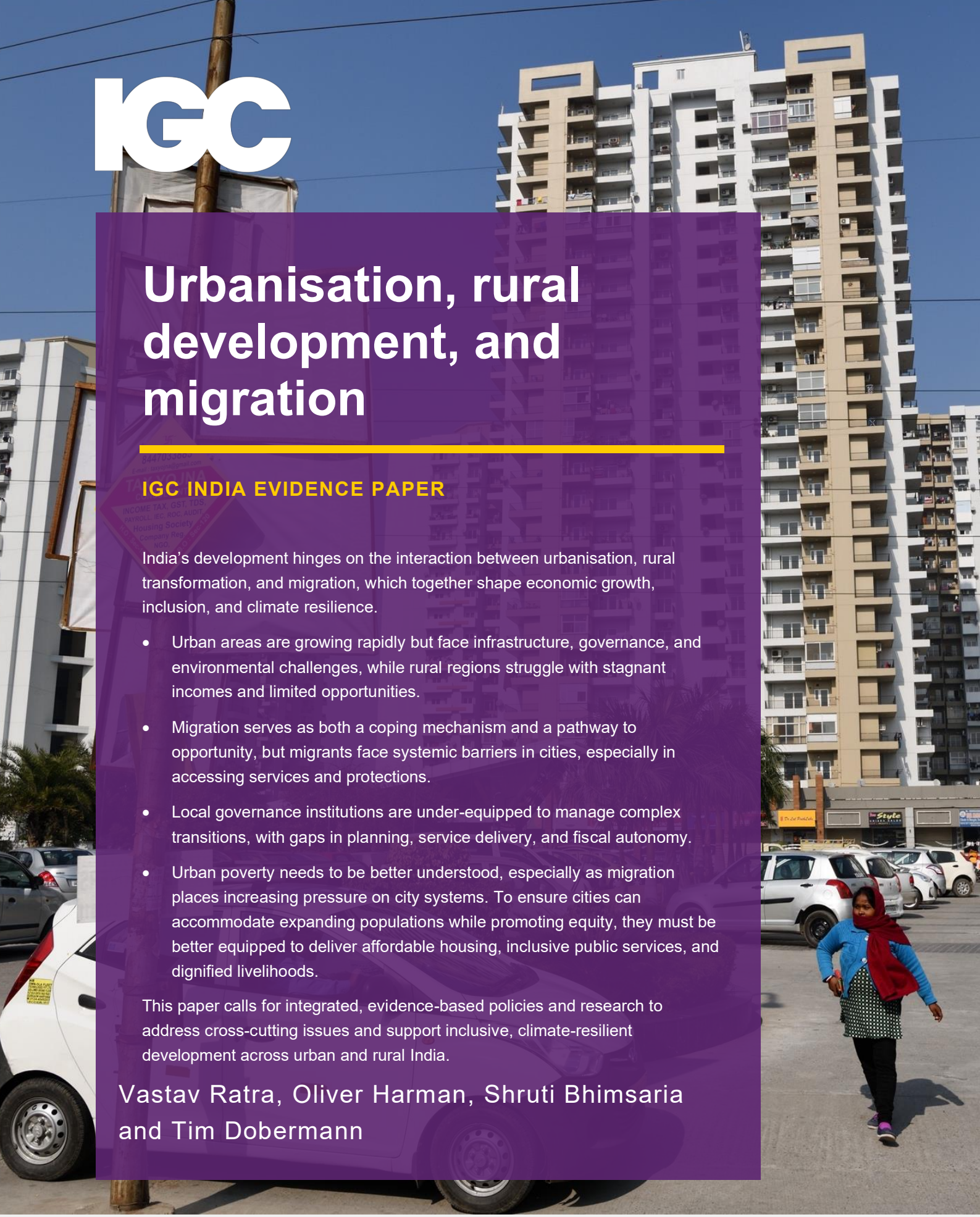

Urbanisation, rural development, and migration

IGC INDIA EVIDENCE PAPER

India's development hinges on the interaction between urbanisation, rural transformation, and migration, which together shape economic growth, inclusion, and climate resilience.

- Urban areas are growing rapidly but face infrastructure, governance, and environmental challenges, while rural regions struggle with stagnant incomes and limited opportunities.
- Migration serves as both a coping mechanism and a pathway to opportunity, but migrants face systemic barriers in cities, especially in accessing services and protections.
- Local governance institutions are under-equipped to manage complex transitions, with gaps in planning, service delivery, and fiscal autonomy.
- Urban poverty needs to be better understood, especially as migration places increasing pressure on city systems. To ensure cities can accommodate expanding populations while promoting equity, they must be better equipped to deliver affordable housing, inclusive public services, and dignified livelihoods.

This paper calls for integrated, evidence-based policies and research to address cross-cutting issues and support inclusive, climate-resilient development across urban and rural India.

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Introduction

India's structural transformation is unfolding across three interconnected domains: the rise of jobs in cities, the development of rural heartlands, and the accelerating flows of people from rural to urban areas. These processes are neither linear nor uniform, but they will together determine the country's long-term prospects for economic growth, social inclusion, and climate resilience.

