TAKSHASHILA INSTITUTION

Unshackling India's cities: How to improve urban areas to drive job growth

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This study attempts to assess hindrances to job growth in Indian cities. It focuses on four main areas – infrastructure, land use policies, governance structures and finances. This document aims to highlight the ways in which Indian cities have experienced problems in these areas, and proposes policy solutions to increase job growth.

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Executive Summary

As per the 2011 Census, India had more than 8,000 cities, 50 of which have a population in excess of 10 lakh. Urban areas in India accounted for 36% of India's population and 70% of GDP. A very important advantage of cities is that (all around the world) they generate more and higher paying employment than rural areas. India needs to generate more jobs, and cities will be vital for this purpose. To do so, India needs to focus on four main areas:

- Infrastructure in Indian cities is inadequate, out of date, or non-existent. Local government spending on city-level infrastructure is extremely low. Cities struggle to provide even basic infrastructure like water, sewage and waste management, public transport, etc. Much more investment is needed in these areas. These investments will create jobs and also improve quality of life for the residents.
- Stringent and restrictive land use policies in India have hindered development. Heavy restrictions on vertical development mean large urban sprawl, and a milder impact of the agglomeration externalities that cities enjoy. Loosening these restrictions will allow economic activity to be more concentrated, free up land for other uses and increase the agglomeration externalities.

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- Urban governments in India have limited powers, which makes it difficult for them to build infrastructure and implement policies to attract better jobs. State governments have a lot of control in the functioning of local governments, while elected leaders like corporators and mayors get to exercise far less authority. Giving local governments more authority will allow them to invest in infrastructure, deregulate land-use policies and shape the development of the city to increase job creation.
- Local governments in India are also strapped for finances. Though they are allotted revenue by the state governments, it tends not to devolve a lot. Meanwhile, their own raising capacity is also very limited, owing to their inability to generate enough tax. Bettering their ability to raise more money will increase infrastructure investments and allocate resources effectively.

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I. Introduction

India's urban landscape represents a critical frontier for economic transformation, with cities emerging as powerful engines of job creation and economic growth. The country is poised for significant urban expansion, with 416 million people expected to be added to its cities by 2050 and urban population share projected to reach 50 percent.[1]

Agglomeration externalities propagate in three main ways - the sharing of inputs, labor and knowledge. This results in industries concentrating in a specific geographical area, turning them into hubs of a specific industry.

The economic potential of cities is well established in economic theory. It is driven by agglomeration economies, where firms and workers interact closely, generating substantial increase in productivity. The externalities in question here are also called Marshallian externalities,[2] named after the economist Alfred Marshall. They also emerge when firms cluster together in the same geographical area, thus benefiting on three main counts:

1. Labour market pooling[3] - Cities create large and specialised labour pools that allow firms to find workers quicker and better.
2. Specialised input services - Cities allow firms to access specialised services more efficiently, reducing transaction costs and improving productivity. Cities allowing this access have the same economic logic as specialised workers. On the other hand, it is much more difficult for rural areas to aggregate talent and generate specialised services.
3. Knowledge spillovers - Geographical proximity allows knowledge to move freely and facilitates exchange between firms and industries.

Research[4] demonstrates that each percentage point increase in urban population share correlates with a 2.7% increase in district GDP. Firms in larger cities show significantly higher innovation rates, being 17.5% more likely to engage in product innovation, 9.9% more likely to implement process innovations, and 21.2% more likely to conduct research and development as compared to smaller ones.

The transformation extends beyond traditional economic metrics. Developing cities can lead to more balanced regional development, reduce unemployment, and improve living standards. With the potential to create new employment opportunities, foster entrepreneurship, and attract investments, India's urban centres are positioned to be crucial drivers of economic growth and job creation in the coming decades.

This shows that cities are important catalysts for job growth. Job creation in Indian cities however, is hampered by many different problems. If India needs to generate 20 million jobs [5] every year, these issues need to be resolved. This document outlines four major problems challenging job creation, explores their complexities and then proposes solutions for the same.

II. Infrastructure

Infrastructure is a vital part of creating more jobs and economic activity. It reduces costs for firms towards manufacturing, transportation, raw materials, energy and market access. Better infrastructure in a city attracts more people to live there, more businesses to operate, and growing economic activity.

There is much literature that describes how better infrastructure leads to more jobs. Sridhar (2010)[6] explains that places with better and denser road infrastructure mitigate the model welfare cost of poor city structure. Lall, Wang, and Deichmann (2010)[7] argue that cities with higher local infrastructure (water, sewage, transport, roads) and national infrastructure (highways, ports, airports) attract a higher percentage of national investment. Infrastructure makes it cheaper for businesses to operate. Alder, Roberts, and Tewari (2017)[8] illustrate how reducing transportation costs improves firms' market access and increases incomes. It is also better for growth in general. Hasan et al.[9] show that reducing the distance to a national highway or expressway by 10 km results in a 0.6% increase in a town's growth rate. They also show how better connectivity, as captured by a smaller distance to the nearest expressway or national highway, drives city growth. Similarly, Ghani, Goswami, and Kerr (2016) [10] depict how better highways lead to the proliferation of firms in rural areas. Dangui and Jia 2022[11] too have chronicled how better access to water infrastructure in Sub-Saharan Africa led to higher economic growth.

Pradhan and Bagchi 2013,[12] meanwhile, state that better public infrastructure causes higher capital formation in Indian cities.

II.A. Investments in Infrastructure and Job Generation

Infrastructure has proven to be critical to job creation as well. A city needs various types of infrastructure, and they all have differing capacities for generating jobs. For every $1 million of public spending on infrastructure (in general terms), approximately 3-7 jobs are created in advanced economies, 10-17 in emerging market economies, and 16-30 in low-income developing countries[13]. A $1 million worth of investments in R&D and public spending yield 5-11 jobs in OECD countries.

Sector	Labor Intensity	High	Medium	Low
Energy	High	23.2	22.3	21.2
	Medium	16.2	15.6	14.8
	Low	12.5	12.0	11.4
Roads	High	23.4	14.9	6.5
	Medium	16.4	10.4	4.6
	Low	12.6	8.0	3.5
Schools & Hospitals	High	22.2	17.7	13.1
	Medium	15.5	12.4	9.2
	Low	11.9	9.5	7.0
Water & Sanitation	High	35.1	24.6	14.2
	Medium	24.6	17.2	9.9
	Low	18.9	13.2	7.6

Table 1: Job intensity of infrastructure investment in emerging market economies. Source: IMF Working Paper[14]

India is a country with low labour mobility, which results in lower job creation potential. However, India has high labour intensity. This means that every $1 million investment in energy would generate 21 jobs, the most in the listed sectors. This job creation includes secondary effects as well. Assuming about 50% pass through to the supply chain - this would signify that the first firm generates 11 jobs (approx.) by investing $500,000, while its suppliers would generate about 6 jobs by spending $250,000 and so on. Another study[15] shows that every Rs.1 crore invested in the infrastructure sector generates 200-250 man-years of employment across at least 70 trades.

These estimates are for infrastructure in general, but every city's requirements are unique. Hence, it is easier to compare estimates for different sectors. For example, when it comes to public transportation and roads, $1 billion invested could create 50,000 jobs, while every $1 invested could generate $5 in economic returns.[16] Some estimates[17] proffer that the construction sector in India has an employment elasticity of growth of 1.12. This means that with a 1% growth in the construction sector, jobs grow by 1.12%.

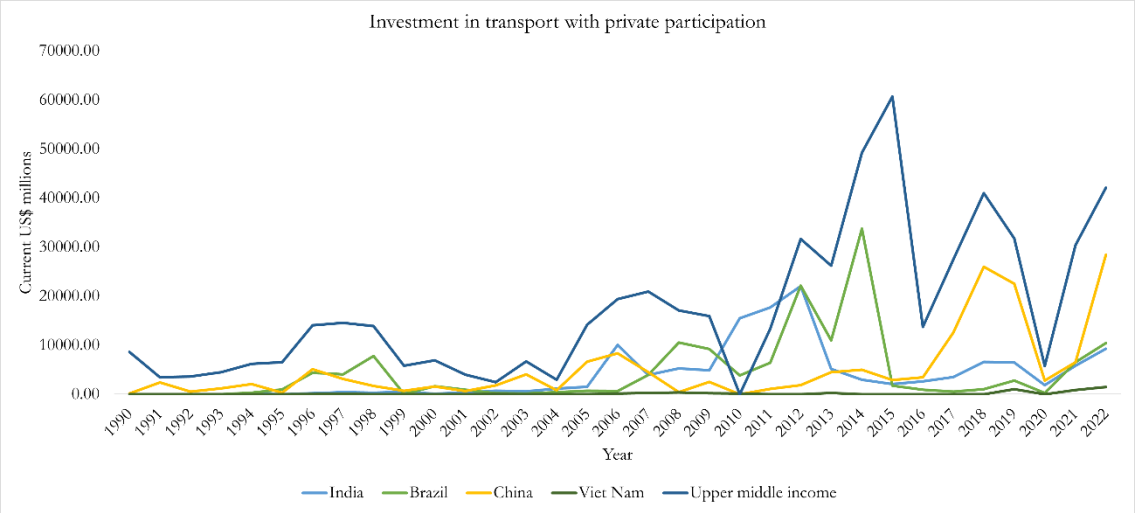
Investments public transport and road repairs also generate more jobs than building new roads. in Studies show that in the US, public transportation investments generate 31% more jobs per dollar than new road and bridge construction[18]. Repair work on existing roads and bridges generates 16% more jobs per dollar than new construction.[19]

Now, people living in a city also require houses to live in. Every Rs.1 lakh invested generates 2.65 informal and 0.4 formal jobs.[20] Meanwhile, every rupee invested in the housing sector adds Rs.1.54 to the GDP, with 12 paise collected as indirect taxes.[21] One study says that the Indian government's initiative to support 30 million affordable houses (including 10 million in urban areas) represents a $500-billion opportunity, requiring at least $100 billion in investment.[22]

Other types of infrastructure exist as well. In emerging market economies, with high labour mobility and intensity, a $1 million investment in water and sanitation can create around 35 jobs . In contrast, a similar investment in countries with low labour mobility and intensity would create around 8 jobs.[23]

