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# Driving India's Economic Future: The Role of Urban Growth Hubs and Global Best Practices

## CHAPTER 1: INTRODUCTION

14 Urban growth hubs are key for India's economic growth. 60% to 70% of  
15 India's GDP is generated by these urban cities, highlighting their  
16 significance. Tier 2 and Tier 3 cities account for 40% of India's GDP, with  
17 improving connectivity and infrastructure, and are estimated to increase  
18 their share in the coming years. Despite this, challenges remain to  
19 achieving inclusive and sustainable growth in infrastructure and  
20 urbanization, including social equality, governance, environmental  
21 sustainability, and infrastructure deficiencies.

22 Urban dynamism is a result of multiple interconnected factors. "Thick  
23 labor markets" have grown due to the concentration of skilled and  
24 unskilled labor in urban areas. This has increased income levels,  
25 decreased staffing delays, and improved productivity. Bengaluru, for  
26 example, is now the center of India's USD 150 billion tech industry,  
27 which contributes almost 10% of the nation's GDP and serves as an  
28 example of how urban centers can support national economic goals.  
29 Similarly, urban agglomerations and satellite cities like Noida and

30 Greater Noida in the Delhi NCR have developed into industrial hubs that  
31 have a positive economic impact on the surrounding areas.

32 Other major factors accelerating India's urban growth hubs are  
33 knowledge and innovation ecosystems. Cities like Pune, Hyderabad, and  
34 Chennai are investing in, developing, and growing vibrant clusters of  
35 research, development, and entrepreneurship. Hyderabad's Genome  
36 Valley stands out as a global leader in life sciences, serving as a model  
37 case study. These hubs attract investments and funding, foster startups,  
38 and support the development of future-ready industries, making India a  
39 competitive player in the global knowledge economy.

40 Metros, Tier 2 cities, and Tier 3 towns are evolving into growth engines  
41 as they provide industrial infrastructure and a workforce, promote an  
42 entrepreneurial ecosystem, and offer platforms for the exchange of  
43 information and knowledge, thereby accelerating technological  
44 advancement, job creation, and growth in service sector verticals.  
45 Together they contribute to more than half of the country's GDP.

46 Governance planning, smart city projects, infrastructure, and urban  
47 planning require attention, and global best practices should be adopted  
48 based on local requirements to make Indian cities competitive,  
49 sustainable, livable, and financially attractive. Singapore's integrated  
50 public transport system, European cities' sustainable urban planning,  
51 Silicon Valley's innovation systems, and Japan's inclusive growth  
52 strategies can be studied and implemented to boost economic activities  
53 and efficiency.

54 Infrastructure development is undoubtedly a key enabler for urban-led  
55 growth. Investments and developments in metro systems, expressways,  
56 and smart city projects are transforming urban mobility, reducing  
57 congestion, and improving logistics and supply chains. The Union Budget  
58 2024-25 has formulated a concept for urban growth, allocating  
59 substantial resources to facilitate infrastructure, water management,  
60 and sustainable development. It aims to decentralize urbanization,  
61 unlocking the potential of underutilized cities and enhancing social  
62 equality.

63 **This research report highlights:**

64 (a) A strategic approach is needed for multiple layers of growth.

65 (b) Establishing systems for policy frameworks and innovative financing  
66 mechanisms is essential.

67 (c) The real estate sector is a direct beneficiary and a key enabler of  
68 urbanization that also acts as a catalyst in sustainable, inclusive, and  
69 resilient urban growth.

70 (d) Proactive efforts in eco-friendly building practices, ESG, affordable  
71 housing solutions, and Public Private Partnership (PPP) models are  
72 essential to reduce funding gaps.

73 Indian cities have their own share of challenges and roadblocks. Learning  
74 from international best practices is essential to overcome these  
75 challenges. Striking a balance between economic prosperity,  
76 sustainability, inclusivity, and a strong governance system is the true  
77 essence of urbanization. By strategically investing in infrastructure,  
78 innovation, and human capital, India can ensure that its cities not only  
79 drive national prosperity but also establish global standards for inclusive  
80 and sustainable urbanization.

81

## 82 **CHAPTER 2: CURRENT SCENARIO AND ISSUES**

83 India is witnessing rapid urbanization. Estimates suggest that by 2050, 50%  
84 of the total population, an estimated 850 million people, will be living in  
85 cities. This demographic shift presents its own share of opportunities  
86 and challenges. Urban centers are seen as engines of economic growth,  
87 yet issues related to unplanned expansion, infrastructure gaps, and  
88 financial constraints cannot be overlooked.

### 89 **Trends in Urbanization:**

- 90 ➤ According to the 2011 Census, India's urban population stood at 31%.  
91 This marked a notable increase in urban areas for the first time since  
92 independence. In 1970, the urban population in India was 109  
93 million; by 2018, it had reached 460 million. This fourfold increase  
94 demonstrates exponential growth.
- 95 ➤ The period 2020-2021 saw a 34.9% urban migration rate. This  
96 indicates a significant demographic shift toward urban centers.

97 ➤ Some projections indicate an additional 416 million people will be  
98 added to Indian cities by 2050. This would make the urban share of  
99 the population 50%.

100 ➤ More recent data and studies confirm this trend of a growing urban  
101 population, with India's urban population standing at 518 million (36%  
102 of the total population) in 2023, rising to 530 million (36.6%) in 2024,  
103 and projected to reach 542 million (37.1%) by 2025.

104 ➤ The Economic Survey 2023-24 estimates that over 40% of India's  
105 population will reside in urban areas by 2030.

106 ➤ These rapid demographic expansion trends underscore the immense  
107 pressure and opportunity for urban infrastructure, housing, the  
108 environment, and social equality.

109 One noteworthy finding in these demographic changes is the complex  
110 picture of migration. The urban population is still growing, even as the  
111 Economic Advisory Council to the Prime Minister (EAC-PM) reports a  
112 slowdown in domestic migration, with rates of 11.78% in 2011 and 28.88%  
113 in 2023. An analysis of migrant characteristics can help to understand  
114 these differences. Improved conditions and opportunities in hometowns  
115 may be a factor in the slowdown of domestic migration. Rural-to-urban  
116 migration recovered since Covid-19, as rural regions struggled to provide  
117 employment opportunities for the labor force and an adequate quality  
118 of life. This indicates that cities will continue to attract migration from  
119 small towns and rural areas, as individuals seek access to jobs and social  
120 benefits. The real estate industry should be prepared to meet the  
121 demand for housing, urban infrastructure, and other relevant services.

122 The large-scale availability of manufacturing and service sectors in urban  
123 areas is a primary factor in their economic prosperity. Manufacturing  
124 and service sectors are considered critical enablers of economic  
125 dynamism. They account for a major share of employment in large cities  
126 compared to small cities and rural areas. This also leads to a higher share  
127 of regular, salaried workers in larger cities, offering opportunities for  
128 stable and higher-paying employment. This human resource  
129 environment creates a powerful economic engine that fuels demand  
130 across various sectors, including real estate.