Urbanisation in India has occurred at a rapid but uneven pace. Urban areas now account for over 60% of India's GDP, and the urban population is expected to reach nearly 50% by mid-century, but this transformation has not followed the well-planned trajectories seen in East Asia. India's cities are often dense but unplanned, productive yet poorly serviced. Infrastructure systems—particularly transport, housing, and sanitation—have struggled to keep up with demand, and governance institutions remain fragmented and under-resourced. At the same time, rural India continues to face deep development challenges. Stagnant agricultural incomes, climate vulnerability, and limited non-farm employment opportunities contribute to persistent inequality and large welfare gaps. While programs like the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) have expanded safety nets, rural distress often manifests in distressed migration—especially among young men and landless households.

Migration, in turn, acts as both a bridge and a buffer. It links rural workers to urban labour markets, redistributes risk within households, and helps individuals adapt to shocks. However, migrants often face high economic, social, and institutional barriers in destination cities, including limited access to social protection, precarious housing conditions, and exclusion from urban services. These barriers disproportionately affect informal workers, women, and those moving across state boundaries. Climate change overlays this transition with an additional layer of risk and urgency. Rising temperatures, increasingly erratic monsoons, and more frequent extreme events are straining rural livelihoods and urban systems. These are amplified by infrastructure deficits, land use constraints, and service delivery bottlenecks—especially in informal settlements and low-income neighbourhoods.

While policy has acknowledged these challenges through national missions on housing, sanitation, smart cities, and climate adaptation, several gaps remain. For instance, India's local and municipal governance architecture—particularly at the level of Urban Local Bodies and Gram Panchayats—is ill-equipped to manage complex transitions that cut across sectors and jurisdictions. Issues like property tax reform, land use planning, and accountability for municipal service delivery remain unresolved. In rural areas, coordination failures, limited

state capacity, and under-investment in public goods constrain inclusive development. This synthesis paper takes stock of the current state of knowledge across these intersecting themes, drawing from the International Growth Centre's Evidence Paper on Cities (Bryan et al., 2024) and identifies where academic research can most usefully inform policy dialogues in India. It does not aim to present a comprehensive diagnosis of every sectoral issue. Instead, it highlights cross-cutting constraints and actionable research priorities at the intersection of urbanisation, rural development, and migration in India.

The stakes are high. India's path to sustainable and inclusive growth runs through its cities, rural districts, and people's mobility. Understanding how these spheres interact—economically, institutionally, and spatially—will be essential for designing policies that are efficient but also equitable and resilient.

The urban growth paradox

Urbanisation, rural development, and migration are interconnected processes that significantly impact sustainable economic growth, especially in India, where cities account for 60% of the country's GDP. UN projections suggest India is expected to urbanise rapidly, with roughly half a billion urban residents by 2050. This theme explores the challenges and opportunities associated with rapid urbanisation, the development needs of rural areas, and the patterns and implications of migration, focusing on how it impacts the environment. It emphasises the importance of balanced development strategies that address the needs of both urban and rural populations.

Downsides of density - congestion, pollution, crime, and disease

High population density is the definitional characteristic of urban areas. In 2011, for example, the largest Indian cities, like Delhi, housed 11,000 individuals per square km (compared to the national population density of 382 individuals per square km). Living in such proximity helps increase the number of interactions between people and firms, fostering employment and innovation. However, it may give rise to conflict, hasten the spread of disease, contribute to pollution and cause congestion. There is much room for the government to address these downsides through investments in infrastructure and implementing enabling policies. Measuring the gains and costs of these policies remains an active research area. The distributional consequences of these policies are particularly crucial. Some prominent examples are:

I. Public transportation sector

Developing a robust public transport system and providing uncongested roads is crucial to ensuring the success of urban residents because urban opportunity is distributed across space, and transportation systems help residents decouple their residential location choices from workplace location. Cities in developing countries often fail on both fronts. The roads are extremely congested for commuters using private transport. For example, compared to their counterparts in the US, the average speed of cars on Indian roads is 40% lower. Thus, while the US cities observe an average speed of 36 km/hr, Indian cities hover around 22 km/hr (Akbar et al., 2023). In addition, public transport provision is inadequate, with crowded buses and unaffordable metro options on offer. The public transportation gaps are filled by informal operators on tuk-tuks and three-wheelers, whose operation further worsens road congestion issues.

The gains from improving road quality, introducing public transport, and regulating tuk-tuks seem high, especially through reducing air pollution. For example, the extension of Metro lines in Delhi is associated with lowering air pollution (Goel and Gupta, 2017), while Metro extensions in Mumbai are associated with higher property prices (Gandhi et al., 2014). Delhi's court-mandated move from diesel to CNG in public transport (and tuk-tuk equivalents) is associated with lowering PM2.5 (but increases in NOx emissions; Goel and Guttikunda, 2015). While air pollution is one mechanism, better roads and public transport likely spur economic activity. In this line, some papers find that subsidising women's mobility increases their participation in paid employment (Chen et al., 2024). Other papers on highway construction find significant employment-boosting effects from mega-infrastructure projects (Ghani et al., 2016).

There are several directions for future research. First, in recent years, several Tier-2 cities - like Lucknow, Ahmedabad, Kozhikode, and Kochi - have invested massively in creating metro networks, but the cost-effectiveness of these projects remains understudied. This area is especially crucial as few, if any, of these cities had a well-functioning intra-city bus network prior to the launch of metro projects. Whether the metro provides exceptional benefits compared to a similarly accessible bus network needs additional investigation. Another potential question comes from the central government's new Faster Adoption and Manufacture of Electric vehicles (FAME) policy. Under this scheme, many cities have received new electric buses to create new within-city fleets or replace existing bus networks. The environmental effects of this massive infusion of low-emission public transit also remain understudied. Additionally, we know very little about factors that motivate people to change their mode choices in developing countries. More evidence on behavioural and environmental motivations to adopt public transit modes is beneficial.