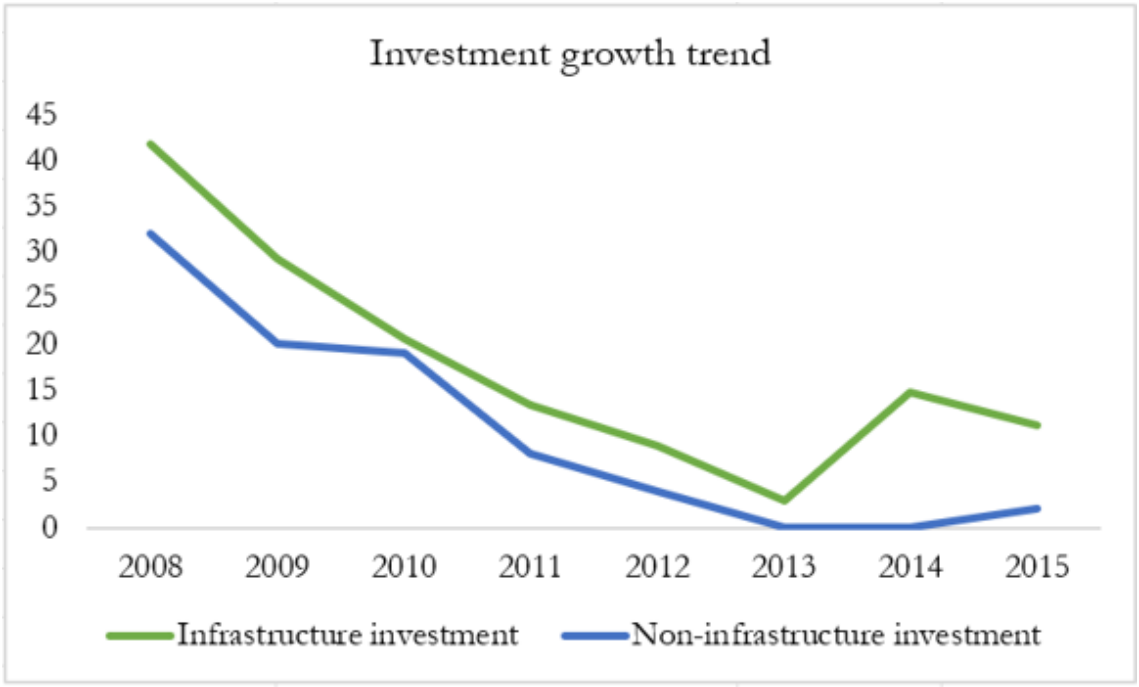
Unfortunately, infrastructure remains a point of vulnerability for Indian cities. The current infrastructure is either inadequate or of poor quality or both. India spends a mere $17 per capita on transport, while its benchmarked needs stand at $100 per capita. The US spends more than $600[24] per capita on roads and transport alone.

According to a McKinsey Global report[25] - "India's annual capital spending of $17 is only 14 percent of China's $116 and 4 percent of United Kingdom's $391." The report also estimates that India needed to invest close to $1.2 trillion (Rs 53.1 trillion) just in capital expenditure in its cities from 2010-2030, equivalent to $134 per capita annually.



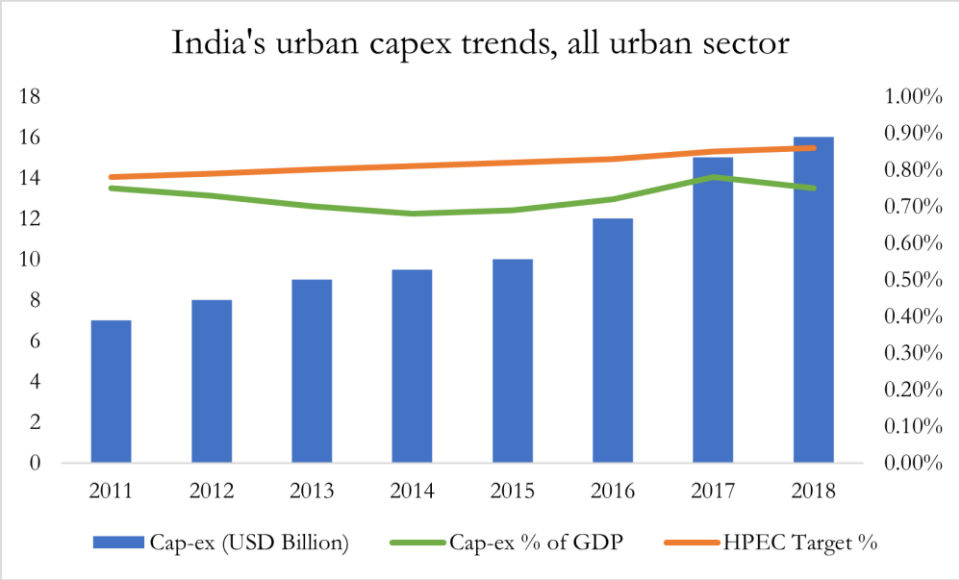
Graph 1: India's investment in transport is consistently lower than other countries. Author's graph, source: World Bank data[26]

A World Bank[27] report in 2022 on India's urban finances stated that India would need to invest $840 billion over the next 15 years, at an average of $55 billion per year, to effectively meet its infrastructure requirements for an ever-growing urban population. Another report said that India's urban infrastructure investment deficit was estimated[28] at $827 billion (at 2009-2010 prices) for 2012-2031. Change in the last two decades has been slow. The graph above shows that the growth rate of infrastructure in India has gone down since 2008, though gross investments have increased. Another source (refer graph below) shows the stagnation in cap-ex spending on urban infrastructure as percentage of GDP from 2011-18.



Graph 2: Growth in India's infrastructure has fallen. Author's graph, source: ASSOCHAM Economic Bureau and CMIE[29]

A study by Asia Development Bank[30] indicated that between 2010 to 2014, government infrastructure investment was close to 3.3% of total GDP. According to the Economic Survey,[31] the total infrastructure investment has gone up to Rs. 5 lakh crores, which accounts to about 8% of total GDP.



Graph 3: India's urban cap-ex spending has consistently been below requirements. Author's graph, source: World Bank report[32]

Another study[33] shows that PPP investments in urban infrastructure peaked at ₹8,353 crore in 2012 but went down to just Rs. 467 crores by 2018. Though this is not specifically urban infrastructure, most will be associated with cities and their residents. Cities need more and varied infrastructure than smaller settlements like towns and villages, and the infrastructure built in them also has more significant economic effects.[34] This section unpacks the various types of infrastructure that cities need, how Indian cities have fared in these aspects and how they can do better.

There are many reasons as to why infrastructure isn't up to the mark in India. Sarkar and Mehta 2019[35] believe it is mainly due to urban local bodies (ULBs)

being underfinanced. Others[36] are of the opinion that corruption and inadequate state capacity are the biggest impediments. One article[37] shows how overlapping and complicated codes, unexecuted standards and budget constraints limit infrastructure quality too.

Untreated sewage is the main polluter of water sources in India. It causes many diseases like diarrhoea, contaminates agricultural land and has negative environmental effects.

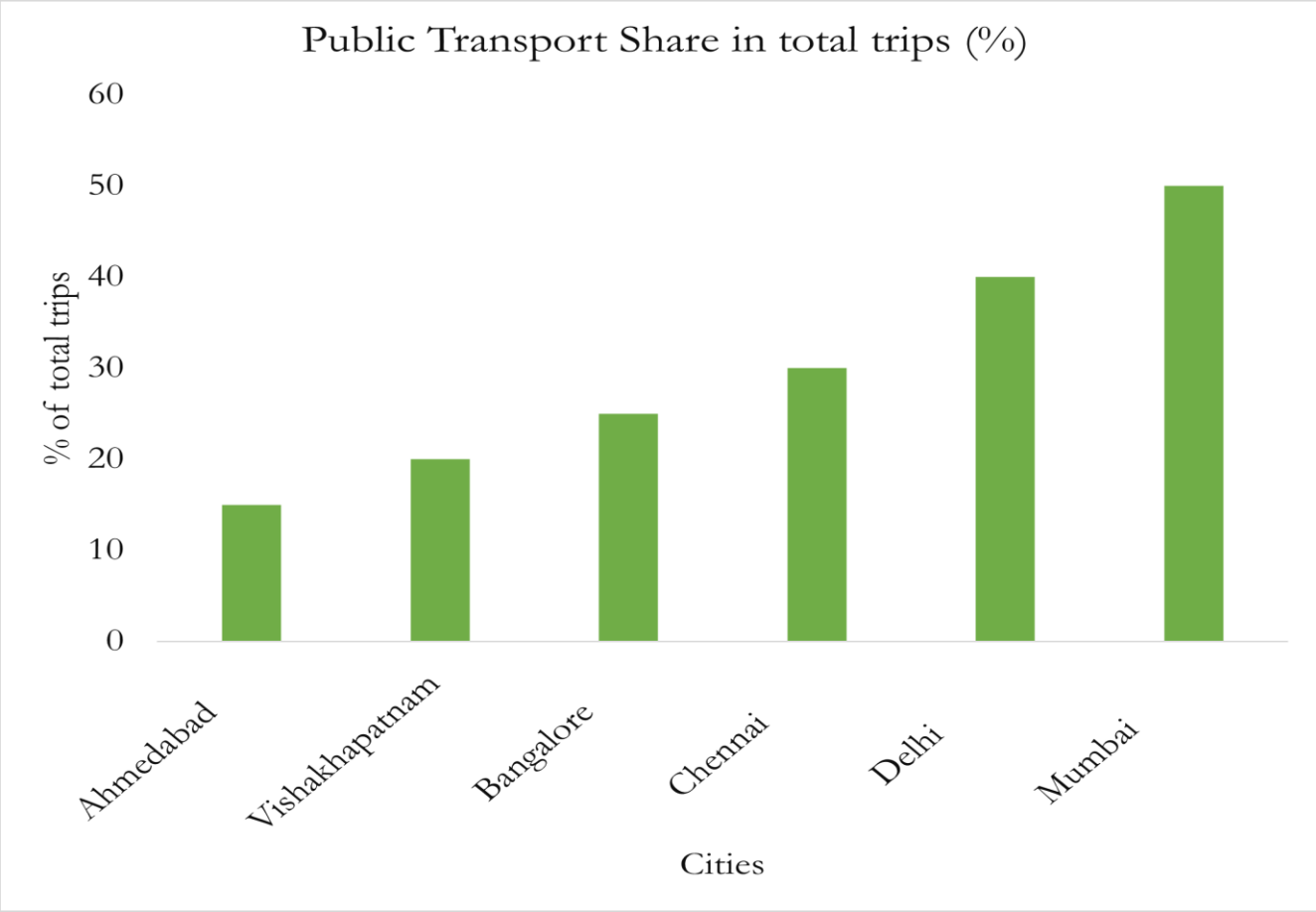
II.B. Water Supply and Sanitation

Let us begin with water supply and sanitation. A chapter by Sarkar and Mehta[38] reveals that in Indian cities, only 71% of people had access to piped water in 2011, and even for those who did, the water supply duration ranged from 1-6 hours per day. This number is said to have improved in 2021[39] to about 90%. Treatment of sewage is still inadequate though. Around 93% of sewage in India goes into sources of water like lakes, ponds and rivers, thus contaminating them. This exacerbates diseases like diarrhoea, which already causes about 300,000 deaths in children aged 0-5 annually in the country. Another study says that only 23% of sewage in India is treated.