131 **Challenges:**

132 Despite their immense economic potential, India's urban growth hubs  
133 face a set of complex challenges that threaten their sustainable

134 development and livability. These issues range from rapid, unplanned  
135 expansion to critical infrastructure deficits and significant environmental  
136 and social pressures.

137 (a) **Unplanned Urban Growth:** Migration has led to the expansion of  
138 informal settlements, encroachment and strain on the existing  
139 infrastructure.

140 Widespread unplanned growth and urban sprawl are a result of the  
141 uncertain pace of urbanization in India that exceeds the capacity for  
142 planned development. Cities like Gurugram substantiate this as  
143 haphazard expansion caused inefficient land use and an increased  
144 dependency on private transport, leading to congestion and pollution. A  
145 major portion of India's urban population stays in informal settlements  
146 and slums that lack basic infra and essential services causing social  
147 inequality of marginalization and exclusion from formal urban planning.

148 As per MOSPI (Ministry of Statistics and Programme Implementation)  
149 and Census 2011-12 reports, urban migration is growing, with millions  
150 moving to cities annually in search of better livelihoods. This is creating  
151 an immense pressure on existing urban infrastructure and services.

152 Slums and unplanned sprawl create roadblocks for the real estate sector.  
153 It highlights a major unmet demand for affordable, planned housing  
154 solutions. It pressurizes them to choose complex urban redevelopment  
155 projects that must be economic and also socially equitable. The  
156 traditional encroachment and slums on the outskirts of a city approach  
157 has proven expensive and unsustainable, leading to urban sprawl,  
158 diverting integrated growth. This highlights the need for a shift towards  
159 "infill" projects and the development of new, well-planned growth  
160 centers in and around existing urban areas. Strategic planning of  
161 sustainable and valuable urban planning is essential for inclusive growth.  
162 Real estate companies must solve tricky social issues like the  
163 displacement of rural residents coming from agricultural land being  
164 converted for urban development. A sensitive approach to development  
165 that prioritizes inclusive growth and minimizes negative social impacts is  
166 vital for planning and execution.

167 (b) **Infrastructure Gaps:** Deficiencies in water supply, sanitation,  
168 transportation, and housing are prevalent.

169 India's urban centres have to deal with substantial infrastructure deficits  
170 on critical major points of transportation, energy, water and  
171 environment. Despite considerable investments in urban transport  
172 projects like metros they lack integration with broader aspects of urban  
173 development. This lack of coordinated planning doesn't reach the  
174 potential of efficiency, resources and administration. Increased land  
175 value around transit hubs creates another barrier for sustainable urban  
176 financing.

177 Increasing volumes of vehicles has been causing severe traffic  
178 congestions and degrading air quality in major cities like Delhi, Mumbai,  
179 Bengaluru, Pune among others. Unchecked urban expansion in cities like  
180 Bengaluru has resulted in the loss of lakes and green spaces leading to  
181 frequent flooding and urban heat island effect thereby damaging the  
182 environment. This negatively impacts the quality of life and long-term  
183 sustainability.

184 Outdated administrative practices and governance have worsened the  
185 infrastructure gaps. Covid-19 pandemic showed us a mirror in our  
186 inability to manage emergencies effectively. Structural reform is a  
187 necessity. Political and administrative operations cause delays in the  
188 implementation of urban development projects. For example, Mumbai  
189 coastal road and metro expansion projects faced regulatory hurdles. For  
190 the real estate sector, this shows the unpredictability of project  
191 timelines, increased investment risks and delay in delivery. Developers  
192 must be aware of the current affairs and local insights of governance  
193 landscape. Developers can come together as a committee, council or  
194 think tank and support the reforms.

195 Government can positively leverage Land Value Capture (LVC) in the  
196 urban development process. Increase in the land value due to  
197 developments like metro, rail, parks, flyovers and other facilities can  
198 increase the value of residential and commercial properties in the  
199 neighborhood, without those citizens doing anything from their end. The  
200 government can collect some amount of tax from them that benefits all  
201 and helps the government raise funds for their urbanization projects.

202 **(c) Service Delivery Issues:** Urban Local Bodies (ULBs) often lack the  
203 capacity and resources to provide essential services effectively and Just-  
204 In-Time.

205 Urban infrastructure, including water, sanitation, transport, and housing,  
206 is often inadequate, especially in Tier II and III cities. Weak municipal  
207 capacity and outdated systems create roadblocks for effective service  
208 delivery.

209 For implementation of Amrut scheme projects, the central, state and the  
210 ULB need to pool in funds as per a given sharing formula. Six ULBs in  
211 Uttar Pradesh were asked to expedite work in Amrut 1.0 roll out in May  
212 2025. Ayodhya Municipal Corporation had been lagging behind in the  
213 schedule. The work is still progressing at grass root level, funds  
214 amounting to INR 90 crores have not been paid by the six ULBs as of  
215 May 2025. Considering the lack of funds, the state cabinet meeting  
216 reduced the share of ULBs having a population under 10 lakh and  
217 revised to remove the burden.

218 Other examples include, Nepanagar of Madhya Pradesh, served only 11  
219 of the towns of 24 wards of a INR 34.35 crore water project, causing  
220 uneven water distribution.

221 Under AMRUT 2.0, launched in 2021, to cover all 4,372 statutory towns  
222 across India, states and union territories (UTs) had 24 months to  
223 complete and take approval for their State Water Action Plans (SWAPs).  
224 As of now, INR 63,976.77 crore of the INR 66,750 crore allocated has  
225 been approved. Many states like Arunachal Pradesh, Chhattisgarh, Delhi,  
226 and Haryana still lack approval for more than 90% of their funds and  
227 have not completed their SWAPs. These delays stall critical water  
228 projects, hindering distribution, storage, and treatment upgrades.  
229 Consequently, millions are forced to depend on erratic and inefficient  
230 supplies amid leaky, ageing systems.

231 Shortage of staff is another reason leading to delay in service delivery.  
232 For example, in Pudukkottai, Tamil Nadu, only three operators were  
233 found managing canals that supply water to more than 160 irrigation  
234 tanks. This caused inequitable distribution, increased risk of water theft,  
235 and high service gaps.

236 **(d) Environmental and Social Pressures:** The rapid pace of urbanization  
237 in India has placed immense pressure on the environment and also  
238 expanded the existing social inequalities in urban settings. Urban  
239 expansion usually causes increased pollution, deforestation, soil erosion,  
240 and a significant loss of biodiversity as natural habitats are destroyed

241 and fragmented. Cities like Chennai, Bengaluru and Pune have witnessed  
242 the destruction of natural habitats due to their expansion.

243 Social inequalities grows in urban settings where slum dwellers often  
244 lack access to basic services contrasting a major city divide. Expansion of  
245 gated communities accelerates social inequality as it limits integration  
246 and understanding between different social groups. Cyclone Michaung  
247 2023 in Chennai observed how marginalized communities faced the  
248 environmental hazard.