II. Private transport regulation

In cities of wealthier countries, vehicles are a major source of particulate-matter emissions that affect residents' physical and mental health. While there is a huge variation, roughly a fifth of particulate matter emissions in Indian cities come from vehicles, which is smaller than the proportional contribution of transport from richer countries. Thus, gains from regulating private transport in India might be lower (Goel and Pant, 2016; Kacker et al., 2023). However, many urban policies target vehicles to reduce pollution. Common policies include regulations on the age of vehicles which can be used (and the associated buyback schemes), driving restrictions (like odd-even rules), construction of new and wider roads (like Outer Ring roads to divert commercial traffic out of the city), subsidies for electric vehicles and mandates for CNG vehicles, among others. The results of these policies on actual levels of pollution and congestion are mixed but mostly encouraging. Driving restrictions like the odd-even rule in Delhi initially seem to lower air pollution (Burlig et al., 2021; for a contrary view, see Mohan et al., 2017). In the case of local restrictions on vehicle ages, there is a fear that pollution gets exported outside of the city - bans on using vehicles which are more than 15 years old in Delhi seem to have driven the sale of these vehicles to individuals in north Indian cities where such a ban is not in place. Congestion pricing is another commonly discussed restriction, but Kriendler (2024) finds that gains from this policy might be limited because individual travel decisions are extremely inelastic.

Many themes remain understudied. For example, the effects of policies like congestion pricing and high-occupancy vehicle lanes have not been evaluated in developing countries. Additionally, streets in India remain exceptionally unsafe for cyclists and two-wheeler users, limiting individuals' ability to opt for these sustainable modes while commuting. Greater inquiry into the design of safe cycling infrastructure could help remedy these imbalances. Moreover, the spatial configuration of urban street networks—such as grid density, intersection quality, and street hierarchy—can greatly affect transport efficiency, emissions, and equity. Comparative spatial analysis using emerging geospatial tools (Boeing, 2021) could help quantify inefficiencies and inform better street planning practices, especially in fast-growing cities like those in Gujarat. Another avenue for research concerns the use of routing apps like Google Maps and their ability to find ecologically sustainable within-city routes between destinations. Finally, autorickshaws and tuk-tuks remain understudied, and we know very little about the pricing practices and dynamics of this sector as an employer and contributor to pollution and congestion in the city.

III. Water, sanitation, and sewage infrastructure

In recent years, cities in India have made massive investments in improving local sanitation systems, primarily through the construction of new toilets under

Swachh Bharat Mission (SBM; 2014-), providing new water connections and constructing new sewage treatment plants (STPs) under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT; 2019-). In addition, state-level regulations have mandated that builders creating new residential neighbourhoods on the city's outskirts should provide small, decentralised water treatment plants for these neighbourhoods. This provision has led to a proliferation of privately owned and operated mini-treatment plants, which lower the burdens on municipal infrastructure (Nath and Rajora, 2023). While much of the research on SBM is done in rural India, a small literature studies urban sanitation infrastructure. For example, Armand et al. (2021) studied shared toilets in urban slums in India and the policies necessary to ensure better maintenance of these facilities.

Water supply and treatment infrastructure is the other key pillar of sanitation in cities. In 2019, only about half of urban residents had access to water through a piped connection in their house or neighbourhood. It seems likely that information is an important mechanism to facilitate demand for clean water (Jalan et al., 2009). Access to piped water has been expanded through AMRUT and the government's Jal Jeevan Mission. However, sewerage and water treatment facilities have not expanded concomitantly. The lack of corresponding development in sewage treatment infrastructure is extremely concerning, as installing sewage treatment plants in urban areas in India has contributed to lowering infant mortality in the city and downstream (Lepault, 2023). The government has tried to engage in public-private partnerships in this sector, but they have been unsuccessful (Joshi and Shambaugh, 2018).

The installed capacity of sewage and wastewater treatment plants currently falls much short of the expected amount of wastewater produced by Indian cities. However, as the National Inventory of Sewage Treatment Plants shows for each year, the existing plants operate approximately 20% below their installed capacity. The key problem is that the sewerage network is not vast enough—too few households are connected to sewers for their wastewater to reach the STPs. However, there is a need for greater research on sewerage and drainage infrastructure in India.

IV. Solid waste management and open burning

Cities in low- and middle-income countries generate literal mountains of waste, as evidenced by towering piles of garbage that collect on landfill sites outside the boundaries of major cities. Not only are these piles an eyesore, but recent evidence suggests that they impose significant health (Lovo and Rawlings, 2024) and amenity costs (Kumar and Chandra, 2025). Cities face several problems in adequately incentivising waste collection, sorting, and safe disposal. Baseline waste segregation rates are extremely low, and it seems likely that light-touch interventions ("nudges") have substantial short-term

effects on household's willingness to sort waste before disposal (Wadhera and Mishra, 2017; Basistha et al., 2024). While there is some promise for further investigation into using behavioural tools to alter behaviour, there is a greater scope to investigate how municipal policies and technology could enable the safe disposal of waste and adequate resource recovery necessary to close many nutrient cycles. In addition to demand-side nudges, supply-side constraints remain underexamined, particularly access to credit for mechanising collection and segregation. Informal and smaller waste operators face substantial barriers in adopting mechanised systems, especially in managing hazardous waste streams like e-waste and biomedical waste. Experimental approaches could test whether relaxing these constraints spurs technology adoption and improves outcomes along the waste value chain.