II.C. Urban Transport

India also needs to fix the many problems hindering its urban transportation sector. Urban transport has a lot of positive externalities. Studies[40] in the US show that using public transportation save 50 man-hours in time over a year. As a side benefit, it's also beneficial for the environment. A McKinsey report[41] mentioned that in 2010, public transport had a meagre 30% share in total trips in Indian cities, compared to about 80% in other countries. There is also a gap[42] of 6.4k km in rail-based mass transit in cities.

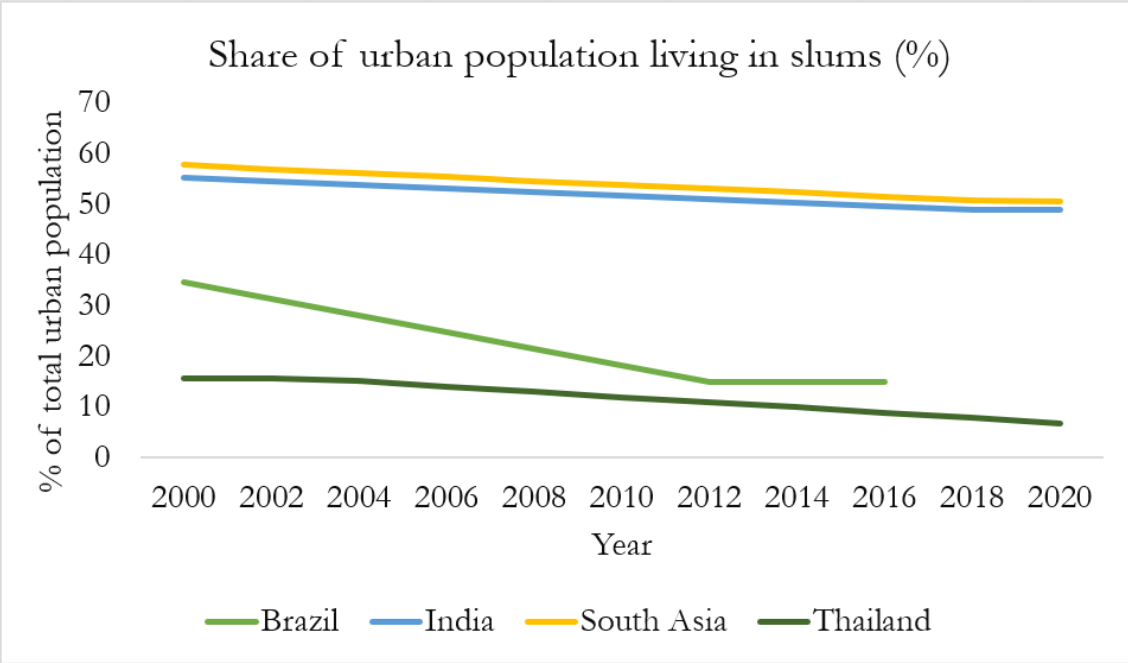
Inadequate investment in transport infrastructure is typical in many Indian cities. In Gurgaon,[43] for example, inadequate bus systems meant companies had to spend their own money on more than a lakh kilometre of taxi trips every day. On top of that, the tax structure[44] in many towns is biased against public transport. Studies[45] show that state road transport undertakings are subject to a variety of taxes and duties, enough to drive them into losses. The same holds true for urban transport as well. Also, motor vehicle taxes are higher for buses than two and four wheelers, meaning public transport pays more tax. Many countries offer fuel (diesel) subsidies for public transport, but India doesn't. The cost of running buses increases further with high levies on diesel. Multiple overlapping regulatory authorities cause red tape, effectively reducing their efficient operation.



Graph 4: Share of public transport in some cities is still low. Author's graph, source: Cities Moving[46]

II.D. Housing

The housing sector in India is beset with multiple issues too. India has a high share of urban population living[47] in slums: 52% in 2010, which reduced only to 49% in 2020. There was also a gap[48] of 38 million affordable housing units. Many problems,[49] such as income informality, become obstacles for home buyers.



Graph 5: Author's graph based on World Bank data[50]

II.E. Case studies of newly built Indian cities facing infrastructure problems

Gurgaon faced severe infrastructure issues despite rapid growth. Only 40% of the DLF area (a significant part of the city's early development) was connected to the main sewer line, leaving most residents in need of proper waste management facilities.

Water supply was also a concern, as 70% of the population relied on underground water sources and were disconnected from the main water line. This put a strain on natural resources and raised sustainability concerns.
The city didn't have adequate electricity and enough fire stations. Private players like DLF are required to provide fire stations for their IT parks. Not only is this more expensive for private players than for the government, but it also raises concerns about equity, as these 'public' goods are not meant for the whole populace. Road infrastructure was deficient as well. The city had only 1.6 km of roads per 1000 people. This led to traffic congestion and mobility issues for residents.

Navi Mumbai[51] struggled with urban planning issues. There were no clear boundaries between commercial and residential zones, which created confusion and affected residents' quality of life.
The city initially faced low demand for housing, mainly due to flawed urban planning. Hence, despite plans for equal living conditions, slums emerged in Navi Mumbai.

Chandigarh,[52] on the other hand, was well-planned initially but faced several issues over time. The city's design was often impersonal, focusing less on community building and social interactions.
Its layout was car-centric, with offices situated far away from residential areas. This made it less friendly for pedestrians and cyclists, and increased dependency on private vehicles.

II.F. Solutions that have worked for existing cities in the past

Many solutions to the problems mentioned can also be found in other Indian cities. Ahmedabad[53] created BRT systems that work best in high-density areas and move many people very quickly through what would otherwise be very crowded roads. The BRT system also has provisions for the urban poor, housed on repurposed mill land. The system covers many areas in the city and has ushered in a lot of infrastructure development. Indore introduced a public-private partnership model in its bus service, which led[54] to a 1200% increase in ridership and a 1300% increase in the fleet.

Chennai built[55] an underground sewer below an existing residential area, a rare feat— this improved sanitation without significant disruptions to residents.

II.G. Solutions that have worked for newly built cities in the past

Jamshedpur,[56] a planned city, provides excellent public infrastructure. Its effective use of private-sector involvement ensures one nodal decision-making body that is accountable, empowered and financed adequately at the same time.

Cyberabad[57] successfully implemented PPPs, SEZs, and integrated townships. The city/township even built the ring road through a PPP. Such an approach works because the government can engage in planning, and the funding/development can come from outside. Financing is a constraint, but there are solutions to resolve the same. Ahmedabad Municipal Corporation raised $1 billion through municipal bonds. These funds were used for road and water projects, thus improving the city's infrastructure. Finances of ULBs are discussed in a different section.

II.H. Proposed Solutions for Improving Infrastructure in existing cities

1. **India urgently needs to increase the amount of affordable housing, to counter the proliferation of slums**. Solutions like developing rent-to-build models for industrial workers that could improve housing access for specific workforces, proposed by NITI Aayog, can be considered. This can be done using a DBT scheme or housing vouchers, which have worked in the US[58] before. Yet another way would be to make housing loans more accessible. Towards this aim, the World Bank has suggested implementing re-finance facilities for primary lending institutions.

2. **India needs to increase its share of public transportation in total rides. Integrated urban planning should include road transportation, buses and metros.** This would ensure more balanced and sustainable urban growth. Many Indian cities do not have adequate provisions for public transport. BRT systems[59] failed in many cities due to half-hearted attempts at constructing them or unintegrated approaches. Many cities in India do not focus enough on buses. A study[60] shows that as of February 2024, almost no municipal corporation in India fulfilled the Ministry of Home and Urban Affairs' guideline for 40-60 buses per lakh of population. The only exception was Bangalore, which had 45

According to a study by WRI, the budget for metro systems in India increased from 12% in 2009 to 54% in 2017, but there was no commensurate increase for buses or for system integration, even though buses carry far more commuters.
Even in metro systems, ridership in Delhi, Mumbai, Chennai, Bengaluru, Kolkata, Jaipur, and Chandigarh showed large deficits when compared with projections.

buses/1 lakh people. Cities like Delhi and Mumbai have a higher share of trips by public transport and their models could be looked at. In India, buses are often passed over for metros. Unfortunately, they are very expensive[61], and finances are a big concern for ULBs in India. Metros are used as a solution in many cities but are rigid and much more expensive to construct and operate. Take the example of Delhi[62], where the first three phases cost ₹70,000 crore to build. The average ticket cost for a metro journey is ₹29, while that for a bus is just ₹11. The aforementioned study also calculates that an average Delhi household spends between ₹8 and ₹21 on transportation tickets every day, which means half of the population won't be able to afford a metro journey everyday.