249 Lack of adequate planning has led to congestion, slums, and  
250 environmental degradation in many cities.

251 The need for sustainable and inclusive urban development is not just an  
252 environmental and social responsibility but an integral tactic for long-  
253 term economic stability. This also influences the value and market  
254 demand for real estate. Environmental degradation causes health crises,  
255 reduces quality of life and inflates cost for healthcare and disaster  
256 management. If social inequality is not addressed it might create social  
257 unrest and limit the consumer demand for the real estate sector and  
258 reduce productive economic activity. Integrating ESG policies in business  
259 strategies with the framework and objectives of investing in green  
260 buildings and sustainable infrastructure and developing affordable,  
261 inclusive housing solutions are not just ethical choice and PR plan but  
262 also a strategic move for long-term success.

263 **(e) Skill Gaps and Employment:** India's demographic profile presents a  
264 unique opportunity, with a vast labor pool of 600 million and a median  
265 age of 29, indicating a potential demographic dividend expected to last  
266 for the next three decades. This potential has a major roadblock of a  
267 stark skills deficit. Only 20% of India's 600 million labor force is skilled, a  
268 major contrast to the global average of 80% in developed countries.

269 Skill gap is highly crucial considering the given pace of job roles evolution  
270 and transformation. Nearly 40% of current job roles are expected to be  
271 transformed by 2030. This highlights the high need of upskilling. The gap  
272 between the current skills and the evolving market demands of urban  
273 jobs can limit productivity and innovation in urban hubs, especially in the  
274 verticals of manufacturing and modern services. This impacts the long-  
275 term economic viability and demand for premium real estate. The  
276 concentration of businesses and high-paying jobs in cities cannot be

277 efficiently leveraged if the workforce lacks the desired skills. This causes  
278 inefficient use of resources. A skilled workforce enhances a city's overall  
279 economic activities, making it a desirable location for investment.

280 **(f) Financial gaps to fund city infrastructure:** A major roadblock to  
281 India's urban development aspirations is the substantial financial gap in  
282 infrastructure funding. The inherent limitations of municipal finances  
283 and the complexities of private sector involvement adds fuel to fire.

284 Urban areas currently contribute over 60% of India's Gross Domestic  
285 Product (GDP). However, they are only housing about 33.5% of the  
286 population. This share is projected to rise to nearly 75% by 2030. Cities  
287 are also critical for employment generation. Majorly in sectors like  
288 services and manufacturing. Gig economy has shown resilience and  
289 adaptability even during the pandemic and become an integral part.  
290 Urban centers offer diverse employment opportunities, attracting a  
291 workforce from rural regions. There is a direct correlation between  
292 urban population share and economic output. The economic dynamism  
293 is highly concentrated, with the top 50 cities alone accounting for nearly  
294 42% of the national GDP in FY 2022-23.

295 The need of required investment exceeds the gaps of the financial  
296 capacity of Urban Local Bodies (ULBs). Estimates suggest a multi-trillion-  
297 rupee gap for Urban infrastructure over the next two decades. ULBs  
298 struggle due to low tax collections, limited revenue-generating avenues,  
299 and dependence on state or central grants. India's urban infrastructure  
300 needs are immense, requiring an estimated annual INR 4.6 lakh crore.

301 Current investment meet only 27% of the total requirement with a mere  
302 INR 1.3 lakh crore. This represents a significant infrastructure financing  
303 gap that exceeds 5% of India's GDP thereby threatening the nation's goal  
304 of becoming a USD 30 trillion economy by 2047. KPMG further estimates  
305 that India needs to invest an unbelievable USD 1.2 trillion in capital  
306 expenditure by 2030 to meet its urban development demands.

307 The growth of cities create a sustained market demand for commercial  
308 spaces like officies, co-working space, tech parks, factories, warehouses,  
309 storage, etc , residential properties like homes, flats, societies, hostels,  
310 etc , retail infrastructure like malls, retail stores, supermarkets, etc and  
311 environmental places like gardens, lakes, ponds, etc.

312 The growth of IT industry in cities like Bengaluru, Hyderabad and Pune  
313 shows how innovation acts as a catalyst for drawing an employment  
314 pool. This trend of job creation is directly connected with the evolution  
315 of economic structures. The digital revolution in India with initiatives like  
316 'Aadhaar Card', Digital transactions through UPI, 'Digital India' is  
317 empowering Indians to bridge the urban-rural disparity and  
318 strengthening the role of cities as digital catalysts. The NDA  
319 government's significant investments in the 'IndiaAI Mission' with USD  
320 1.2 billion and 'sunrise technologies' USD 12 billion are indicative of a  
321 strategic preference for a knowledge-based economy. This tech  
322 advancement is estimated to transform nearly 40% of job roles by 2030  
323 which makes upskilling a necessity.

324 The shift towards an innovation-driven economy shows how significant  
325 urban centers are as a hub for intellectual capital and technological  
326 advancements. Tech-parks, co-working spaces, and integrated live-work-  
327 learn environments are an opportunity for real estate stakeholders as  
328 these infrastructures are essential to attract a skilled workforce for these  
329 innovation ecosystems.

### 330 **Why cities aren't able to fund infrastructure improvements?**

331 Poor planning and lack of institutional capacity limit the ability to design  
332 and implement bankable projects. Weak governance and outdated  
333 institutional frameworks hamper effective resource mobilization and  
334 project execution.

335 In 2023-24, the government's budget allocations for infrastructure  
336 increased to INR 10 lakh crore. This was essential as capital expenditure,  
337 including private investments grew 5.7 times in comparison to 2013-14  
338 to 2023-2 from INR 53,000 crore to INR 3.01 lakh crore, respectively. A  
339 major part of private capital remains largely untapped. This  
340 underutilization of private capital creates roadblocks for urban  
341 development goals. Institutional investors allocate only 6% of their funds  
342 to infrastructure with factors like long duration process, high capital  
343 requirements and an increase in public spending. This is not the only  
344 solution to bridge funding gap as it is a vast issue necessitating more  
345 effective mechanisms to attract and integrate private funding.

346 ULBs are the third tier of governance in India. They face financial  
347 constraints as a system. Roadblocks include political economy issues,

348 regulatory problems, dull track record of the municipal bond market and  
349 lack of grants and loans.

350 **Role of Quality Issues and Governance**

351 Effective governance, transparent institutions, and empowered ULBs are  
352 significant for sustainable urban growth. Benchmarking service delivery  
353 and creating accountability can drive improvements in public health,  
354 infrastructure, and economic development.

355 Property tax contributes only 0.17% of India's GDP. This highlights the  
356 reasons of undervaluation and ineffective administration. As of  
357 December 2022, only 164 out of 470 cities (35%) had investable credit  
358 rating.

359 ULBs are a victim of fiscal autonomy as organizations. State governments  
360 usually control the authority to levy taxes. Their dependency on State  
361 and Central transfers which increased from 37% to 44% of their total  
362 revenue, remains insufficient for sustainable financing. Own Source  
363 Revenues (OSR) are inefficient to cover revenue expenses further  
364 limiting their functional and financial independence. ULBs also lack  
365 modern financial practices, transparent accounting standards and lack of  
366 access to capital markets.

367

368 **CHAPTER 3: WAY-AHEAD: OPTIONS FOR SUSTAINABLE  
369 INFRASTRUCTURE**

370 It is essential for all the stakeholders to come together for a holistic  
371 growth. Government ministries, government bodies, private players, all  
372 communities, social workers and people from varying backgrounds can  
373 come together with their resources and skills and help in nation building.

