

chapter 2

india now, india then



2.1 the reluctant urbaniser

Since the Industrial Revolution, the world has seen steady urbanisation. Western Europe and North America went through this process in the nineteenth and early twentieth century. However, the urbanisation of Asia in the second half of the twentieth century has been extraordinary in both speed and scale. Take the case of South Korea. Once known as one of the world's poorest agrarian societies, the country set out on a deliberate track of economic development in 1962. In less than four decades, Korea emerged as the world's 11th largest economy in terms of GDP³¹. During this period, the proportion of its urban population has increased four-fold from 21 per cent in 1950 to approximately 81 per cent today. The population of Seoul alone increased from about 8 per cent of the total population of the country to 25 per cent in the same period.

In contrast, India is still predominantly rural and has been a reluctant urbaniser so far. As shown in Figure 6, the proportion of India's urban population increased by a mere 12 percentage points from 17 per cent of the total population in 1950 to 28.7 per cent of the total population in 2005. It is expected to increase marginally to 30.1 per cent by 2010. Meanwhile, China has witnessed explosive urbanisation in the last twenty years. China's urban population was barely 13 per cent in 1950 and was lower than India's ratio till the mid eighties. However, this rose to over 40 per cent of the total population in the year 2005³². Some estimates suggest that it is now an urban majority country (although the process may have stalled temporarily in 2009 with the economic crisis).

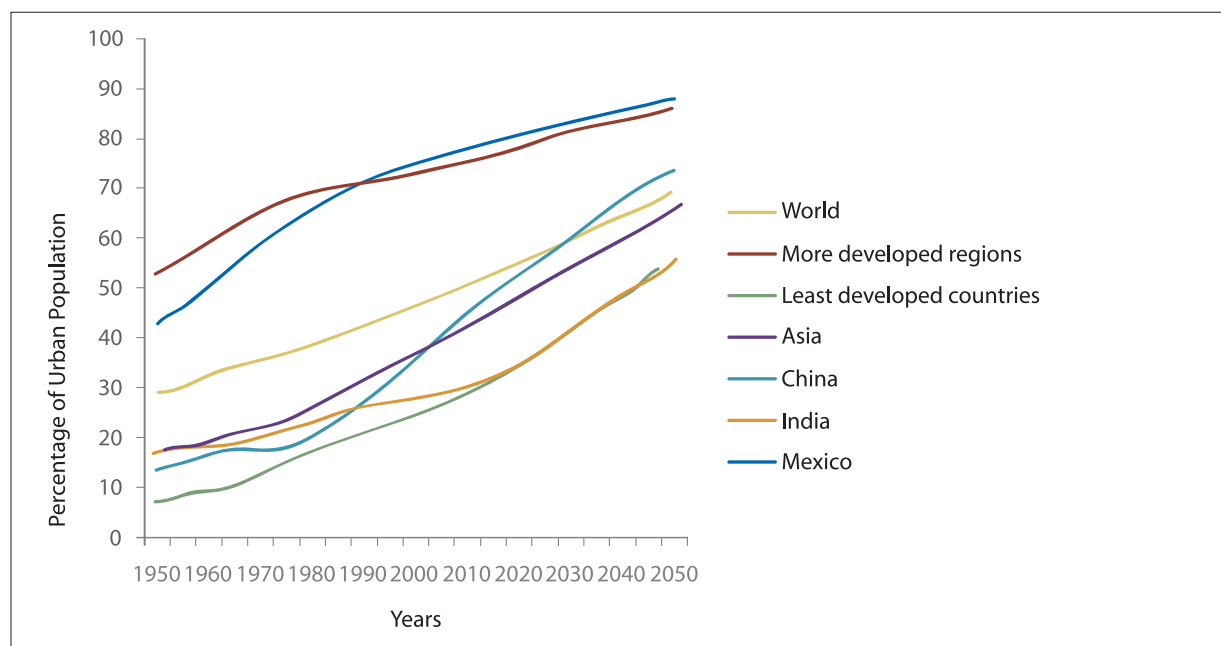


Figure 6: Worldwide Urban Development

Source: United Nations Population Division³³

The cause of India's slow urbanisation is not well studied. In our view, it probably could be ascribed to the general nature of India's post independence socialist development model with its emphasis on import-substitution via capital-intensive industrialisation. Primary education, labour-intensive export industries and the services sector were all deliberately ignored. All these factors may have discouraged the shift of the work-force away from subsistence farming. There was probably also an

