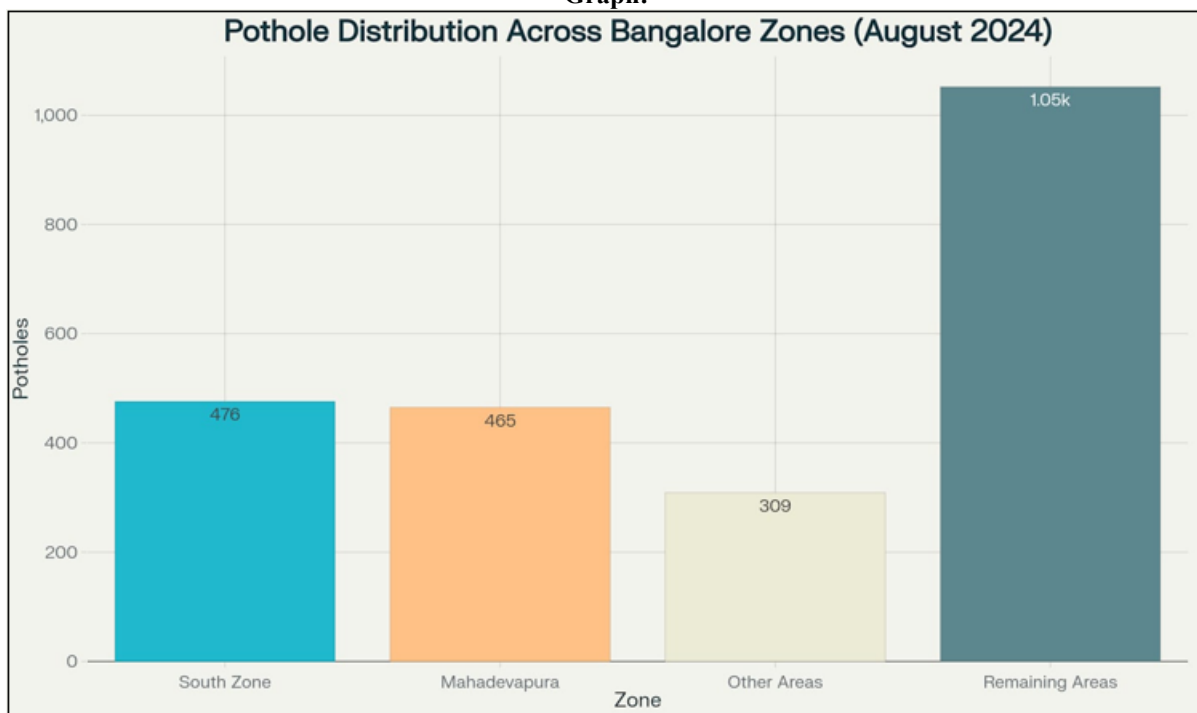


Source: Transport Department data

3) Distribution of Potholes Across BBMP Zones

Zone	Potholes
South Zone	476
Mahadevapura	465
East	[No data]
West	[No data]

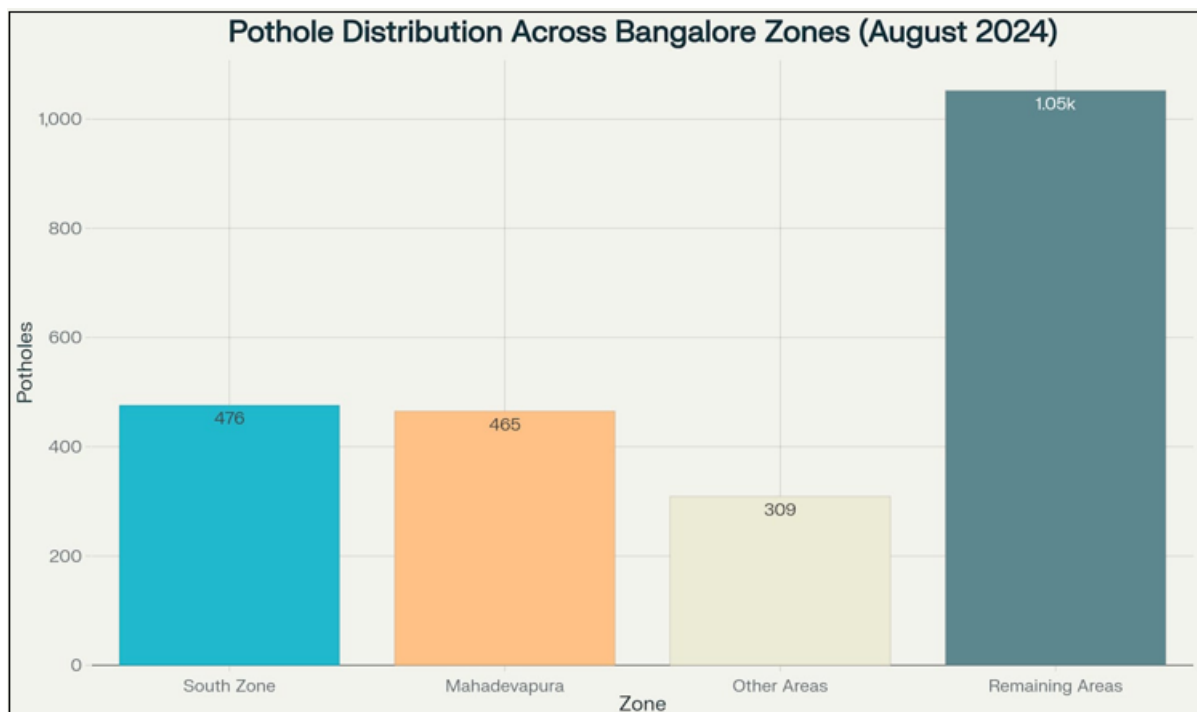
Graph:



Source: BBMP infrastructure survey

4) Water Requirement vs. Supply

Source Supply	(MLD)
Cauvery River	1,460
Borewells	1,392
Total Supply	2,852
Requirement	2,600



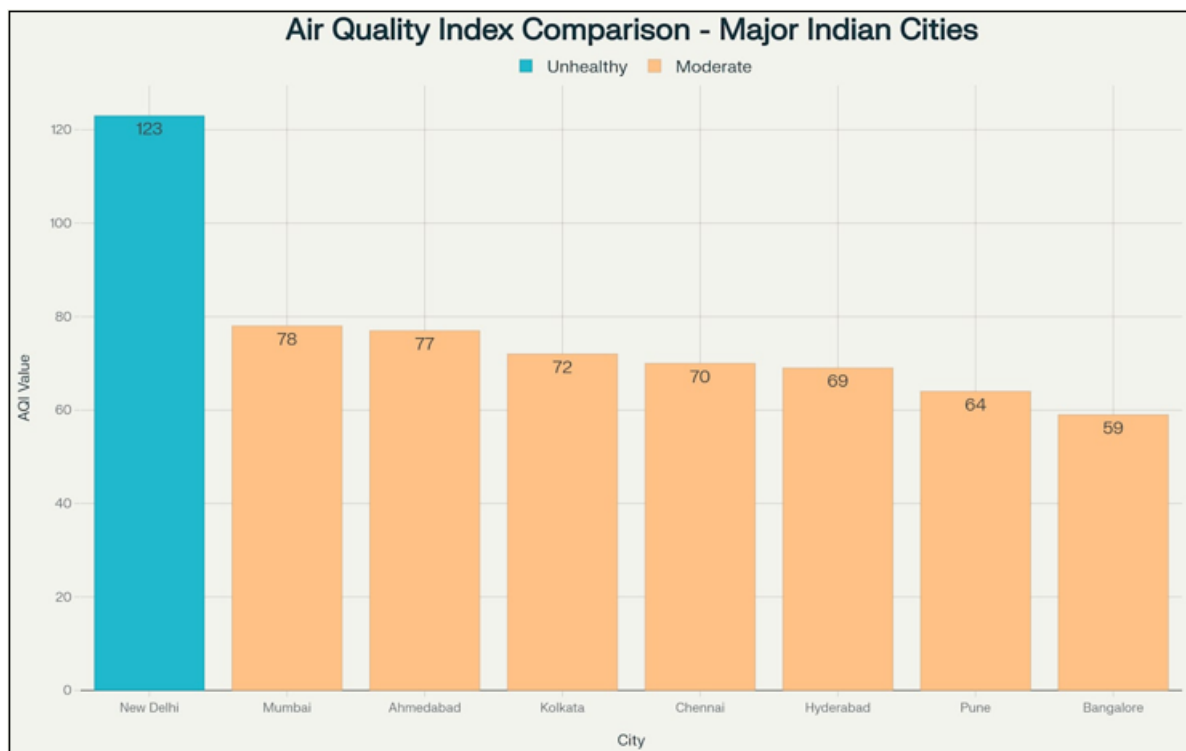
5) Air Quality Comparison

City	Population
Bengaluru	59
Delhi	87- 123
Mumbai	78
Kolkata	72- 82

Volume 15 Issue 9, September 2026