374 PPP Public-Private-Partnership Model

375 PPPs have emerged as a key strategy to bridge the investment gap,  
376 supplementing public resources and bringing in private sector efficiency.  
377 Successful examples include metro rail projects, bus rapid transit  
378 systems, and urban road projects in cities like Chennai, Hyderabad, and

379 Mumbai. However, only 10% of PPP projects in India are in urban areas,  
380 mainly due to poor planning and low municipal capacity.

381 PPPs are a tried and tested mechanism to bridge India's infrastructure  
382 deficits by leveraging finance and expertise of corporate and  
383 government bodies. The government sees investments in infrastructure  
384 and productive capacity as having a big impact on growth and  
385 employment. Various PPP models are formulated and implemented,  
386 including Build Own Operate (BOO), Build Operate Transfer (BOT)-  
387 Annuity, Engineering Procurement and Construction (EPC), and the  
388 Hybrid Annuity Model (HAM) for the same. Successful PPP projects of  
389 the Mumbai Coastal Road Project and Delhi International Airport are a  
390 global case study showing private sector efficiencies and advanced  
391 technology. The National Infrastructure Pipeline (NIP) launched in 2020  
392 plans INR 111 lakh crore to be spent in the sector over five years, with a  
393 significant portion expected to be executed in BOT mode for high-speed  
394 corridors. The Ministry of Housing and Urban Affairs is also considering  
395 developing PPP project pipeline for urban land redevelopment.

396 PPPs have their own share of challenges as well. Regulatory issues,  
397 clearance delays, etc have caused a substantial budget increase in many  
398 infrastructure projects. Financial constraints exists due to high capital  
399 needs and major risks that lowers the confidence of private investors.  
400 Disputes are another barrier as there are no proper mechanisms for  
401 dispute resolution, as they are government-owned which reduces  
402 private players courage. Delhi airport metro failure has also created a  
403 skepticism among private players. To address these issues, PPP Project  
404 Review Committee, Adjudication Tribunal, independent auditors can be  
405 set-up to win investor confidence.

#### 406 Debt Financing and Municipal Bonds

407 To solve the funding gaps problem, innovative financing mechanisms are  
408 gaining popularity and acceptability, especially with municipal bonds and  
409 green bonds. Municipal bonds share a viable option for ULBs to access  
410 long-term debt from the capital market for urban infrastructure  
411 development. India's municipal bond market has been unpopular prior  
412 to 2017. From 2017 to 2024 there has been a spike in bond issues.  
413 According to ICRA it is estimated to cross INR 1,500 crore in 2025-26.  
414 These bonds provide benefits such as fixed liability, large upfront capital,

415 and long maturity periods (around 10 years), making repayments  
416 manageable.

417 Municipal green bonds have seen another acceptance among investors.  
418 Nearly 50% of recent municipal bonds have been categorized as green  
419 bonds for funding environment-related projects like water, solar, and  
420 energy-efficient infrastructure. Green-labelled bonds have shown lower  
421 borrowing costs, enhancing their attractiveness. The estimate potential  
422 for municipal green bonds in India is USD 2.5 to 6.9 billion in next 10  
423 years.

424 To fully unlock this potential, the Council on Energy, Environment and  
425 Water (CEEW) Green Finance Centre proposes the RISE framework:

426 **Reform:** Upgrade financial and accounting systems, and diversify own-  
427 revenue sources.

428 **Identify:** Identify and map infrastructure needs and assess  
429 borrowing/bond issuance potential.

430 **Strengthen:** Build internal capabilities in financial management and  
431 sustainability-linked planning.

432 **Engage:** Proactively collaborate with key stakeholders, including  
433 regulators, Development Finance Institutions (DFIs), investors, credit  
434 agencies, and public institutions.

435 Challenges of limited issuer base (only 25-30 ULBs meet SEBI's  
436 investment-grade criteria), weak revenue autonomy, illiquid secondary  
437 markets, high issuance costs, and the lack of tax-free status for modern  
438 municipal bonds, among others, remain in the process. Government  
439 schemes like AMRUT 2.0 which offers INR 13 crore for every INR 100  
440 crore raised and establishing digital platforms like CityFinance.in are  
441 bringing transparency and encouraging market growth. As a step, The  
442 National Bank for Financing Infrastructure and Development (NaBFID)  
443 was established in 2021. It is playing a crucial role, having sanctioned  
444 over USD 18 billion in loans and raised over USD 3 billion through bond  
445 issuance with long maturities, attracting institutional investors.

446 Need for Better Planning, Governance, and Institutional Structure

447 Urban reforms should focus on strengthening municipal finances,  
448 improving planning processes, and building institutional capacity. Key for  
449 sustainable and inclusive growth are integrated urban planning and  
450 robust governance frameworks.

451 The Government of India understands the role of urban development in  
452 the nation's economic future and has launched several ambitious  
453 policies and missions to accelerate this transformation. The Ministry of  
454 Housing and Urban Affairs (MoHUA) is the nodal agency for formulating  
455 policies, coordinating activities, and monitoring programs in urban  
456 development. Several flagship schemes are underway.

457 The government is actively working on policy reforms and fiscal  
458 incentives to strengthen urban development. The Union Budget 2023-24  
459 announced the establishment of an Urban Infrastructure Development  
460 Fund (UIDF), managed by the National Housing Bank, with an annual  
461 allocation of INR 10,000 crore for urban infrastructure development in  
462 Tier-2 and Tier-3 cities. This fund aims to support public agencies in  
463 these growing urban centers.

464 Cities are also being incentivized to improve their creditworthiness for  
465 municipal bonds through property tax reforms and eliminating user  
466 charges. MoHUA provides financial incentives to ULBs for issuing  
467 municipal bonds, reflecting a strategic push to diversify urban financing.  
468 States and cities are encouraged to undertake urban planning reforms  
469 with the aims of efficient land resource utilization, Transit-Oriented  
470 Development (TOD), and enhancing the availability and affordability of  
471 urban land. The government also aims for 100% mechanical desludging  
472 of septic tanks and sewers, alongside enhanced focus on scientific  
473 management of dry and wet waste.

474 **CHAPTER 4: BRICS**

475 Compared to other BRICS nations, Indian cities are below in per capita  
476 infrastructure investment and service delivery efficiency. Brazil and  
477 China have leveraged strong municipal governance and robust PPP  
478 frameworks to drive urban transformation, offering lessons for India.  
479 Brazil emphasizes inclusive participatory budgeting, allowing citizens to  
480 influence public spending. Russia focuses on smart city initiatives to  
481 enhance urban living standards. China invests heavily in urban

482 infrastructure, promoting rapid urbanization. South Africa implements  
 483 integrated development plans to address urban inequalities.