Another underexplored issue is open waste burning, prevalent in many Indian cities despite regulatory bans. While anecdotal accounts suggest that lack of public awareness is a key driver, systematic research into the behavioural and institutional reasons for continued burning—and policy levers to curb it—remains scarce.

Heat stress and urban cooling strategies

The residents of cities often face higher temperatures than those residing in neighbouring areas, a phenomenon called the urban heat island effect. The materials used in urban construction - concrete and glass - are more likely to retain heat than mud and natural surroundings, which raises temperatures within cities. In India, the difference between within-city and surrounding area temperatures might be between two and ten degrees Celsius (Islam et al., 2024). Accounting for the effects of temperature on worker productivity, it is believed that cooling technology and green infrastructure might significantly improve the city's resilience to climate change. Under this category, the most common government policies include city-level heatwave action plans, district cooling schemes, and nature-based solutions (replacing concrete in paving roads and parking spaces with less heat-absorbing material, constructing vertical gardens and nurseries, etcetera). While significant resources are spent on these projects - in Telangana, for example, every city used to be mandated to earmark 10% of their expenditure as "Green Budget" - relatively little is known of their effects on social and economic outcomes of relevance, making this a promising area of research.

One emergent area of inquiry relates to how extreme heat disrupts informal workers' daily rhythms and economic participation—prompting skipped shifts, delayed caregiving, or reduced mobility. Exploratory work could identify behavioural responses to heat stress and evaluate adaptation strategies,

ranging from low-tech interventions (for example, water bottles and shaded workspaces) to targeted information campaigns.

Urban workforce and livelihoods

Cities promise economic opportunity, but India's urban labour markets are marked by informality, vulnerability, and weak social protection. Over 85% of urban workers operate in the informal sector, with limited access to contracts, benefits, or workplace protections. In this context, public employment programs targeted at urban areas are emerging as an important, albeit underdeveloped, policy tool to support livelihoods. Several Indian states have recently launched urban workfare schemes to provide minimum wage guaranteed employment for a few weeks a year. Rajasthan's Indira Gandhi Rozgar Guarantee Yojana (IRGY), launched in 2022, is among the most prominent examples, aiming to fill the gap in employment opportunities for low-income urban residents.

These programs hold the potential to provide income support, create public assets, and strengthen civic engagement. However, early implementation evidence suggests significant operational challenges—most notably, delays in wage payments, limited planning of productive works, and capacity bottlenecks at the municipal level (Choragudi, 2025). Moreover, the impact of such schemes on labour market dynamics, skill development, or the quality of public infrastructure remains largely unstudied. As cities grow and fiscal pressures rise, understanding how to design sustainable and effective urban workfare will become increasingly important for inclusive urbanisation.

A critical yet overlooked aspect of urban employment is the exposure of workers to climate and environmental risks, particularly heat. Informal workers such as construction labourers, vendors, and delivery riders often work outdoors in extreme heat, with little access to shelter, cooling, or health insurance. With temperatures in many cities regularly exceeding 40°C, climate-related stress is becoming a key determinant of productivity, safety, and income in urban labour markets. While some cities have piloted early-stage adaptation interventions—such as heat action plans or pilot programs for heat insurance—most work environments remain unprotected. Simple measures like access to cold drinking water, shaded rest stations, or lightweight, protective clothing are rarely integrated into public employment or informal sector regulation.

Risk mitigation tools such as insurance are critical but underutilised in this context. Community-based models show potential: for instance, an NGO in India has long offered parametric insurance packages to its members—including health, accident, and life coverage—tailored to the needs of informal women workers. Organisations have also piloted climate-linked insurance schemes in partnership with insurers and donors, aimed at helping informal

workers cope with income loss during extreme weather events. However, such efforts remain fragmented and small in scale, and there is little formal integration of insurance mechanisms into broader urban labour policy.

New research on low-cost, scalable heat adaptation measures in informal work settings—and their impact on productivity, health, and employment retention—could support the design of more climate-resilient urban labour policies. Understanding how to integrate livelihood support with climate adaptation will be key to safeguarding the urban workforce in the decades ahead.

New cities and the challenge of urban expansion

As India's cities grow denser and face mounting infrastructure deficits, policymakers increasingly turn to new city development to manage urban expansion. Unlike the incremental growth of existing cities, new urban centres promise a clean slate—offering the opportunity to design efficient infrastructure, promote economic clustering, and avoid the legacy issues of overcrowding and informality. Flagship projects such as the Gujarat International Finance Tec-City (GIFT City) exemplify this ambition. Positioned as a world-class financial hub, GIFT City reflects the broader shift in Indian urban policy toward creating nodes of planned, high-value economic activity. Rigorous evaluation of such new city models—including their governance, financing, and integration with existing urban networks—could provide valuable lessons for future urban expansion efforts.

However, the reality of new city development in India has often fallen short of its vision. Many planned cities struggle to attract residents or private investment, with slow occupancy rates, limited job creation, and infrastructure that is underutilised or disconnected from broader regional economies. The challenge lies in physical infrastructure and institutional design—how governance structures are built, how land is acquired and regulated, and how these new cities are integrated into existing urban and economic networks. The success or failure of new cities is not merely a question of construction timelines but of institutional coherence, coordination, and accountability.