Indian cities have built 740 km[63] of metros in the last ten years. This includes building new metro lines, expanding bus networks, and improving cycling and walking facilities. Even though many cities have built metros, their usage remains low[64]. A paper explains[65] how India focuses too much on building metros. One study conducted[66] in 2013 depicted how metros would serve a very small fraction of office-goers in Indian cities, as they are at their most useful for journeys greater than 10 km.

	Journey distance (kms)			
City Population	<5	5–10	10–20	>20
1 to 5 lakhs	55	20–25	10–15	6
5 to 10 lakhs	48	25–30	10–15	7
10 to 40 lakhs	45	30–35	15	7
40 to 80 lakhs	40	30–35	15	6
> 80 lakhs	35	40	17	10

Table 1: Metros are most useful for journeys greater than 10 km, while most people in India cities travel less than that for work. Source: The Infravision Foundation, IIT Delhi TRIPC and The Quint[67]

Building metros is an excellent way for politicians to show they have modernised a city, as metros look futuristic, shiny and new. Metros have a place in the modern city, but currently they serve a very different clientele than buses, which should be accorded equal importance.

II.I. Proposed Solutions for Improving Infrastructure in existing cities

1. As suggested by Hasan et al.,[68] **developing better connectivity to ports and highways is a good strategy for creating more jobs.** It eases logistics and boosts economic activities. Alder et al. (2017),[69] show that market access significantly influences economic growth in Indian districts. This can also be a cue for cities to look at interstate transportation. City infrastructure can be crucial to the success of such services, commonly operated by state transport corporations. It is essential that new cities have as much access as they can including road, air and if possible, port connectivity.

2. **Utilising Public-Private Partnerships (PPPs) for infrastructure projects can help. This could be used to build ring roads, airports, and other large-scale projects.** Contrast the earlier Gurgaon example with the case of Magarpatta City[70] in Pune, wherein a fire station is housed inside the complex. This remains public, and the government operates it for everyone, but it has also proven convenient for the township. A report by the World Bank[71] said that competitive and successful cities can attract companies by consulting them prior to designing and implementing specific infrastructure. Though this would include establishing a body or agency, matching supply to demand can be done

more efficiently. Developing special economic zones (SEZs) is another way that could lead to faster development. These zones typically have less red tape, thus attracting more investment. Dedicated agencies can be given the job of providing infrastructure to these SEZs so that accountability is maintained. In an SEZ, it is easier to build infrastructure before or parallel to industries coming in, as per the company's needs, which proves to be cheaper and more efficient. The government's new plan to build[72] twelve new industrial cities is based on the SEZ model as well.

III. Land Use policies

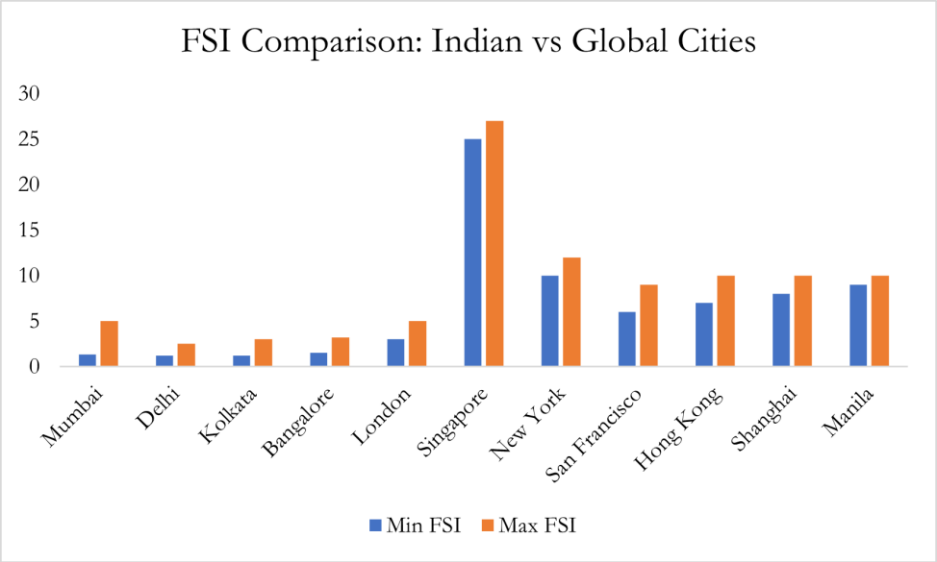
Land is one of the three essential aspects of any development. Regulations surrounding land drastically impact the growth of any industry in any city and, in turn, the jobs that cities can provide. Land in Indian cities is very tightly regulated, by way of building limits and constraints on land-use change. This reduces land availability for residential and commercial purposes near the city centre, hindering the development of agglomeration externalities. Land is an important asset as it holds much value and is essential for economic activity. Firms need to be able to buy and sell land quickly and without friction.

Many studies show the benefits of flexible land laws. Hasan et al.[73] claim that city employment growth has been faster in states with flexible land regulations. They also show how employment growth, especially in firms with ten or more and a hundred or more workers, tends to be larger in cities belonging to states with more flexible labour and urban land regulations. A McKinsey Institute[74] report states that sub-optimal land management stops Indian cities from achieving their highest growth potential. Brueckner and Sridhar (2012)[75], Clarke Annez et al. (2014)[76], and Sridhar (2010)[77] show that regulations on land use and building, including very low floor area ratios seem to have created artificially scarcity of urban land, especially in the most economically dynamic cities. They also conclude that India has some of the most onerous land-use conversion systems. Sridhar (2010)[78] finds that states in which land-use regulations were relaxed, following the Urban Land Ceiling Regulation Act (ULCRA) had a higher base of

employment in manufacturing. Cities that made these changes also had less proliferation and urban spread.

III.A. Problems with land-use policies in existing Indian cities

The commonly used tool to measure/control buildings in India is the FSI(Floor Space Index) or FAR (Floor Area Ratio), which is the ratio of the plot area to the built-up area. FSIs in Indian cities[79] are pretty low compared to other countries.



Graph 6: FSI in Indian cities is much lower than global peers. Author's graph using varied data sources.

This has many cascading effects. Restrictive/low FSI reduces the permitted built-up area, and hence the amount of people who can live on a plot of land . This translates to more land being used for housing. On a larger scale, cities become bigger and spread into neighbouring areas. This is called urban sprawl (Brueckner & Sridhar, 2012).[80] Urban sprawl leads a city away from high density and agglomeration, the primary reason behind more jobs.[81] Another problematic consequence of this is an increase in real estate prices. Generally, the central part of cities is concentrated around commercial spaces, offices, etc. Many people work there and hence look for real estate close to it. When FSI is restricted, and you cannot build more, the (artificially

constrained) supply falls and real estate prices go up (Bertaud & Brueckner, 2005)[82]. So, many people are priced out and have to move further away. This increases transportation costs and can lower the quality of life.
An additional unintended effect of building regulations is that housing space per capita decreases. As demand for housing in central regions is high and supply is low, house sizes shrink. Brueckner and Sridhar (2012)[83] show that compared to developed cities like Copenhagen (43.9), Berlin (37.9), and even Shanghai (13.1), the land in square meters per person in Mumbai (3.9) is very low.

These restrictions are put in place to prevent an overload of services like roads, water, electricity, etc., and offer more access to greenery, for example, in Delhi. However, it has a higher cost. Concentrating amenities within shorter distances generates positive externalities, enhancing a city's utility and driving agglomeration economies. When cities are not allowed to grow tall, we compromise on their 'raison d'etre' - agglomeration and its benefits. Brueckner and Sridhar (2012)[84] state that cities with looser restrictions lead to more compact cities (ironically) with less land area in India. Using the average income in cities in the country, they find that the annual welfare gain by increasing FSI/FAR by one unit would be Rs.10.6 crores for an average town in 2005, which translates to about Rs.40 crores today. On average, household cost savings would be 0.7% of the income. As an estimate, if the FSIs were brought to the level of Singapore, the welfare gain for an average city could be Rs.1000 crores (one time), a significant amount indeed. For context, increasing the Floor Space Index (FSI) in an average Indian city to match Singapore's levels would yield annual welfare gains equivalent to

about 16.66% of Mumbai's (BMC's) recent budget, India's largest municipal budget.

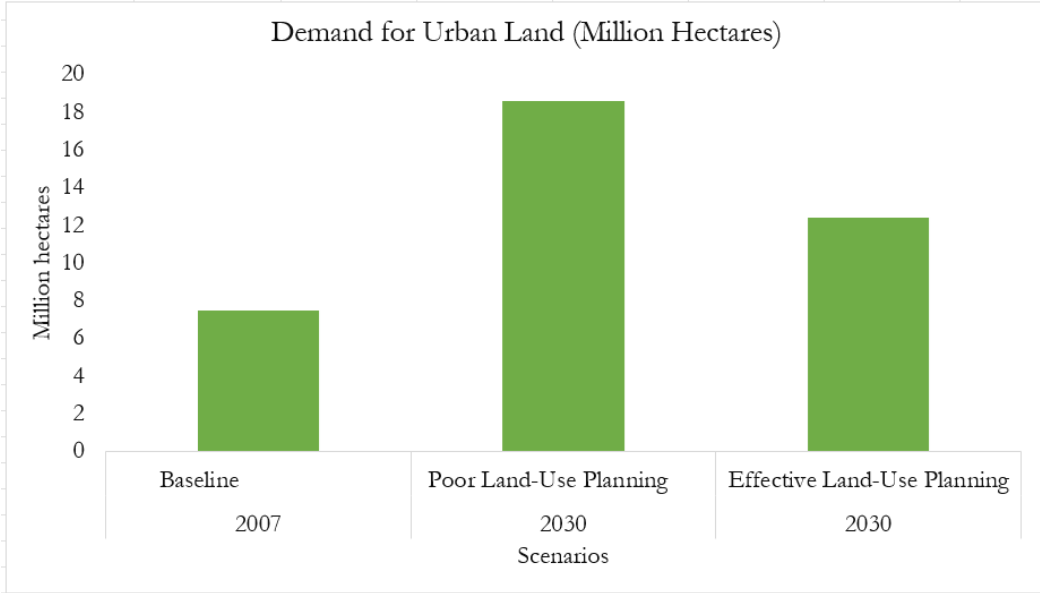
The land that cities' urban sprawl takes up may include forest or agricultural lands. Cutting down forests has multitudes of negative externalities. Arable/good quality agricultural land that gets developed is also inefficient since its optimum use lies somewhere else. Studies show that suburbs in the US have tighter building height restrictions because of the higher need for heating and transportation. Sub-optimal land use and planning also cause environmental problems. Unclear demarcation can lead to encroachment of forest areas and water bodies. Bangalore[85] is famous for encroachment of its lakes. Heavy rains, followed by a lake overflowing, meant streams overflowed and caused harm to properties built on encroached land in Pune.[86] Chandigarh's celebrated streams have also been encroached upon over time. Hillocks in and around the city of Pune[87] too have been encroached upon constantly. The same can be said of forest areas around Bangalore[88]. These encroachments, like in the case of Pune, harm the environment and can endanger people. Clear demarcation in urban plans and monitoring of these spaces, before anything is built, will prevent dislodging later.