484 A comparative analysis of BRICS nations for Indian scenario:

Country	Urbanization Rate (Latest)	Key Urban Development Focus	Challenges	Key Strategies/ Initiatives	Learnings for India
India	36.6% (2024), 40% by 2030	Economic growth hubs, Smart Cities, affordable housing, sustainable infrastructure	Unplanned growth, infrastructure deficits, financial gaps, governance fragmentation, skills gap	Smart Cities Mission, AMRUT, PMAY-U, UIDF, Municipal Bonds, PPPs	Enhance ULB fiscal autonomy, integrated planning, climate resilience, private capital mobilization.
Brazil	Not specified (focus on climate action in cities)	Green and Resilient Model Cities, climate mitigation & adaptation, multi-level governance	Balancing urban development and sustainability, rising emissions	Green Resilient Model Cities Program (50 cities), AI for climate action, CHAMP (climate federalism), civic participation in planning	Strong emphasis on climate-conscious urban planning, data-driven decision-making, and fostering multi-level governance for climate action.
Russia	Not specified (focus on municipal infrastructure)	Modernizing municipal services, housing, social infrastructure, balanced regional development	Severe municipal infrastructure failures (deteriorated since Soviet era), insufficient private involvement, low/inflexible	National projects (schools, roads, hospitals), 4.5 trillion rouble modernization program by 2030, social guarantees	Proactive federal investment in basic services, but also highlights the risks of underinvestment and the need for private sector engagement and realistic tariff structures.
China	67% (end 2024), 75-80% by 2035	"New Urbanization" (people-centered), urban-rural coordination, green sustainable development	Real estate risks, local debt, export decline, consumer demand	Reclassifying rural hukou holders as urban, integrated urban-rural development, green building practices, public transport	Focus on human-centric development, balancing urban-rural growth, and leveraging green technologies for sustainable

				investment	urban expansion. Cautionary tale on real estate market risks.
South Africa	Not specified (focus on affordable housing)	Affordable housing in urban areas, urban densification, spatial transformation, economic inclusion	Urban sprawl, informal settlements, lack of basic services, historical spatial exclusion	"Infill" housing projects, research into housing demand/location, aligning housing with ESG guidelines, strengthening local governance	Prioritizing affordable housing within existing urban fabrics (densification) to stimulate local economies and address historical inequalities. Emphasizes evidence-based planning.

485 *The above table provides a comparative analysis on how BRICS nations*  
 486 *approach urban development, highlighting diverse strategies and shared*  
 487 *challenges. It is valuable for identifying potential policies, framework and*  
 488 *approaches for India.*

489 **Key Learnings for India**

490 From the comparative analysis of BRICS nations, multiple key points can  
 491 be noted:

492 *Climate-Conscious Urban Planning (Brazil):* Brazil's "Green Resilient  
 493 Model Cities Program" and its integration of "climate federalism" into its  
 494 National Determined Contributions (NDCs) shows a strong commitment  
 495 to climate action at the local level as well as in their administration and  
 496 policy making. India can adopt Brazil's priorities on technical support for  
 497 mitigation and adaptation projects, leveraging AI for data-driven climate  
 498 action, and developing multi-level governance for climate resilience. This  
 499 approach aligns with India's own focus and mission on climate-conscious  
 500 strategies in urban infrastructure.

501 *People-Centeric Urbanization and Urban-Rural Integration (China):*  
 502 China's "new urbanization" model, shifts from a land and investment-  
 503 driven approach to a people-centric one. With this China is focused on  
 504 quality of life, public services, and industrial upgrading, offering valuable  
 505 lessons. Its emphasis on urban-rural coordination and balanced regional

506 development provides a blueprint for addressing and solving regional  
507 social inequalities in India. Their ESG approach resonates and aligns with  
508 India's need to ensure that urban growth benefits all segments of society  
509 and reduces disparities.

510 *Addressing Infrastructure Deterioration and Private Sector Involvement*  
511 *(Russia):* Russia's major failures in municipal infrastructure, especially in  
512 heating and utilities, highlight the consequences of prolonged lack of  
513 investment and lack of involvement from private players. Russia has  
514 announced a massive modernization program. Still the roadblocks of low  
515 and inflexible municipal tariffs and limited private concessions exists.  
516 This offer a cautionary story for India. India must learn from Russia's  
517 failures and ensure that its PPP frameworks are robust, inclusive,  
518 transparent, tariffs are viable, and private capital is seriously incentive to  
519 participate in long-term urban infrastructure projects.

520 *Strategic Urban Densification and Affordable Housing (South Africa):*  
521 South Africa has strategically addressed the problems of affordable  
522 housing, social equality and economic inclusion with a focus on urban  
523 densification through "infill" projects. This eliminates sprawl, revives  
524 existing urban areas and creates local economic opportunities. India  
525 should make notes and implement this framework and approach, as  
526 India faces the issues of unplanned sprawl and informal settlements.  
527 Guidelines can be prepared for ESG and budgeting for the same to solve  
528 affordable housing demands.

529 The BRICS comparative analysis underscores the need for integrated,  
530 long-term urban planning that focuses on economic and social needs as  
531 well. Priorities on sustainability, effectively mobilizing diverse financing  
532 sources, including robust private sector participation and innovative  
533 municipal finance mechanisms should be met and implemented.

534

## 535 **CHAPTER 5: RELEVANT GOVERNMENT POLICIES IN** 536 **INDIA**

537 The NDA Government led by the visionary Prime Minister Shree  
538 Narendra Modi ji is working on multiple schemes and plans to solve  
539 issues on urbanization and sustainability. These programs emphasize

540 citizen participation, technology adoption, and innovative financing  
541 mechanisms.

542 **Smart Cities Mission (SCM):** This mission was launched in 2015 with an  
543 aim to develop 100 cities into citizen-friendly and sustainable urban  
544 centers through multi-sectoral projects. As of January 2024, 7,352 out of  
545 8,066 tendered projects (91%) worth INR 1,47,366 crore have been  
546 completed. Integrated Command and Control Centers (ICCCs) in all 100  
547 Smart Cities are a notable achievement of this mission. They have  
548 enhanced urban management across diverse fields like crime tracking,  
549 transport and waste management. This mission was allocated a budget  
550 of INR 14,100 crore and a further INR 16,000 crore in the 2023 Union  
551 Budget.

552 **Atal Mission for Rejuvenation and Urban Transformation (AMRUT):**  
553 This mission is planned to focus on improving basic urban infrastructure,  
554 including water supply, sewerage, stormwater drainage, urban transport,  
555 and green spaces. AMRUT's budget allocation for 2023-24 was INR 8,000  
556 crore.

557 **Pradhan Mantri Awas Yojana – Urban (PMAY-U):** This mission was  
558 planned with the focus on providing affordable housing. As of 2022,  
559 PMAY-U approved 1.08 crore houses and only 60% of the target was met.  
560 The 2023-24 budget allocation for PMAY-U saw a significant cut of 12.6%  
561 to INR 25,103 crore, because of a surge in expenditure in 2021-22.

562 **Swachh Bharat Mission – Urban (SBM-U):** This mission focuses on  
563 enhancing and solving sanitation and solid waste management. Under  
564 SBM-Urban 2.0, urban waste collection increased by 97% from 2014-15  
565 to 2024-25, and waste processing rose from 18% to 78% in the same  
566 period. The budget allocation for SBM (Urban) saw a substantial 150%  
567 increase to INR 5,000 crore in 2023-24.