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

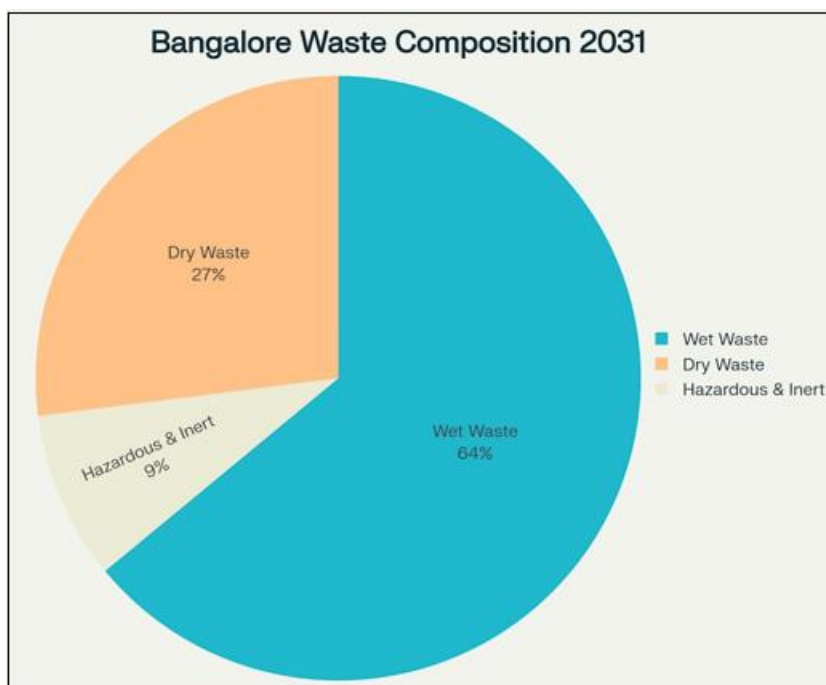
www.ijsr.net



Source: AQI.in

6) Projected Waste Composition

Waste Type	Percentage
Wet Waste	64%
Dry Waste	27%
Hazardous/ Inert	9%



Source: Bangalore Masterplan 2031

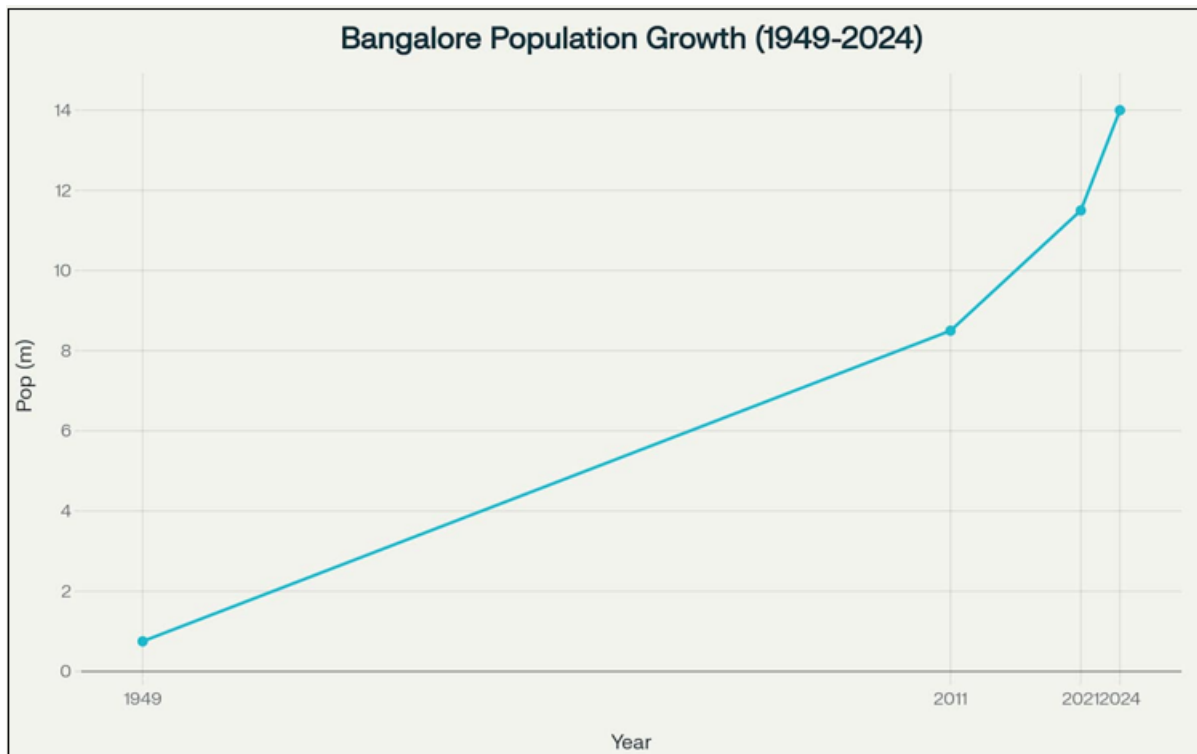
7) Population Growth (1949–2024)