III.B. Problems with land acquisition in newly built Indian cities

It is challenging to acquire land in India. An inefficient and incomplete land tenure and ownership record system hinders[89] property transactions, especially for large tracts of land. Land is a significant and immovable investment, which means cities with onerous processes can dissuade future employers from setting up shop there.[90] Another problem is that plots of land in India are tiny. Ancestral properties like farmlands have been divided into smaller ones over the years, which has led to the holdout dilemma. This is when a small landowner can hinder the acquisition of large plots of land by refusing to sell and thus render massive projects null, like in the case of the Tata Nano plant in West Bengal. Archaic laws like the Land Acquisition Act (1894) have to then be used because acquiring through legal processes is a pain. The LAA was used for such acquisition extensively in Gurgaon.[91]

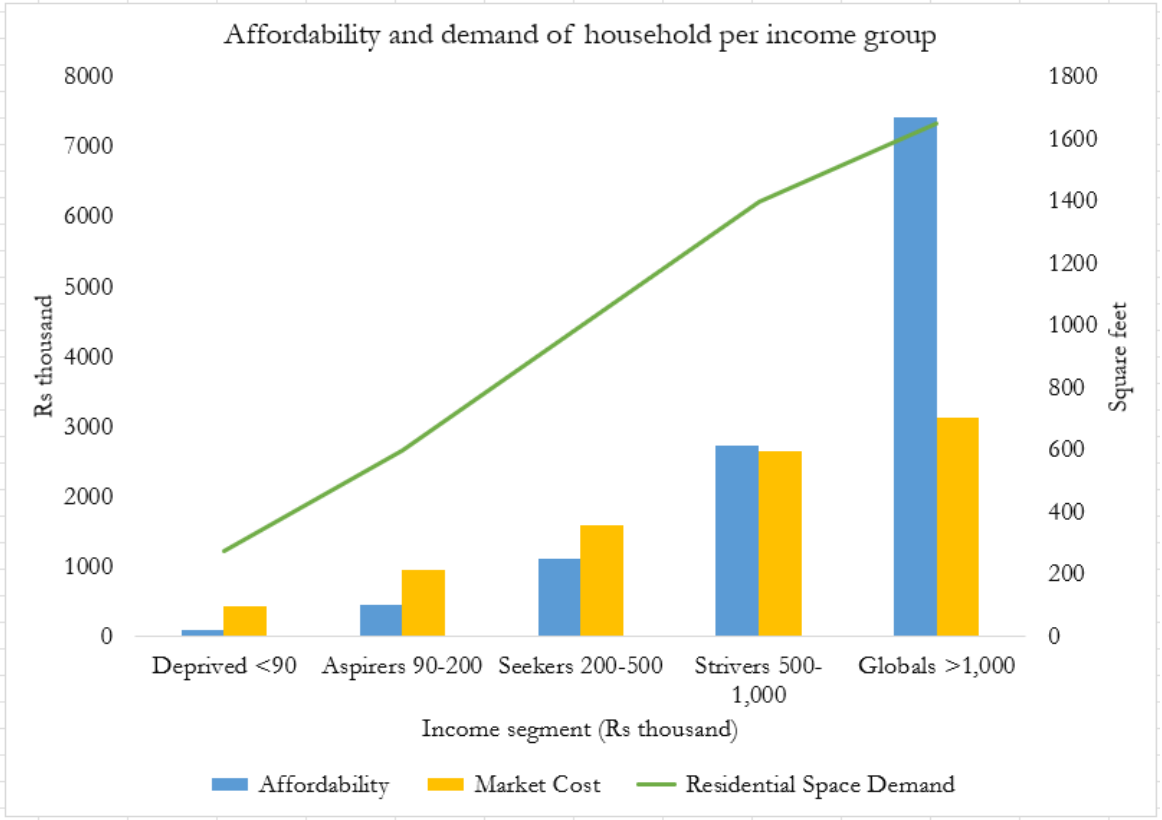
The Land Acquisition Act was implemented by the British to help acquire land for railways, roads, irrigation systems, etc. It included a compensation clause, but properties were generally undervalued.
It was replaced by the The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation, and Resettlement Act in January 2014.

India also has cumbersome laws for land conversion. Generally, any entity wanting to use land demarcated for agriculture must get it converted first to Non-Agricultural Use (NA) by explicitly providing the reason it will be used for. Then, there are building permissions, changes in land-use permissions, etc. This excessive bureaucracy in land-use conversion and multiple permissions means more possible areas for rent-seeking and score negatively in the cities and the countries' Ease of Doing Business.



Graph 7: India could potentially save 6.2 million hectares of potentially arable land through effective planning for land use. Author's graph, source: McKinsey[92]

A remedy for this is getting the state government to buy large swathes of land to lend or sell to private players to develop. This is done in any SEZ, industrial development corporation, or big cities like Gurgaon. The problem with this is that it again requires the government. Any process where the government is involved takes much more time than private players, thereby hindering and demand and supply discovery processes. Instead of having the market sort it out, which is the most efficient allocation process, a state government will plan based on a top-down approach, with less information



Graph 8: Most of India's income segments can't afford adequate housing. Author's graph, source: McKinsey[93]

than local governments or businesses. This can have many negative externalities. Political economies of governments and other stakeholders can be challenging and entail rent-seeking. The time for such government projects to materialise is much more than a free market could take.

Land acquisition for SEZs has a long and troubled history in India. Misra (2020)[94] shows that the combination of the elite and the state in India has used coercive methods for land acquisition for SEZ development, effectively rendering democratic rights of farmers moot. He also explains that promises of formalisation or jobs do not entice farmers to sell their land. One study[95] shows that farmers have been reluctant to give land because returns have not been stable, and much of the land demarcated for SEZs over the country is lying unused. Another paper[96] describes how politicians prioritised personal gain in selecting sites for SEZs and selected sites that did not serve industries well. Not all SEZs have been successful. According to one study[97], out of 425 approved SEZs, only 265 were operational in December 2023. The case of Amaravati,[98] a greenfield planned new capital city, highlights how land acquisition can exacerbate existing social inequalities. Land pooling and rapid real estate development led to the dispossession of Dalits through speculative land markets, primarily due to institutionalised caste dynamics within the land revenue bureaucracy.

Another example[99] of governments not getting planning right is that often, in their master plans, the land area designated is much more than needed. Because master plans are static and markets are not, significant differences can exist between what is planned and what will materialise. This makes the case for more flexible planning. Master plans in India also miss the land allocation needed for adequate services provision, from transportation to water.

III.B. Solutions that have worked for cities before

A good example here is Magarpatta,[100] where more than 100 farmers came together to pool their land and develop a township. The farmers still own a 50% stake in the land, ensuring they benefit from the development even after selling it. The township's construction created[101] a space for 60,000 professionals to work in. It generated 20,000 jobs indirectly. Amaravati,[102] Andhra Pradesh's new capital, also used a similar scheme. This initiative was missing in the old Gurgaon village and the towns around Cyberabad.

Cities should explore alternative models for post-acquisition development, such as land-for-land swaps and joint ventures, to maximise the benefits of land acquisitions, like in the case of CIDCO in Navi Mumbai. CIDCO's land-use flexibility also helped land usage for different purposes. These models can help to ensure that land is used efficiently and that the public receives a fair return on its investment. A study by the World Bank[103] recommends that cities support specific economic sectors; cities should invest in sector-specific infrastructure, such as fibre optic cables for IT and logistics facilities for agribusiness. This helps the cities capture their comparative advantage in different sectors and use money most efficiently. Another report says that land should be valued based on its potential future use rather than its current use.

III.C. Proposed solutions for improving land-use Policies for existing cities

1. The first step should be deregulating the Floor Area Ratio (FAR). Increasing FAR allows cities to accommodate more people and activities within a smaller geographic area, reducing urban sprawl and promoting more compact, coherent cities. This can also lead to a more efficient use of infrastructure and services, and reduce the need for costly new development.
2. Transit-oriented development (TOD) should be prioritised. TOD involves creating dense, mixed-use developments around public transportation stations. By increasing the FSI (Floor Space Index) along bus or metro lines, cities can encourage higher-density development, thereby reducing reliance on private vehicles and improving accessibility. Many cities already do this, especially along newly built metro lines.

III.D. Proposed solutions for improving land-use policies for existing cities

1. Complex and time-consuming land use and conversion laws hinder development and investment. By streamlining them, cities can reduce bureaucratic delays and make it easier for developers to obtain necessary approvals. Some reforms can include those made in the LARR Act 2013[104], which replaced the Land Acquisition Act of 1894. In the case of Gurgaon, the Haryana government initially acquired land through the archaic Land Acquisition Act but then changed the laws to allow the buying of large tracts of land for townships. It also instituted HUDA to coordinate the process. A similar pattern was followed in Cyberabad, where the state government bought large tracts of land and developed it in a PPP. This process is also called land banking.
2. Alternative and innovative land acquisition methods like land pooling, as used in Amaravati and Magarpatta city, have addressed the animosity of land owners by giving them a stake in the newly developed land.
3. This can also be done by Transferrable Development Rights (TDRs), which allow property owners to buy and sell FSI rights. Though institutionalised in many cities, its processing can be improved. This

was done in Hyderabad, where, for the development of Cyberabad, the FSI of 0.75 was increased by buying TDRs. It has also worked as a policy in GIFT City.[105]

IV. Governance Structure

Urban governance has always been a point of contention in India. Civil servants like the Municipal Commissioner control most executive powers and report only to the state government. The mayor and the standing committee are elected directly or indirectly through elections but have limited authority. This brings up a paradox in which those who have executive powers in the city are not directly accountable to the people of the city, and those who are accountable to the people of the city do not have executive powers, at least not enough. The problem varies with cities and states.