568 **Deendayal Antyodaya Yojana – National Urban Livelihoods Mission  
569 (DAY-NULM):** This mission was launched to reduce poverty by providing  
570 skill development and self-employment opportunities for urban poor  
571 households. Its budget allocation for 2023-24 was a token amount of INR  
572 1 lakh, a drastic reduction from previous years.

573 Impact and implementation challenges:

574 While government initiatives demonstrate a strong commitment to  
575 urban transformation, implementation challenges remain as roadblocks.  
576 The Ministry of Housing and Urban Affairs has consistently faced issues  
577 with underutilization of allocated funds, a concern highlighted by the  
578 Standing Committee on Urban Development in 2021. This consistent  
579 underutilization can hamper the progress of key schemes and affect  
580 future fund allocations. Eg, the significant cut in PMAY-U allocation for  
581 2023-24, despite a surge in previous years, indicates adjustments based  
582 on utilization patterns.

583 The challenges grow with the capacity of ULBs and their inability to  
584 collect the desired revenues. This is a major reason for poor urban  
585 infrastructure. The dependency on ULBs on central and state transfers  
586 and weak fiscal autonomy limits their ability to independently fund and  
587 operate projects. This issue underscores the requirement for ULBs  
588 empowerment in terms of governance and financing to enable priority  
589 projects and generate their own revenues efficiently. The Prime Minister  
590 Narendra Modi's 2024 Independence Day address called upon city  
591 government authorities to implement at least two reforms annually,  
592 signaling a constant focus on improving urban governance at the local  
593 level.

594 Here is an observational analysis of the government schemes in the  
595 below table:

Scheme	Aim and Objectives	Achievements & Outcomes	Challenges	Overall Success
Smart Cities Mission	Make 100 Indian cities more livable, technology-driven, and citizen-friendly	<ul style="list-style-type: none"><li>- Over 8,000 projects worth ₹1.6 lakh crore launched</li><li>- 7,160 projects completed, rest nearing completion</li><li>- Improved urban services, digital solutions, and community engagement in 100 cities</li></ul>	<ul style="list-style-type: none"><li>- Some delays in project execution</li><li>- Variation in progress across cities</li></ul>	Most cities have seen visible improvements in infrastructure, cleanliness, and digital services. People in these cities generally report better quality of life.
Atal Mission for Rejuvenation and Urban	Improve basic urban services (water, sewerage, green	<ul style="list-style-type: none"><li>- 1.1 crore tap connections, 85 lakh sewer connections</li></ul>	<ul style="list-style-type: none"><li>- Project delays due to land, finance, and</li></ul>	Many cities now have better water and

<b>Transformation (AMRUT)</b>	spaces) in 500 cities	<p>provided</p> <ul style="list-style-type: none"> <li>- 1,820 parks developed; 1,700 flooding points fixed</li> <li>- AMRUT 2.0 aims for universal water supply in 4,378 towns</li> <li>- Improved health and quality of life</li> </ul>	<p>local capacity issues</p> <ul style="list-style-type: none"> <li>- Sustainability and coordination challenges</li> </ul>	sewerage services, but some projects are slow. Overall, life has improved for many urban residents <sup>345</sup> .
<b>Pradhan Mantri Awas Yojana – Urban (PMAY-U)</b>	“Housing for All” – Provide affordable pucca houses to urban poor	<ul style="list-style-type: none"> <li>- Millions of houses sanctioned and built for urban poor</li> <li>- Families now have permanent homes with basic facilities</li> <li>- Major improvement in living standards for beneficiaries</li> </ul>	<ul style="list-style-type: none"> <li>- Delays in some states</li> <li>- Land and funding issues in some cities</li> </ul>	Many poor families now own safe houses, reducing slums and improving dignity. Still, some waiting for houses due to delays.
<b>Swachh Bharat Mission – Urban</b>	Make cities clean and open defecation free	<ul style="list-style-type: none"> <li>- Most cities declared open defecation free</li> <li>- Large-scale toilet construction</li> <li>- Better waste management in many cities</li> </ul>	<ul style="list-style-type: none"> <li>- Waste segregation and processing still a challenge</li> <li>- Behavioural change takes time</li> </ul>	Cities look cleaner, more toilets are available, but garbage management still needs improvement in some places. People's habits are slowly changing.
<b>Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM)</b>	Reduce urban poverty by promoting self-employment and skill development	<ul style="list-style-type: none"> <li>- Lakhs of urban poor trained in skills</li> <li>- Many have started small businesses or</li> </ul>	<ul style="list-style-type: none"> <li>- Reaching the most vulnerable is still tough</li> <li>- Quality of</li> </ul>	Many urban poor now have better job skills and income opportunities, but more needs

		got jobs - Women's self-help groups strengthened	training varies	to be done to reach everyone and ensure good jobs.
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596 **Best Practices from Indian States and Cities:**

597 Examining specific urban development initiatives and their outcomes in  
598 Indian states and cities provides practical insights into effective  
599 strategies and persistent challenges. Gujarat and Chennai offer distinct  
600 examples of urban growth and transformation.

601 **Gujarat:**

602 The western state of India, Gujarat ranks first in urban PPP projects, with  
603 successful implementation in areas like urban transport and waste  
604 management.

605 **Key statistics:**

- 606 ● Gujarat stands out as one of India's most industrialized states  
607 boasting the highest industrial output. It accounted for 33% of all  
608 India's exports in 2022-23.
- 609 ● It's Gross State Domestic Product (GSDP) reached INR 25.68 lakh  
610 crore in FY 2023-24 and thus making it the third largest state  
611 economy in India.
- 612 ● This strong economic base, coupled with a high rate of urbanization  
613 (42.6% urban population in 2011, with significant urban growth in  
614 the last decade), attracts substantial migration, contributing to its  
615 urban dynamism.

616 Gujarat State Government has been proactive in its approach towards  
617 urban development. In 2025, under the Swarnim Jayanti Mukhyamantri  
618 Shaheri Vikas Yojna (SJMMSSVY) they allocated a budget of 2,204 crore  
619 INR and declared it as "Urban Development Year". This initiative aims to  
620 enhance urban infrastructure with major focus on roads, drainage  
621 systems, street lighting, sanitation, anganwadi centers, schools, libraries,  
622 etc. Another budget of INR 585.83 crore was approved for urban  
623 mobility, beautification, water supply and rainwater drainage. With this  
624 they also plan to introduce CNG-run public transport buses.

625 Key initiatives and their outcomes include:

626 Smart City Features: Cities like Vadodara utilize Integrated Command  
627 and Control Centers (ICCCs) for e-governance and resource management.  
628 Vadodara has over 400 strategically installed cameras aiding urban issue  
629 monitoring. Surat has pioneered the use of treated wastewater,  
630 generating INR 140 crore in FY 2022-23.

631 Sustainable Urban Development: Implementation of central government  
632 schemes like "Har Ghar Jal" (tap water supply), Swachh Bharat Mission  
633 (SBM), PMAY Urban, AMRUT, and Smart Cities Mission are driving  
634 sustainable practices. There is a strong focus on solar power, treated  
635 wastewater reuse, zero untreated waste disposal, and river/lake revival  
636 projects. In November 2024 a Waste-to-Energy plant was launched in  
637 Piplaj, Ahmedabad.