Urban expansion also depends critically on land conversion and land market efficiency. In many Indian states, converting land from agricultural to urban use is slow, opaque, and politically contested. Ambiguities in land titles, overlapping jurisdictions, restrictive zoning laws, and lack of transparency in valuation create bottlenecks that drive up costs and delay development. These constraints make urban land artificially scarce and expensive, hindering the supply of affordable housing and disincentivising private investment—

particularly in Tier-2 and Tier-3 cities that are expected to absorb the next wave of urban growth.

From a policy perspective, these challenges have far-reaching implications. As urban India expands, the ability to create liveable, economically vibrant, and environmentally sustainable new urban centres will shape patterns of inclusion, migration, and regional development for decades to come. However, the evidence on what works—and why—is still limited.

Governing Indian cities: Social, political and judicial in the city

I. Slums, redevelopment, and urban displacement

Slums represent one of the most visible contradictions in urban India: dense, productive cities coexisting with large populations living in unregulated and precarious settlements. The biggest contest against the economic miracles provided by the city comes from these settlements. Large, unregulated areas spanning acres of illegally occupied land and decades of potentially lost opportunity, slums are viewed as a failure of urban policy to deliver desired outcomes. India is home to some of the largest slums in the world, with Dharavi's squalor being the backdrop of several award-winning documentaries and movies. Marx et al. (2013) provide a bird's eye view of the relevant economic literature on slums, but we discuss some emerging questions here.

A critical question for urban policy is how to improve the living conditions of slum dwellers—populations often excluded from formal infrastructure, housing, and governance systems despite being integral to the urban economy. In many Indian cities, the lack of legal tenure means municipal authorities withhold essential public services such as piped water, sanitation, and waste collection from informal settlements. This exclusion undermines basic human dignity and perpetuates poor health and developmental outcomes. Slum residents consistently fare worse on indicators like child stunting, communicable disease burden, and access to education, even when controlling for income. While a few municipalities, such as Mumbai in 2022, have experimented with expanding service provision regardless of tenure status, these efforts remain rare and largely unevaluated. Evidence from other developing contexts suggests that incremental improvements in legal rights—such as recognition, secure tenure, or infrastructure extension—can have meaningful effects on poverty reduction and long-term investment behaviour.

Redevelopment efforts have emerged as a more systemic response to the challenge of slums, but they have also brought their own design and equity trade-offs. These projects may occur through in-situ upgrading or relocation to

distant sites. Even in the case of in-situ redevelopment, temporary displacement is often required, which disrupts livelihoods and social ties. Crucially, the spatial placement of new housing relative to transport infrastructure matters: evidence shows that many large-scale transport projects, such as Bus Rapid Transit systems, are poorly aligned with the mobility needs of slum dwellers, reducing their access to jobs and services. Better spatial planning and integration could enhance inclusion, yet this remains an underutilised intervention area.

Slum redevelopment is also politically fraught. Large flagship projects—such as Dharavi's ongoing USD 3 billion redevelopment—offer upgraded housing but have complex social consequences. While some households report modest improvements in income post-relocation, many feel socially disconnected and perceive a loss in informal insurance and caste-based community networks. Strikingly, a third of relocated households opt to move back out of the improved housing units (Barnhardt et al., 2017). In-situ redevelopment remains under-studied, especially regarding its ability to avoid these social costs while addressing infrastructure gaps. Furthermore, concerns over gentrification and market-driven displacement arise even when redevelopment remains on-site (Gechter and Tsividias, 2017).

An underlying tension in all these efforts is balancing the formal property rights of landowners and the state against the lived claims of slum residents who may have occupied the land for decades. These conflicts intersect urban planning, welfare, and jurisprudence—a theme taken up in greater detail in the section on courts and environmental litigation.

Greater empirical work is needed to understand the long-term impacts of incremental tenure recognition, service extension, and relocation models on slum dwellers' economic, health, and social outcomes. There is also a need to evaluate how slum redevelopment interacts with transport access, social networks, and informal insurance. Importantly, more granular evidence on the political economy of slum policy—how decisions are made, who benefits, and under what conditions displacement occurs—could support more equitable and transparent approaches to urban inclusion.

II. Urban local bodies

There are 4,852 Urban Local Bodies (ULBs) in India at the moment, which lie at the heart of India's city-level governance, tasked with the delivery of core infrastructure and services—ranging from sanitation, water, and waste management to roads, public transport, and fire safety. Their ability to govern effectively is often hamstrung by persistent capacity deficits. For ULBs to function as capable institutions, they must possess the three critical pillars of

state capacity: **funds**, **functions**, and **functionaries**. However, these elements remain weak or unevenly distributed across urban India.

Fiscal autonomy is particularly limited. Most ULBs depend heavily on intergovernmental transfers from state or central governments rather than raising revenue independently. Statutory decentralisation—intended to grant ULBs control over key domains—varies widely across states, with many retaining tight legislative control over urban policymaking. Even where responsibilities have been devolved on paper, execution is often constrained by staffing shortages or low administrative capability. Evidence from Rajasthan, for instance, suggests that many local councillors are unaware of their formal powers or lack the procedural knowledge to use them effectively (Auerbach et al., 2023). In larger cities like Mumbai, elected officials may wield informal influence by brokering access to land or navigating bureaucratic hurdles for constituents (Tandel et al., 2023), but this operates within a system governed by opacity and low accountability.