Two main types of governance structure reforms are conducive to economic activity. Some studies show that decentralisation positively affects worker productivity, and centralisation has adverse effects. Stansel(2005)[106] tabulates that a one standard deviation increase in the number of local governments results in a 2.5 percentage point increase in per capita income growth rate. Jia et al.[107] show that forming a different local government in Chongqing, China, boosted its GDP growth rate by 1.8 percentage points. On the other hand, Ahrend et al. (2017)[108] show that workers in OECD cities with fragmented governance structures have lower productivity. They also witness an uptick in productivity when a coordinating governance body exists between different structures, such as municipalities, counties, or local authority districts.

Hence, much more nuance is required when discussing centralisation/decentralisation of governance.

An OECD[109] paper sums this up well. They find that, in most cases, better governance leads to higher urban productivity. A dip is observed with more decentralisation, but when fragmentation is low and quality is better, decentralisation does not contribute as much to a dip. It also shows that vertical fragmentation hurts growth, meaning the more powers concentrated in one governance body, the better. A World Bank report that draws on lessons from some of the world's most competitive and fast-growing cities illustrates how cities with more empowered local governments have more robust growth. Ahluwalia, I. J. (2017)[110] explains why Indian cities need more empowerment to grow faster and generate more jobs. Bo (2020)[111] reports how municipalities created by combining various rural counties in China have led to better economic growth, thus highlighting the need for strong local governments to prevent resource misallocation and increase productivity growth.

IV.A. Problems with existing governance structures in Indian cities

The most significant problem for Indian urban local bodies (ULBs) is their lack of power and authority. Only[112] seven states provide for the mayor to be an ex-officio member of the MPC, undermining the elected city council. Mayoral tenures of less than five years make the position largely ceremonial

and inconsequential. The Economist[113] puts it very nicely: "(in India) city governments lack governance. There is no consistency in what power mayors have and how they are elected throughout the country, as the state government controls these structures". Most Indian cities operate on the colonial era model, giving most control to the governments of the then-provinces, now states. There are some exceptions, like Kerala, where mayors have executive powers. US cities are an excellent model to follow, wherein the mayors are empowered by a strong city council that has executive powers and is also directly elected. In India, citizen engagement at the ward level is significantly less, which can be solved by empowering the mayor. Another report[114] highlights how politically weak institutional frameworks make it difficult to establish any kind of accountability in a ULB.

Rank	City	2010 population (million)	Mayor Empowerment Level (0-4)	Nature of national political system
1	Tokyo	31	3	Parliamentary
2	Seoul	24	4	Presidential
3	Jakarta	24	3	Presidential
4	Mumbai	24	1	Parliamentary
5	Mexico City	21	4	Presidential
6	New York	20	4	Presidential
7	Sao Paulo	20	4	Presidential
8	Shanghai	19	2	Communist
9	Kolkata	18	1	Parliamentary
10	Osaka	18	3	Parliamentary
11	Delhi	17	1	Parliamentary

12	Cairo	16	2	Presidential
13	Moscow	15	3	Semi-presidential
14	Manila	14	2	Presidential
15	Los Angeles	13	4	Presidential

Table 2: Population and governance of cities around the globe, 2010. Author's table, source: McKinsey[115]

Despite[116] the 74th Amendment stating that ULBs should control urban development, state governments still retain control. City executives (like the municipal commissioner) are civil servants the state government appoints. It is easy for the states to transfer these officers at any point in time, thereby creating instability. Compared to that, elected representatives like the mayor have a decided tenure. This is mainly because cities are essential for revenue generation, meaning those who control them get more power. State governments can also get more clout by working the political economy to show that they 'developed' the city, mainly because cities require more modern and prominent projects which people can view as progress.

City governments are dependent on states for mostly everything. Cities have minimal revenue generation capacity and depend on states for most of their revenue. According to a study,[117] most cities in India generate less than 50% of their revenue internally. A McKinsey[118] report states that Indian cities can potentially generate 80-85% of the revenue they need internally, but they desperately need the power to do so.

IV.B. Why local governments are not empowered in India

The 73rd and 74th Amendments to the Indian Constitution laid the groundwork for establishing urban local government in the country. Subsequent articles also included guidelines for setting up ULBs, devolution of powers, state finance commissions, etc. However, the major problem was that the responsibility to do so was given to the state government under Entry 5 of the State List in the Seventh Schedule. This means that states have all the power to control local governments. States can constitute Gram Sabhas, ward committees, and district and metropolitan planning committees, which they have not done so far in many states. States also have the power to institute their finance commissions to decide on the devolution to local governments, but many states have not done that either.

Bureaucrats are also unwilling to share power with the local governments, as it reduces their sphere of influence. One article[119] highlights how collectors maintain control over administrations by deliberately understaffing local government offices but still letting them run hospitals, schools, etc., so the blame does not reach the former.

IV.C. Problems in urban planning

Many reports highlight the unintegrated urban planning in Indian cities. ULBs generally have different land-use plans, such as the City Master or District Development Plan. However, they do not consider industry organisation, provision of low-cost housing and environmental aspects. If land use is demarcated, then it is very rigid. It is very hard for governments to predict how people will want to use a part of the land a decade or so in the future. Urban areas can proliferate in various directions, rendering plans moot. Flexible land planning should be used, in which recommendations are made but can be changed if needed. Another perspective[120] is that Indian ULBs do not have the capacity for planning because they are relatively understaffed, especially compared to countries like the US and China. Civil servants may not have the necessary training to plan, so capacity-building programs must be implemented.

Newly built cities, industrial towns, etc., often lack clarity on what government agency or level should govern them. Gurgaon initially had no clear distinction regarding who should provide services. The Haryana Urban Development Authority (HUDA) provided most of the primary public services in the area, but they had no redressal mechanism for citizens. The Municipal Corporation also existed. They even had a redressal mechanism but no control over providing any services. This, again, represents the classic dilemma discussed earlier.

Consequently, there was no coordination between the private parties, the Municipal Corporation and HUDA. Due to this, the city also got too big before any effective planning could be implemented. As usual, this led to private parties having to provide their services, which is costly and has negative externalities. In Amaravati as well, Andhra Pradesh's proposed new capital, mixed signals from successive state governments and the urban development body have led to development stalling.

IV.D. Solutions that have worked in the past

Navi Mumbai[121] can serve as an example of good planning. The Maharashtra Regional & Town Planning Act was introduced in 1960, the same year the state was created. This paved the way for the government to set up bodies to create new cities. City and Industrial Development Corporation (CIDCO) was formed in 1970 to coordinate growth in the new city. CIDCO was responsible for planning and providing public services to the city. The high-tech city built on the outskirts of Hyderabad had a governing body, the Hyderabad Urban Development Authority (HUDA), which controlled all the development. It was responsible for the master plan and layout. Other state agencies, like the APIIC, provided infrastructure like roads and water but were contracted by HUDA. Such a model balances good planning with efficient provision of resources.

In the case of Sri City[122] in Andhra Pradesh, the state government recently moved offices to the city instead of having them in Hyderabad to make getting permissions easier.

One model that has worked before is the privately built city. In the US, Disney World in Florida controls the entire area in which it is situated. Although, unlike an average city, it has a huge theme park, hotels, restaurants and residential areas. The Walt Disney Company controls almost all public services, such as a security force akin to the police, fire station, etc. Also, since it is a private company, the incentives are set to provide these services for the whole area. Compare this to a city like Gurgaon, where poor provision of public services meant that many private companies had to fend for themselves. However, because these companies only controlled smaller areas, they never had the incentive to provide security services or fire stations for the city. This is expensive because all companies must pay a fixed cost, which would have been otherwise shared and inequitable as these services are provided only to the company's premises. On the other hand, a police force, for example, provided for by the city serves all regions and strata of society, not just the private players. Walt Disney, though, has an incentive to protect the whole city because its business depends on this security.

An Indian example, and probably the only successful one, would be Jamshedpur. It is a city designed around one purpose and by one company, which again has the right incentive to ensure the efficient provision of services.

Disney World was established in 1971 in Lake Buena Vista, Florida in the United States. It's the largest employer in the US. The company operates its own police force, fire office etc. It gets an average of 159,000 tourists per day.

IV.E. Solutions that can be implemented

1. The most important problem to solve is establishing elected executives in cities. If they exist, most of the executive powers must be given to the elected representatives. Kerala[123] is one Indian state where mayors have the necessary powers, and it could serve as a good model for the others. Mayors are indirectly elected, but the city government consists of councillors elected from wards. For even more decentralised governance, councillors hold ward 'sabhas', in which the people of the ward discuss policy. Mayors and their governments should have longer tenures; five years is recommended. It is also critical to have clear accountability measures in place. A World Bank report shows that economically robust and empowered city governments perform better than others.

2. Mayors and town planners/officers need to be trained in town planning and the planning should support their policies. They must also be trained in economic planning to ensure an integrated approach. City governments should develop realistic timelines, ensure sufficient resources, disentangle programs from political parties and align ambition with state capacity. They should set standards for monitoring, routinely report on progress, and maintain capacity. Integrated planning is also necessary for the better functioning of cities. Land use,

economic, and environmental plans must be cohesively fed into each other. Master plans are a good exercise towards this aim. The mayor and other executives should be trained in master planning. Some reports suggest creating 20-year (socio-economic forecast, plot-level detailed plan) and 40-year (socio-economic and population forecast) plans for better planning. It is also necessary to strengthen urban planning to provide for the poor.

3. Another solution could be to create integrated economic development committees (EDC) to work with all stakeholders to aid in planning. This could bring together city executives, academia in the form of subject matter experts, and even the private sector for more integrated planning. Cities could also form partnerships with international cities and learn how they plan for better outcomes. City governments could engage in extensive dialogue, and use a solid fact base to anchor priorities in real comparative advantages.