638 Citizen Engagement and Grievance Redressal: Gujarat government has  
639 established a dedicated 24x7 Citizen Complaint and Grievance Redressal  
640 Call Center, handling over 1,500 calls daily. It is supported by a  
641 customized complaint management system and mobile app. Over 4.5  
642 million complaints have been registered since its launch promoting  
643 transparency, accountability and citizen trust.

644 Affordable Housing and Slum Redevelopment: Gujarat is the first state to  
645 implement PPPs for in-situ slum redevelopment under PMAY (Urban).  
646 Their approach is to promote integrated solutions rather than  
647 displacement.

648 Despite its brilliant case study, challenges of delineation, limited capacity,  
649 limited resources for local authorities and disproportionate  
650 infrastructure demands act as roadblocks and need solutions. Gujarat's  
651 integrated approach, strong budget allocation and focus on sustainable  
652 and citizen-centric initiatives are a masterclass for other states.

653 Chennai:

654 Tamil Nadu's capital is notable for its IT corridor and outer ring road  
655 projects developed under PPP models. They demonstrate effective  
656 collaboration between public and private sectors. Chennai Smart City  
657 Limited focuses on smart energy, environment, mobility and technology  
658 to enhance urban living.

659 ● Chennai contributes 2.81% to India's national GDP. The city is  
660 actively engaged in strategic urban planning to shape its future as a  
661 global city.  
662 ● Its 3rd Master Plan expected by December 2025. This plan is  
663 evidence-based, incorporating 26 studies covering sustainable  
664 economic growth, spatial distribution of income and employment,  
665 land value, flood mapping, climate action, and blue-green  
666 infrastructure requirements.

667 Key initiatives and challenges in Chennai include:

668 Climate Action and Resilience: Chennai launched its first Climate Action  
669 Plan (CAP) in 2023 thereby becoming the second Indian city to have a  
670 Paris Agreement-aligned CAP. C40 Cities back this plan to focus on  
671 strengthening city financial capacity and developing bankable projects  
672 for climate adaptation. The Tamil Nadu Sustainable Urban Development  
673 Project, supported by the World Bank, has significantly improved urban  
674 service delivery for 2.8 million people across 30 urban areas. This  
675 included the construction of a first-of-its-kind wastewater treatment  
676 plant, 500 km of new stormwater drainage systems, and over 1,000 km  
677 of water supply pipelines.

678 Housing Shortage: Chennai faces a major housing shortage. It produces  
679 only 22,000-23,000 dwelling units annually. This is far below compared  
680 to cities like Hyderabad (80,000 units) and Mumbai (1.25 lakh units). To  
681 meet the growing demand, solutions include unlocking land potential,  
682 utilizing the Floor Space Index (FSI) tool, and providing processed land at  
683 cheaper rates to encourage affordable housing development. New  
684 growth centers in the city's outskirts are planned to ease the pressure  
685 on the core and divert urban sprawl.

686 Social Equity and Climate Vulnerability: Despite urban development  
687 efforts, vulnerable communities in Chennai continue to face significant  
688 challenges. Residents displaced from informal settlements struggle with  
689 a lack of basic amenities, long commutes, and neglect in urban planning.  
690 The city's vulnerability to climate hazards was starkly demonstrated  
691 during Cyclone Michaung in December 2023, which inundated parts of  
692 the city, including resettlement areas like Perumbakkam, for extended  
693 periods. Areas like Vyasarpadi and Ennore, despite protests, continue to  
694 face environmental burdens from industrialization and recurrent  
695 flooding.

696 Replicable Models and Unique Challenges:

697 Both Gujarat and Chennai offer valuable insights as a case study for  
698 other states and cities.

699 Reasons for Gujarat's success are its strong industrial backbone,  
700 proactive government funding, and integrated approach to smart city  
701 development and citizen services. Other states should adopt its  
702 pioneering use of PPPs for in-situ slum redevelopment and revenue  
703 generation from treated wastewater as they are highly replicable models.

704 Chennai's commitment to a Paris Agreement-aligned Climate Action Plan  
705 and its evidence-based master planning process are commendable and  
706 other cities can follow the same. Chennai's experience highlights the  
707 persistent roadblocks of ensuring social equity and climate resilience,  
708 particularly for vulnerable citizens. Overlooking displaced communities  
709 and the ongoing struggle with flooding and pollution in certain areas  
710 underscore the need for urban development to be truly inclusive and  
711 resilient along with economic focus.

712 This emphasizes that while economic growth is crucial, it must be  
713 balanced with robust social and environmental designs to create truly  
714 livable and sustainable urban environments.

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723 **CHAPTER 6: SUSTAINABLE URBANIZATION**

724 Sustainable urbanization needs to be designed considering the  
725 environmental support, resilient infrastructure and inclusivity. Cities  
726 must plan and implement green building standards, promote public  
727 transportation and enhance water and waste management systems for a  
728 long-term viability.

729 Green initiatives and climate resilience are a must for emphasizing  
730 sustainable infrastructure. Urban forestry, renewable energy adoption  
731 and sustainable waste management are crucial in planning and  
732 execution. Infrastructure must be designed to support environment and  
733 climate challenges for a long-term sustainability. The recently  
734 inaugurated Atal Bihari Vajpayee Sewri-Nhava Sheva Setu that cuts  
735 travel time from Mumbai to Navi Mumbai to 20 minutes (from 2 hours  
736 earlier) was built sustainably to ensure that there is minimum  
737 environmental impact. The development of the project was carried out  
738 while preserving important natural areas like mangroves and mudflats  
739 that are crucial for migratory birds. It is called 'responsible engineering'.

740 Similarly, green building is also a good example of bringing sustainability  
741 elements into regular development projects. Extending this a bit more,  
742 we also see environment sustainability becoming a part of large housing  
743 projects like Pradhan Mantri Awas Yojana, which is consciously  
744 incentivizing green housing development, with sub-components like  
745 energy efficiency, etc.

746 The Covid-19 lockdown in 2020 led to a mass migration of labour force  
747 back to rural. Odisha, one of the lagging state also witnessed this and a  
748 need for livelihood arises. Odisha State Government launched Urban  
749 Wage Employment Initiative. To this end, the state of Odisha planned a  
750 series of small but much-needed public works improvements and  
751 created a salary pool from resources drawn from ongoing national and  
752 state welfare schemes. In addition to mitigating the economic stress due  
753 to the pandemic of the impoverished urban labour force, the state  
754 government adopted the initiative as a long-term measure for poverty  
755 alleviation and implementation of labour-intensive public works  
756 designed to improve the quality of life and economic activity of the city  
757 region.

758 Leveraging innovative financing instruments like municipal bonds and  
759 green bonds is necessary for the positive results of sustainable  
760 urbanization. The potential for municipal green bonds is estimated at

761 USD 2.5 - 6.9 billion over the next 5 - 10 years. To realize this, the RISE  
762 framework should be widely adopted:

763 **Reform:** ULBs must upgrade financial and accounting systems and  
764 diversify their own-revenue sources to strengthen creditworthiness.