Regarding finances, the Reserve Bank of India (RBI) has taken major initiatives to increase the visibility of municipal finances in the country, to boost their ability to gain resources through municipal bonds or larger central transfers. In recent years, RBI's reports on municipal finances have augmented the knowledge base on these bodies, spurring inquiry into heterogeneity across cities in India. This is coupled with greater vertical transfer from the central government through the finance commission, city-specific policies (Smart City Mission, Make in India, JNNURM, PM-Awas, AMRUT), and performance-based awards. While these are exceptionally valuable in augmenting local revenues, there is an increased need to build capacity to raise Own Source Revenue (OSR) as well. The primary source is property tax, whose collection is hindered by poor record-keeping of land ownership and sale. New technology like drone mapping has helped create dependable revenue streams for many local bodies (Awasthi et al., 2021), dovetailing with a large literature on taxation and state capacity discussed elsewhere in the report.

More comparative evidence is needed on how decentralisation arrangements affect urban service delivery across states and city sizes. Studies could also evaluate which reforms—digital cadastres, staffing incentives, participatory budgeting—best strengthen ULB capacity and accountability. There is scope for experimental and quasi-experimental research on boosting property tax compliance, improving transparency, or testing citizen feedback mechanisms. Understanding the political economy of fiscal and administrative reforms at the local level remains essential to making India’s cities more functional, inclusive, and resilient.

III. Environmental litigation and urban displacement

India's courts—particularly the higher judiciary—have become increasingly influential in shaping its cities' governance and environmental trajectory. This evolution has been driven by the rise of Public Interest Litigation (PIL) since the 1980s, enabling various actors to approach the courts on issues affecting collective welfare. Urban planning, environmental degradation, and informal housing have become frequent subjects of judicial scrutiny, often without effective executive action. This judicial activism has had far-reaching implications for how Indian cities grow, whom they serve, and who is excluded.

One of the most visible domains of judicial intervention is slum demolitions and urban displacement. With over a quarter of India's urban population residing in informal settlements (as of 2011) and many lacking formal property rights, courts have been called upon to adjudicate competing claims between slum residents and landowners or planning authorities. Courts have often authorised demolition drives, particularly where state authorities cite legal violations or ownership claims. However, there have also been notable instances where courts have intervened to halt evictions when due process—such as notice periods or alternative housing provision—was not followed. Without a national legal framework on urban demolitions, courts effectively function as de facto regulators, interpreting state-level policies and enforcing procedural safeguards. This discretionary power has profound consequences for poor people in urban areas, who often rely on courts for protection yet remain vulnerable to uneven enforcement and shifting legal standards.

In parallel, the judiciary has taken a proactive stance on city environmental issues, often stepping in where executive enforcement has faltered. Landmark cases led by environmentalists such as M.C. Mehta have resulted in sweeping rulings—from the closure of polluting leather tanneries in Kanpur to the ban on diesel autos in Delhi. These interventions, while aimed at improving public health and ecological outcomes, frequently entail trade-offs with livelihoods, housing, or mobility. The National Green Tribunal (NGT), established as a specialised forum for environmental disputes, has strengthened this landscape by offering a faster resolution and compensation platform. Still, enforcement capacity remains a persistent challenge, with limited follow-through once judgments are delivered.

These dynamics matter deeply to how Indian cities evolve. Judicial interventions often determine the pace and nature of redevelopment, the enforcement of environmental norms, and the treatment of informal populations, yet courts operate with little institutional accountability themselves, and urban jurisprudence frequently lacks consistency or clarity. For city governments, navigating these legal landscapes is both necessary and difficult—shaping how policies are crafted, how land is used, and how rights are negotiated.

There is considerable scope for empirical research on the long-term impacts of judicial decisions on urban housing, displacement, and environmental quality. Studies could map the legal pathways and outcomes of PILs, identify patterns in judicial activism across states, and evaluate the institutional performance of bodies such as the NGT. In particular, work is needed on how courts influence land markets, regulatory enforcement, and urban inequality and whether judicial action complements or substitutes for institutional capacity within ULBs and state departments. Understanding the judiciary's role in shaping urban trajectories is essential to building more coherent and accountable city governance.

Informality, housing, and urban inequalities

I. Gender and cities

A city's social and economic freedoms may not be equally available. Women, for example, face a very different city from their male counterparts. They are much less likely to work or even step out of the house on any given day than men, partly as a result of social norms which inhibit women's mobility (Jayachandran et al., 2023), patrilocality which limits their social circle (Anukriti et al., 2022), and safety which limits their willingness to be a part of the city's social life (Borker, 2021).

A burgeoning economics literature studies which policies best enhance women's social and economic presence in urban life. For example, deploying female police officers who punish harassers is particularly effective at lowering the harassment rates of women in cities, possibly affecting education and employment outcomes (Amaral et al., 2023; Ashutosh, 2024). Additionally, in recent years, many states have introduced policies to allow travel for free on inter- and intra-city buses. Initial results suggest that these policies boost women's mobility (Chen et al., 2024), even though the effects seem to come from more educated middle-class women (Borker et al., 2024). In Delhi, where this policy was first introduced, the government also added marshal security to buses to make them safer for women. Eviscerating supply-side constraints, while promising, has little effect on family restrictions placed on women in urban India. Interventions to improve women's networks also promise huge returns, not just in the social sphere but also in economic outcomes like employment (Kapoor and Gade, 2024). In parallel, the built environment also shapes gendered access to economic opportunity. For instance, poorly ventilated or non-resilient homes—common in lower-income urban areas—exacerbate the burden of care during heat spikes, limiting women's mobility and labour market participation. These micro-environmental stressors merit further study.