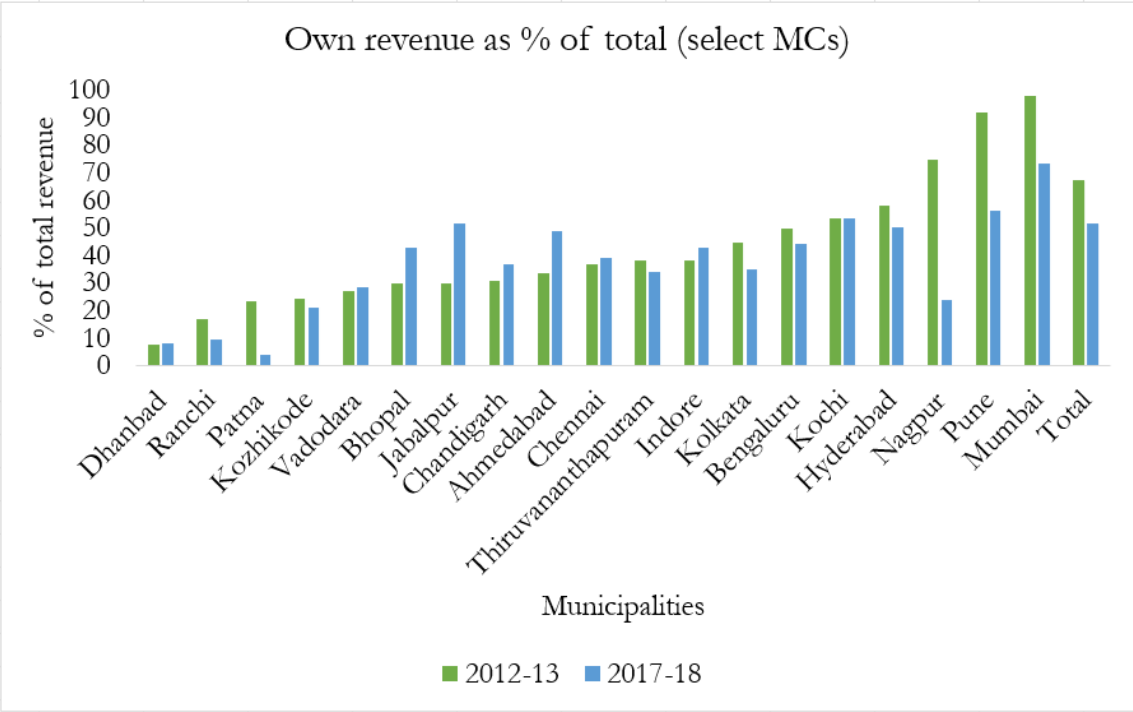
4. New cities or industrial parks need to have a clear governance structure. These governments or governing bodies must also be empowered and free of meddling by state governments. The state government can create a master plan and directive but should not be involved thereafter. This would prohibit rent-seeking and be better for the organisation and arrangement of the city, better done under market forces rather than through a top-down or centralised approach.

V. Finances

Any government must generate finances to implement reform, invest in infrastructure, and provide for its citizens. Indian local governments have minimal capacity to do so, which hinders their ability to achieve all of the above. The 74th Amendment[124] reformed urban governance in India but did not give cities adequate powers to raise their finances. It maintains that the State government should be responsible for the local government's financial needs. Cities heavily depend on states, inhibiting their ability to provide for their citizens. The 74th Amendment also recommends that states set up finance commissions to decide devolution, but not many states do so. This results in an ad-hoc sharing of finances with cities. We will now look at problems with raising finances in Indian ULBs and possible solutions.

V.A. Problems with finances in Indian city governments

India's current investment in city infrastructure is only 0.6% of its GDP, while the estimated requirement[125] is 1.18%. India requires[126] $1.4 trillion of investment in infrastructure by 2024-25, which is 8-9% of the GDP. The union and state governments collect most taxes, fees and tolls. Local governments generally control two taxes: property and service. Compared[127] to other OECD countries, India performs poorly in generating revenues from urban immovable property tax. The average property tax collection in OECD countries is 1.1% of their GDP, while for India, it is less than 0.2%. Municipal service charges are too low even to recover service costs. We can observe that ULBs' municipal revenue is not growing as fast as the GDP.



Graph 9: Municipal Own Tax Revenue in 2012-13 and 2017-18 as % of state GDP. Author's graph, source: NIC

The main issue here is the same as governance structures local governments in India have no real authority or power. States want more control over development than local governments and hence choose to devolve less. State control over city finances means cities have to undergo many more rounds of approval before investing. This limits their freedom and curtails their innovation. A World Bank report highlights how political economy decisions are implemented to keep own revenues low.

Though the state governments have almost full control over the cities' finances, they are not equipped to decide where to invest the money and what infrastructure is needed locally. State governments might be a good option to build cities from scratch as they are better positioned to mobilise the required amount (on a large scale) of land and finances, but a local government should be the one managing its finances.

Bureaucrats also like to control city finances. They impose their own decisions regarding spending on local governments, many of which involve higher ranking politicians. Also, funds which are earmarked to be used by ULBs are diverted by bureaucrats to corporate SPVs for centrally controlled initiatives such as Smart Cities.

The state of State Finance Commissions (SFCs) in India exemplifies this. A study[128] showed that many states did not have 3rd, 4th or 5th State Finance Commission as of 2019. This included big states like Andhra Pradesh and Karnataka. They cite paltry reasons like a lack of computers, offices and technical staff for the delay in constituting the commissions and beginning their work. The study also shows how many officers of the SFCs are bureaucrats and politicians, and not subject matter experts who can contribute effectively. There is also a severe lack of data about local government, which means that every time a SFC is conceived, it has to start collecting data from scratch. State governments have also been found to flout recommendations made by the SFC without any explanation.

City governments too suffer from inadequate absorptive capacity. Their inability to effectively use the finances that they get and turn them into

infrastructure hinders their ability to raise more. India also fares poorly at collecting property tax. A World Bank report depicts how undervaluation, incomplete registers, policy inadequacy, and ineffective administration contribute to this. The encumbrance is exacerbated as property taxes are the major source of own revenue for ULBs.

Another challenge is that ULBs have limited access to capital markets. Only 1% of municipal expenses are met by bonds (as of 2020). In the country, only large municipalities can raise funds quickly, not all cities. Access to capital markets is essential because it is a way to raise finances without going through the state. City governments can use this money for specific projects. City governments' finances need to be improved to allow for development. Many different reforms can be made to achieve this goal.

V.B. Possible solutions

1. First and foremost, a regulatory devolution regime for ULBs needs to be fixed. A World Bank report recommends that a stable, formula-based, and unconditional transfer regime with some performance-based funding be implemented. The Union government currently devolves[129] only 5% to ULBs, which must be increased. This aid generally comes tied to specific projects, which shouldn't be the case. Stability from devolution will help cities plan expenditures more effectively. Like credit scores, performance ratings can signal governments to be better and more effective at using this revenue. The union government could also help by improving the regulatory environment to provide assistance and reduce borrowing market frictions.

2. City governments should raise finances through the capital market. They must have a clear plan for the projects they want to implement. Extensive plans must be created for a pipeline of projects which lending institutions are more likely to support. Thereafter, the cities can map out how to raise money for them. Municipal corporations need to be made creditworthy. To prove that they can pay back the money they will raise, they need to increase their capacity to raise tax and earnings from taxes. Sadly, own municipal revenue is not growing as fast as GDP[130]. Increasing urban property tax rates can be one

solution for this. Their increase can be linked to economic growth, meaning a stable rate is maintained. Cities can also utilise land monetisation and different fees on land for development. Many cities in India have raised municipal bonds, with Bangalore and Ahmedabad being the first to do so in 1997 and 1998, respectively. However, as of 2020, only 1% of municipal expenses are met by bonds. Specific projects are more investible. Also, long-term infra projects with long gestation periods can be suitable for outside investors. One problem with municipal bonds is that only large municipalities can raise them quickly. Again, the creditworthiness of municipalities proves to be an impediment. Previously, schemes such as the Financial Institutions Reform and Expansion Program—Debt & Infrastructure (FIRE-D) had been used to rate creditworthiness. FIRE-D specifically did not work because its execution was too slow and needed to be ratified by all the tiers of government. An excellent example is the municipal bond project undertaken by Pune Municipal Corporation in 2017. It raised about ₹1200 crore for its 24x7 Water Supply Project. The PMC was rated AA+ by two external agencies, India Ratings and CARE Ratings, signalling its ability to pay back the money. This also meant domestic insurers, pension funds, and large state-owned banks invested in the PMC bonds. It set up a working group with stakeholders from various departments and consultants to make critical decisions for the project. The payment mechanism, with escrow, was also finalised early

on. It remains to be seen how the PMC fares on repayment. Municipalities could also use green bonds and pool infra bonds with them in order to raise money.

3. A Municipal Revenue Board (MRB) could be established for smaller municipalities that might not be able to raise municipal bonds. First, the MRB should centralise property tax administration, enhancing efficiency and consistency. Leveraging technology is crucial; implementing advanced IT systems can streamline property registration and valuation processes. Updating outdated property tax laws and eliminating ineffective exemptions will help improve revenue collection. Additionally, creating accurate, GIS-based property rolls through comprehensive surveys will address issues of undervaluation. Strengthening the administrative capacity of ULBs is essential, alongside promoting intergovernmental fiscal transfers to support local governance. Lastly, regular monitoring and evaluation mechanisms should be established to assess performance and facilitate ongoing improvements in property tax administration— ultimately bridging the resource gap ULBs face in urban areas.

4. If states are unwilling to allocate more money to the local governments, then the use of state-controlled financial institutions should be changed. They can go from concessional financiers to being facilitators of private financing. These bodies will have a better

capacity to attract private players to invest in city projects than ULBs. However, control of these finances should be given to cities. Large projects will be essential in raising money, as they have a higher chance of generating more revenue. Special purpose vehicles can be established in these cases to help coordinate the development and the raising of money. Not banking on the existing state capacity will also prove helpful. Cyberabad is an example of a city that was created, which allowed it to attract investment for large-scale infrastructure and real estate projects. Ahmedabad's BRT system, which is pretty successful, is also in the form of an SPV, thereby separating it from the municipal corporation.