765 **Identify:** Cities need to map their infrastructure needs and accurately  
766 assess their borrowing potential for bankable projects.

767 **Strengthen:** Internal capabilities in financial management and  
768 sustainability-linked planning must be built within ULBs. Government  
769 incentives, such as those provided under AMRUT 2.0 for municipal bond  
770 issuance, should be continued and expanded, potentially with tax  
771 benefits and interest subsidies for green bonds.

772 **Engage:** Proactive collaboration with regulators, DFIs, investors, and  
773 credit agencies is necessary to navigate regulatory requirements and  
774 boost investor confidence. The Urban Infrastructure Development Fund  
775 (UIDF) for Tier-2 and Tier-3 cities is a positive step that needs sustained  
776 allocation and effective utilization.

777 Urban development must prioritize social equity and climate resilience  
778 to ensure long-term sustainability. To address both, social equality and  
779 climate resilience, challenging issues of informal settlements needs to be  
780 provided planned, affordable housing solutions and basic services,  
781 rather than planning displacement. Policies should encourage "infill"  
782 development within existing urban areas to reduce sprawl and maximize  
783 existing infrastructure, as seen in South Africa. Establishing green  
784 infrastructure funds in partnership with banks and private equity  
785 investors can provide low-interest loans for sustainable construction  
786 projects.

787 Technology is a key enabler for smarter, effective and more efficient  
788 urban management. The expansion of mass transit systems, including  
789 metro rail and Bus Rapid Transit (BRT), along with the promotion of non-  
790 motorized transport infrastructure like cycling lanes, can significantly  
791 reduce traffic congestion and carbon footprints. Implementing Mobility-  
792 as-a-Service (MaaS) platforms can offer seamless, interconnected  
793 transportation options. Digital Public Infrastructure (DPI) should be  
794 leveraged to modernize urban service delivery, utilizing digital tools for  
795 planning, execution, and monitoring. Data analytics and automation can

796 improve operational efficiency and citizen experience. The success of  
797 Integrated Command and Control Centers (ICCCs) in Smart Cities for  
798 crime tracking, public safety, and resource management demonstrates  
799 the potential of technology in urban governance.

800 Integrating climate adaptation measures into urban planning and  
801 infrastructure investments is of prime importance. This includes  
802 promoting green infrastructure such as permeable pavements and urban  
803 wetlands for storm water management and aquifer replenishment, as  
804 seen in global best practices. Policies should also incentivize low-carbon  
805 construction, passive design, and the use of eco-friendly materials like  
806 steel slag and recycled plastic waste. Addressing air pollution and  
807 improving waste management through increased and dedicated  
808 allocations are also critical for restoring urban environmental health.

809 Investing in educational institutes and vocational training centers within  
810 urban growth hubs is essential to build a skilled and relevant workforce  
811 that can meet the demands of evolving job roles. This would uplift the  
812 quality of life for urban residents.

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823 **CONCLUSION**

824 Indian cities are at the forefront of its economic development as the  
825 urban landscape is going through a transformation. This marks  
826 significant demographic shifts and growing economic footprint.  
827 Understanding these dynamics is crucial for strategic planning in  
828 urbanization and real estate sector as well.

829 Tackling the challenges of unplanned growth, infrastructure deficits, and  
830 financial constraints requires a dynamic approach. By adopting global  
831 best practices, strengthening institutions, and enhancing sustainable  
832 development, Indian cities can become resilient, inclusive, and engines  
833 of economic prosperity.

834 To effectively drive India's economic future through its urban growth  
835 hubs, a detailed layer strategic approach is a crucial need. This involves  
836 strengthening governance, mobilizing diverse finance, designing  
837 inclusivity and resilience, and leveraging technology.

838 The way we plan our cities needs to change. Many of the current rules  
839 and planning methods are outdated. They don't reflect how cities  
840 actually grow today. We need a more balanced layout—with enough  
841 housing, commercial areas, public spaces, and transport links. This isn't  
842 about copying the West, but about adapting sensible ideas to our local  
843 context. A national-level body that can track urban growth and help  
844 coordinate across cities. This might help avoid the current overlaps and  
845 confusion between departments. The establishment of a National Urban  
846 Development Authority (NUDA) could help monitor urban development  
847 at the national level and strengthen the role of ULBs in planning and  
848 management.

849 Strengthening Urban Local Bodies (ULBs) is fundamental to improving  
850 urban infrastructure and service delivery. ULBs currently suffer from  
851 poor capacity and an inability to collect adequate revenues, often relying  
852 heavily on central and state budget allocation and approvals. To address  
853 this, ULBs must be empowered with greater fiscal autonomy, enabling  
854 them to levy and collect taxes more effectively, and to manage their  
855 finances with increased independence. This includes implementing  
856 property tax reforms, rationalizing user charges, and improving  
857 collection mechanisms through digital tools and GIS mapping.

858 Integrated urban planning needs reworking on outdated regulations for  
859 accommodating dynamic urban needs. This involves adopting smart  
860 growth principles that promote a balanced mix of residential,  
861 commercial, and green spaces, and utilizing modern technologies like  
862 GIS for efficient urban management. Enhancing coordination between  
863 different government agencies and levels - central, state, and local is  
864 crucial to overcome the political and administrative fragmentation that  
865 often delays project implementation.

866 The way forward for the real estate sector is clear. It must move beyond  
867 traditional development models to embrace a more holistic, sustainable,  
868 and inclusive approach. This involves strategic investments in integrated  
869 infrastructure, affordable housing, green building technologies, and  
870 active participation in PPPs that are structured for long-term viability  
871 and social impact. By strategically developing robust urban governance,  
872 innovative financing, and technologically-driven solutions, the real  
873 estate sector can play a transformative role in shaping India's urban  
874 future, ensuring that its cities are not just economic powerhouses but  
875 also livable, resilient, and equitable spaces for all.

876 Real estate sector also has to evolve. It can't just be about high-rises or  
877 gated communities anymore. The focus has to shift to practical housing  
878 for working families, greener construction, and projects that actually  
879 serve the people who live there. Developers, investors, and the  
880 government all need to work together, but with clear rules and long-  
881 term thinking. PPPs can work, but only if risks are shared fairly and  
882 projects are made viable through proper planning and funding support.

883 Bridging the significant urban infrastructure funding gap requires a  
884 concerted effort to attract both public and private investment. While  
885 government capital expenditure has surged, private capital remains  
886 largely untapped due to long duration process and perceived risks. To  
887 mobilize private finance, risk-sharing mechanisms in PPPs (Public-Private  
888 Partnerships) must be made more attractive and sustainable. This  
889 includes streamlining regulatory processes, establishing effective dispute  
890 resolution mechanisms, and offering viability gap funding where  
891 necessary.

892 To sum up, the path forward for urban India isn't just about big ideas or  
893 imported models. It's about fixing what's broken, strengthening what  
894 works, and keeping people at the centre of planning. Our cities can lead

895 India's next growth phase. They just need to be better run, better  
896 connected, and better prepared for the future.

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