Year	Population
1949	0.75 million
2001	[No data]
2011	[No data]
2024	14 million

Volume 15 Issue 9, September 2026

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

www.ijsr.net

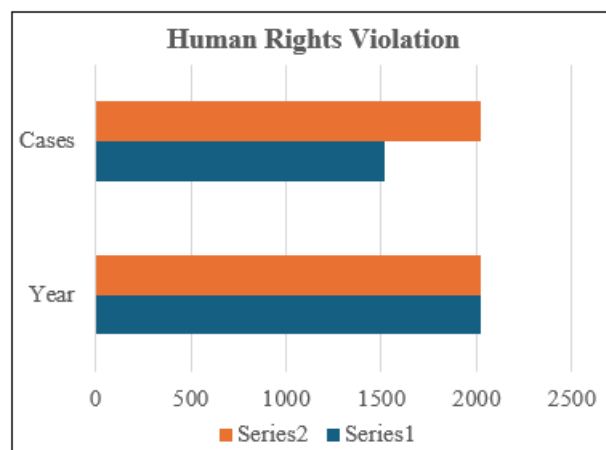


Source: Census data

8) Human Rights Violation Cases

Graph: Bar chart showing the number of human rights violation cases in Bengaluru Urban for 2023 and 2024.

Year	Cases
2023	1,515
2024	2,022



Source: Karnataka State Human Rights Commission

References

- [1] TomTom. (2024). TomTom Traffic Index 2024 – Bengaluru. TomTom International BV.
- [2] Transport Department, Government of Karnataka. (2024–25). Vehicle Registration Statistics. Bengaluru.
- [3] Bruhat Bengaluru Mahanagara Palike (BBMP). (2024). Infrastructure and Pothole Survey Reports. BBMP, Bengaluru.
- [4] Directorate of Urban Land Transport (DULT), Government of Karnataka. Pedestrian Infrastructure and Footpath Assessment; Pedestrian Policy. Bengaluru.
- [5] Bangalore Water Supply and Sewerage Board (BWSSB). (2024–25). Water Supply and Demand Data; Cauvery Water Supply Scheme Stage V. Bengaluru.
- [6] AQI.in – Air Quality Monitoring Data for Bengaluru and Comparative Indian Cities. (2024).
- [7] Bangalore Development Authority (BDA). Revised Master Plan 2031 – Solid Waste Generation Projections. Bengaluru.
- [8] Census of India / Directorate of Census Operations, Karnataka. Population and Slum Demographic Data (1949–2024).
- [9] Karnataka State Human Rights Commission (KSHRC). (2023–24). Annual Records of Human Rights Violation Cases. Bengaluru.
- [10] Government of Karnataka. (2024). The Greater Bengaluru Governance Act, 2024 (Karnataka Act No. 36 of 2025). Karnataka Gazette; PRS Legislative Research summary.
- [11] Bangalore Metro Rail Corporation Limited (BMRCL) / Press Information Bureau. (2024). Namma Metro Phase 3 – Union Cabinet Approval (44.65 km, 31 stations).
- [12] Railway Infrastructure Development Company Karnataka (K-RIDE). Bengaluru Suburban Rail Project (BSRP).
- [13] Ministry of Heavy Industries, Government of India. PM E-DRIVE Scheme – Electric Bus Procurement for Bengaluru.
- [14] Ministry of Environment, Forest and Climate Change. Solid Waste Management Rules, 2016 and Construction & Demolition Waste Management Rules, 2016.

- [15] Ministry of Housing and Urban Affairs. Pradhan Mantri Awas Yojana– Urban (PMAY-U). Government of India.
- [16] Government of Karnataka. Karnataka Sakala Services Act, 2011 – Guaranteed Delivery of Services to Citizens.