VI. Recommendations

We have looked in at what all ails India's cities, what possible solutions there can be and some that have been implemented. Here we distil the ones we think are the most important solutions for cities in the country. A major question that remains unanswered is how much investment will be required to develop cities in India. While efforts to empower city governments, reform land laws etc can't really be assigned a number, infrastructure investments can be quantified. This exercise will also give us an estimate of how many jobs will be created (at least in the first order effect) by investing in cities as well. Governments also give estimates for when they will build new cities. But the money that the government initially invest is never enough. It is needed to build the initial infrastructure and support the governance structure. When different government bodies provide additional infrastructure, their investment might not be counted in the initial estimate. The city's authority building also needs to attract investment from the private sector to create jobs. Given that cities are a very wide terminology, there is no one master formula for how much infrastructure and investment is needed. Here, we gather elasticity estimations from varied sources, investments pledged, and jobs created in cities India has built recently.

There are other concerns with these numbers about investments. The link between private investments and jobs is complex, often not addressing issues like low female labour force participation or rural job creation.

Investments should consider social and labour externalities for a more comprehensive impact assessment.

VI.A. Existing cities

Infrastructure

There needs to be much more investment in infrastructure in the country. India needs to get the basics right first, and focus on infrastructure that aids economic activity. Firstly, increasing investment in public transport by establishing Bus Rapid Transit (BRT) systems via public-private partnerships (PPPs) and metro-rail systems will significantly improve accessibility and mobility for workers. There needs to be more focus on buses than metros, as they are cheaper, more flexible and the ideal approach for the country. Investing in making bus systems more reliable and predictable will enhance their use. Secondly, investing in affordable housing will ensure that workers can live closer to their jobs, reducing commuting times and costs and thereby increasing the likelihood of employment retention and productivity.

Furthermore, special economic zones (SEZs) should be prioritised for their ability to provide better infrastructure provisions, attract businesses, and create jobs. Together, these initiatives create a robust framework that supports current employment levels and fosters an environment conducive

to future job growth. Other infrastructures, like water and sewage systems, also need to be fixed.

Finances

To enable this investment in infrastructure, ULBs need to sort out their finances. Doing this will need to involve states and union governments also. Firstly, states must take finance commissions seriously and devolve more financial authority to local governments, enabling them to tailor fiscal policies that meet their unique needs. Union governments should devolve more to ULBs. Cities should actively engage with private markets by issuing municipal bonds, providing them with the necessary capital for infrastructure projects that create jobs. Increasing property taxes and duties is another avenue through which municipalities can generate revenue to repay loans taken out for development projects. Establishing municipal revenue boards designed specifically for smaller municipalities will ensure equitable distribution of resources and support localised economic initiatives. By implementing these financial recommendations, cities can secure the funding necessary to invest in infrastructure and services that directly contribute to job creation while fostering a sustainable economic environment.

Governance Structures

ULBs will not be able to build more infrastructure or get more revenue unless they have actual power over their cities. For that, governance structures need to be reformed at a national level.

Strengthening governance structures is vital for fostering an environment where job creation can thrive in urban settings. Urban Local Bodies (ULBs) must be empowered by central authorities to ensure effective decision-making and implementation of policies tailored to local needs. This includes establishing elected executives who can advocate for their communities while adhering to a unified national policy framework. Improved planning processes must integrate all aspects of urban infrastructure—such as sewage systems and public safety—into a cohesive strategy that supports economic growth. Developing long-term socio-economic forecasts of 20 to 40 years will enable cities to anticipate future challenges and opportunities effectively. Lessons from these socio-economic forecasts need to be integrated with land planning as well. Clarity in service delivery roles is essential; thus, an independent integrated economic development committee should be formed to oversee these initiatives without political interference from state governments. Additionally, strengthening private city models could attract investment if structured appropriately. Finally, investing in training and capacity building for urban planners will ensure that experts create sustainable urban environments supporting job growth.

Land Use

Last but not the least, any kind of economic activity needs land. Firstly, more land is needed. The process to acquire and change land use also needs to be streamlined and efficient. Reducing controls on Floor Space Index (FSI) regulations throughout cities will encourage vertical development, allowing for more businesses and residential units within a limited area, thereby fostering economic activity. Eliminating cumbersome land and land-use conversion laws will streamline processes for developers and businesses, reducing delays that can hinder job creation. Moreover, master planning should incorporate flexible land-use strategies revisited every decade, aligning with economic forecasts to adapt to changing market conditions. Emphasising upon transit-oriented development around public transportation hubs will not only enhance accessibility but also stimulate local economies by attracting businesses to these high-traffic areas. Establishing transparent and secure land tenure systems will simplify property transactions, encouraging investment and development. Additionally, local governments can create land banks and facilitate land-for-land swaps or joint ventures, such as the Magarpatta model, which promote collaborative development efforts. These strategies collectively enhance urban environments and make them conducive to job creation by ensuring that land is used effectively and equitably.

VI.B. New cities

All the recommendations given for existing cities apply to new cities as well. But they have an opportunity to start afresh without the baggage of older ones, which is what these recommendations focus on.

While planning to build new cities, integrated planning needs to be done beforehand, this should include flexible land planning for different kinds of activity, including manufacturing and services. Other than that, there needs to be crystal clarity on who the governing body will be. It would help governments to learn from mistakes in the past. It would not hurt to have a single nodal agency, supported by the state government, to coordinate the planning and building of the city.

This should act as a coordination body that facilitates the provision of public services/goods from the state government or other sources.

Also, in general, more needs to be spent on infrastructure, and it will always be massively cheaper to include this in the planning and not leave anything for later. The government, in consultation with the private sector, must decide where these new cities will be located. One option is to undertake a large area and then let companies decide where they want to be situated. These places must, however, be near country/state-wide infrastructure, such as ports, highways, and airports.

VI.C. Investment required for city building in India

Various city projects in India have pledged differing amounts of investments. Lavasa City, a planned tourist destination near Pune, was promised over Rs. 4,000 crores for infrastructure, with more than Rs.3,000 crore initially invested[131]. Lavasa, however, was not very successful as a project.

Chhattisgarh's new city, Naya Raipur[132], got an estimated investment of Rs.10,000 crore from the Chhattisgarh government (2015), with Rs.6,000 crore intended for basic infrastructure and Rs.10,000 crore for amenities and an electronic city. It is estimated to generate 222,950 jobs by 2031, with a 40% Work Participation Rate. Total investments from the public and private sectors are estimated at Rs.15,000 crore.

Andhra Pradesh's proposed new capital city, Amaravati, saw Rs.1.1 lakh crore being spent in 18 months before 2019, with a 2024 budget allocation of Rs.15,000 crore. It is also expected to generate 200,000 jobs[133].
Sri City in Andhra Pradesh attracted more than ₹9,000 crore of investment and created over 21,500 jobs.

There is also evidence of what strategies the country could adopt to generate more jobs. One study describes how empirical data from 300 districts in India shows that smaller firms are better at generating employment than larger

ones. India needs entrepreneurship to create more jobs and lacks physical and human infrastructure[134].

Various infrastructure investments shows significant variation in employment generation potential per Rs. 1 crore invested across sectors in India. General infrastructure development creates approximately 200-250 man-years of employment across 70 trades. The housing sector demonstrates the highest job creation potential, generating around 305 jobs per Rs. 1 crore (including both formal and informal employment). In contrast, public transportation and road construction yield approximately 6-8 jobs per crore, with public transportation showing 31% higher job creation compared to new road construction. Water and sanitation infrastructure generates relatively fewer direct jobs, at approximately 4-5 jobs per crore investment. These variations reflect differences in labour intensity, skill requirements, and broader multiplier effects across sectors, with housing and general infrastructure development emerging as the most significant employment generators in the Indian context. This means if a spending of Rs. 1 crore is divided equally amongst general infrastructure, house building, public transport & roads and water and sewage infra, then about 150-200 direct jobs will be generated.

VI.D. Strategies to increase job creation and attract companies

Other than improving the areas as we have recommended above, cities also need to pursue strategies to attract job creators and providers. They can be different from just providing better services, as they need a different kind of active involvement in attracting jobs. A World Bank report suggests that cities need to institute committees in partnership with the private sector which will enable them to go look for job creators. Such a committee could be led by a corporate leader and comprise of representatives from the bureaucracy and the elected government. It could provide for many things skills initiatives designed in partnership with companies to address practical workforce needs, financial support for industries, collective initiatives developed through public-private sector collaboration, etc. However, the most important job it should do is drive the planning for infrastructure. The city should build the infrastructure it needs by coordinating with the companies that will bring jobs.

City governments must realise that different kinds of companies need different infrastructures - SMEs need proximity to customers, connective infra, basic services, and favourable regulatory and financial environments. MNCs look at the fundamental attributes of the city the professionalism of the govt - i.e. softer characteristics. It has also been shown that cities need all kinds of firms small, medium and large, to be competitive. This means cities should plan to attract all kinds of firms, which includes land and financial

planning. Cities do well when they narrow down on what you should focus on, and emphasise building ecosystems. The forward and backward linkages of an ecosystem exemplify when you build cities for comparative advantage. By reducing red tape in excessive labour regulations, tax laws, import duties etc, they should minimise regulatory capture. Cities should focus on promotion and branding, and actively pursue investments and companies.

VII. Conclusion

Indian cities are held back by a lot of things. There isn't enough infrastructure, land and labour is too heavily controlled, city governments don't have enough money to invest and the governance structures are structured in a way that doesn't offer them the right incentives to develop the city. All this contributes to lackadaisical planning and service provision, which makes it difficult for companies to set up shop and generate more jobs. The problem with all these issues is that solving just one might not contribute significantly to job generation; all of them need to be addressed for that to happen. Fixing governance is very important, as it would empower and enable governments to solve the other problems on their own. There is a lot of variation on how cities govern themselves in the country, and some models can be successfully replicated.

We need to think about how cities in India rank against the best in the world, which is missing from the political discourse. Cities will be India's best chance at creating more jobs and they need to be fixed to do so. Focusing on solving the obstacles elaborated upon in this document will be the best way to start.

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