We know relatively little about the benefits women gain through greater access to cities and their public spaces. In addition, while women's struggles remain an important avenue for research, much less is known about how gender and sexual minorities navigate city life and benefit from its opportunities. These remain crucial areas of inquiry for future projects.

II. Housing and segregation

In addition to offering economic opportunities, many cities offer freedom from the restrictive social norms and hierarchies in the subaltern, especially in India, where the caste system governed economic opportunity for centuries. The father of the Indian constitution, Dr Ambedkar, wrote extensively about the liberating power of the urban sphere. He urged Dalits to no longer live in villages to create a new life in the city (Bhan Prasad, 2014). Research on the ability of the cities to deliver their social role in India remains mixed. On the one hand, Indian cities remain segregated spaces across caste and religious lines (Shah et al., 2024; Bharathi et al., 2021). While this is detrimental, evidence suggests that public services are also unequally accessible in India, with lower access to schools in Muslim neighbourhoods (Bharathi et al., 2022; Asher et al., 2024). We know little about the causal effects of residential segregation on education and health-related outcomes in India, except for some studies analysing sanitation-related externalities in mixed-religion neighbourhoods (Geruso and Spears, 2018). Another related dimension is the siting of urban fossil fuel infrastructure. In many Indian cities, thermal power plants or other high-emission installations are close to dense residential areas, raising concerns about exposure and environmental justice. More systematic research linking emissions data, wind patterns, and urban spatial configurations could highlight vulnerable populations and guide more equitable urban energy planning.

III. Rural development

Disentangling urban growth from rural development is tough, as prosperity or destitution in rural areas has first-order consequences on cities. In India, the problem is further aggravated by definitional challenges - government entitlements and local governance are strongly linked to classifying areas as rural or urban. As governments are slow at reclassifying urbanising areas, large swathes of the "urban" population live in statutorily rural areas. In 2001, for example, only 26% of Indians supposedly lived in an urban area, defined by being governed by an urban local body. The actual urbanisation estimates might exceed 65% (Tandel et al., 2019), with grave implications: On the one hand, it under-delivers vital municipal services to the populace, creating a scenario where governance seems "too slow for the urban march." On the other hand, it has fiscal implications because lower property taxes are levied on rural areas compared to urban counterparts.

Aside from properly classifying urban and rural areas, government policy for sustainable development in rural areas has several important consequences. One of the most widely studied policies - building roads to unconnected rural villages in India through PMGSY - has measurable positive effects on structural transformation (Asher and Novosad, 2020), health (Aggarwal, 2021; Dasgupta et al., 2024) and educational enrollment (Adukia et al., 2020), among other outcomes. The effects of creating new roads rival the effects of maintaining rural infrastructure (Chaurey and Le, 2022), stressing the importance of maintenance and upkeep in the usability of roads. Despite these seemingly positive effects on a whole range of outcomes, Asher and Novosad (2020) report precise null effects on economic growth measured through nightlights. Similarly, India's large government programme to provide electricity to rural households seems to generate small gains in economic growth (Burlig and Preonas, 2024). However, recent evidence suggests that villages quasi-randomly receiving both policies did witness economic growth, pointing to complementarities in infrastructure provision (Endye and Wren-Lewis, 2025).

Alongside infrastructure, the government delivers services catering to local education and health. A large body of evidence shows how poorly these are delivered in India - roughly a fifth of workers are absent on random visits, and those present have low skill levels. Despite this suboptimal provision, some benefits accrue. Villagers living in villages with health facilities are particularly likely to be aware of their hypertension status. Education gains are shown in several studies. However, better education provision is critical because of its role in adapting to climate change (Doberman, 2023).

Migration, urban poverty, livelihoods, and climate adaptation

Urban poverty is an increasingly pressing challenge in India, particularly in states like Bihar, where rapid urbanisation has not been matched by corresponding investments in infrastructure and basic services. Despite recent economic gains, millions of urban residents live in precarious conditions—often in informal settlements—without access to clean water, sanitation, quality healthcare, or stable employment; increasing migration from rural to urban areas is exacerbating this crisis. For instance, according to NITI Aayog (2023), approximately 2.8 million people in Bihar's urban areas are multidimensionally poor, with nearly half classified as severely poor. These populations—disproportionately composed of low-income families, women, youth, and informal workers—remain excluded from many social protections and formal economic opportunities.

Across India, urban poverty is intensifying as cities absorb growing populations without adequate preparation. Over 85% of India's urban workforce is employed

in the informal sector, which is characterised by low productivity, job insecurity, and limited access to welfare programs (World Bank, 2021). Globally, nearly two-thirds of the population is projected to live in urban centres by 2050, with Asia and Africa accounting for the bulk of this expansion (UN DESA, 2019). In many low- and middle-income countries, urban growth outpaces the development of housing, infrastructure, and services—producing deep pockets of deprivation in the heart of growing cities.

I. Migration as an adaption opportunity and social protection

Migration is a critical mechanism through which individuals respond to economic stagnation and environmental shocks, enabling them to access better opportunities in urban labour markets. Despite comprising roughly 37% of India's population, internal migrants face substantial constraints that limit the potential gains from mobility. These include information and search frictions, high monetary and psychological relocation costs, and the deterrent effects of informal social insurance embedded in rural kinship networks (Munshi and Rosenzweig, 2009; 2016). As a result, many individuals, particularly from marginalised or risk-averse households, choose to stay in place despite the promise of better opportunities elsewhere. Research has shown that the latent gains from migration can be large (Bryan and Morten, 2019), underscoring the importance of reducing friction to unleash this potential.

Institutional frictions further constrain migration decisions. For example, Until recently, India's Public Distribution System (PDS)—a key source of food security for low-income households—posed a significant barrier to migration. Operated by state governments, the PDS required individuals to access their entitlements only within the jurisdiction where their ration card was registered, effectively tying benefits to one's home village (Kone et al., 2018). This immobility discouraged both inter- and intra-state migration, especially among the poorest families for whom the PDS constitutes an essential part of the household consumption basket. Recent policy reforms have addressed this constraint by introducing greater portability of benefits across state boundaries. Evidence from the COVID-19 pandemic provides early insight into the impact of these changes. In states where ration cards were portable within the state, return migration during lockdowns was significantly lower, as migrants could access food rations without rushing back home (Choudhury et al., 2020). These findings underscore the critical role of portable social protection in enabling mobility and suggest that making welfare benefits more mobile can help unlock the full potential of migration as a pathway to resilience and economic opportunity.

There is significant scope for research on lowering frictions in the migration decision, particularly among marginalised populations. Evaluating job-matching

services, relocation subsidies, or mobile job guarantee schemes can provide insights into how different interventions affect migration flows and outcomes. Simultaneously, studies examining the impact of portable welfare entitlements—such as food, employment, or health benefits—on migrant wellbeing, labour market outcomes, and urban integration would be valuable. A better understanding of who uses portable benefits and under what conditions can inform the next generation of inclusive welfare design.

There is scope to develop policy responses to urban poverty derived from approaches designed for rural contexts. For instance, many poverty alleviation programs—such as workfare schemes or self-help group models—have been developed and tested in rural settings, with little adaptation to urban realities. Poor people in urban areas often face very different constraints: they are more likely to be renters than landowners, face volatile informal job markets rather than seasonal agriculture cycles, and may lack the community ties that rural programs depend on for targeting and delivery. This mismatch raises important questions about how rural anti-poverty approaches—such as the graduation model—could be reimagined for cities. The graduation approach, which combines asset transfers, livelihood training, and consumption support, has succeeded globally in rural settings. However, adapting it to the urban context would require thoughtful redesign to address different forms of vulnerability, diverse income sources, and more fragmented social networks. Bridging this gap through rigorous piloting, experimentation, and evidence generation is crucial for developing an effective urban poverty agenda for India. Countries such as Bangladesh and India are already doing important work in this area, which can help create important evidence.

II. Climate change and environment-driven migration

As climate change increases the likelihood of droughts and natural disasters, it might drive migration to urban centres (Sedova and Kalkuhl, 2020). Are the cities prepared to accommodate these new residents? Between 2001 and 2011, Dutta et al. (2021) showed that drought-like events drive migration to urban areas. In response to this migration, housing supply is elastic, so it seems somewhat responsive to migration. These vary across states, with the highest being in Maharashtra and the lowest being in West Bengal. However, we know relatively little about the supply elasticity of public services like sanitation and schooling, which may rely more on government intervention and remain less responsive.

There is a need for granular, district-level studies linking climate shocks to temporary and permanent migration patterns. Additionally, research can assess cities' adaptive capacity by evaluating the elasticity of public services in response to climate-induced inflows. Policymakers would benefit from

forecasting models that integrate climate risk, migration trends, and urban planning scenarios.

III. International migration and the problem of brain drain

While internal migration within India has rightly attracted policy and academic focus, India is also one of the largest sources of international migrants globally—yet this phenomenon remains underexplored in discussions on migration and urbanisation. Understanding international mobility is increasingly relevant to the story of urbanisation for three reasons: First, remittance flows from Indian emigrants—especially those working in Gulf countries—have a direct bearing on rural livelihoods, infrastructure investments, and consumption patterns in source regions, which in turn influence domestic migration dynamics. For instance, outward migration to the Gulf has shaped urban development and housing patterns in states like Kerala, with remittances fuelling peri-urban growth (Zacharia and Irudaya-Rajan, 2015). Second, return migrants often settle in urban areas, bringing back capital, skills, and expectations that may influence city labour markets, entrepreneurship, and service demand.

Among low-skilled international migrants, the India–UAE corridor remains a dominant pathway, particularly for construction and domestic services workers. However, recent studies find limited political or civic effects from this form of migration (Gaikwad et al., 2024), raising questions about how durable its developmental impact is on sending and receiving communities. Meanwhile, the high-skilled migration of engineering and tech graduates—often from institutions like the IITs to the United States and Europe—is more closely linked with the narrative of "brain drain." These flows are usually viewed as a loss to India's human capital, especially given the substantial public subsidies involved in their education. However, emerging research suggests a more complex picture. The opportunity to migrate abroad can encourage broader education investment among those who never migrate. At the same time, high-skilled emigrants may serve as “brain banks,” facilitating knowledge transfers, innovation linkages, and startup ecosystems in Indian cities.

There is scope to better understand how international migration shapes domestic spatial development through remittances, return migration, or diaspora engagement with urban economies. Studies could explore how returnees influence entrepreneurship and housing markets in cities or how global migrant networks shape job aspirations and skill acquisition within urban centres. Bridging the gap between international migration and urban research can also inform policies on reintegration, city planning, and workforce development in rapidly urbanising regions.

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