³¹The Economic Times (October 2008), 'The Miracle Economy'

³²Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, 'World Population Prospects: The 2007 Revision'

³³United Nations Population Division, World Urbanisation Prospects: The 2007 Revision Population Database

embedded anti-urban bias as the socialist-era policymakers created and sustained the myth that “real” India was to be found in the country’s villages. It was this attitude that guided the earliest policies (or lack of) with respect to urbanisation. Even today, it is viewed by many as a problem that should neither be encouraged nor investigated³⁴. As a result, urbanisation in India has happened in a most haphazard way. In Delhi, for instance, many villages have ended up being marooned in the urban sprawl but without adequate development of urban amenities.



Village now Encircled by Delhi

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Independent research³⁵ reveals the presence of a strong “rural bias” among India’s politicians as planners “continue to limit government support for urban development.” The research argues that the Indian Government allocates its urban citizens only 1/6th of the per capita spending allocated for rural citizens. The ratio is even more lop-sided when we consider spending on the urban poor which is 1/10th that on the rural poor. An overview of India’s five year plans³⁶ reinforces the pervasiveness of this attitude (See Annexure 2) which has also prevented the upgradation of urban infrastructure in Indian cities post independence³⁷. This rural bias underscores the failure to create a comprehensive urban policy which encompasses issues such as migration and an urban agglomeration’s relationship with its rural heartland.

There has been some revival of interest in cities in recent years but, as we will discuss later, it is limited exclusively to the very largest cities of Delhi, Mumbai, Bangalore, and so on. The small “*moufassil*” towns continue to be ignored. This bias is unfortunate since the smaller towns will provide the backbone of future urban growth in India. We feel this skewed approach must change because of the long-term impact of the decisions taken today. Good city-making ensures long lasting legacies and in many cases hardwires the DNA of the cities permanently. For instance, the Central Business Districts of Mumbai (Fort) and New Delhi (Rajiv Chowk; earlier Connaught Place) still clearly illustrate the vibrant street culture of the past. Poor planning and ineffective governance have led to the sustained decay of the old cities inherited by independent India and the construction of new but unworkable cities like Haldia and Navi Mumbai.

³⁴Sanyal, S., (June 2008 a)

³⁵Urban Age, London School of Economics & Political Science (2008), ‘Integrated City Making, Governance, Planning and Transport’

³⁶Srivastava, R. (January 2005), ‘History of India’s Urban Plans’, InfoChange News and Features

³⁷Urban Age, London School of Economics & Political Science (2008), ‘Integrated City Making, Governance, Planning and Transport’

2.2 india's urban future

In 1991, India embarked on an economic reform programme that has dramatically transformed the economy. The old socialist emphasis on heavy capital-intensive industry was abandoned in favour of a more open and varied economy. This process of reform continues sporadically to this day. As a result, India has emerged as the world's second fastest growing economy (after China) in the first decade of the twenty-first century. Despite the slowdown caused by the global crisis of 2008-09, it is expected to maintain growth rates far in excess of the socialist era. Many factors should help maintain economic growth. The country is witnessing important socio-economic changes such as the spread of primary literacy³⁸. By 2020, primary literacy in India will rise to 90% (compared to 51% in 1991). The country is also going through a major demographic shift that will allow India to bypass China as having the world's largest workforce by the 2020s.

Not surprisingly, many forecasters predict that India's urbanisation will accelerate in tandem with increasing GDP. After all, most of the growth will come from moving the labour force from farming to non-farm activities. The World Urbanisation Prospects (2007 Revision) published by the UN expects 197 million Indians to move to urban areas between 2007 and 2025. Some economists feel that

this could accelerate even faster in the 2020s. In turn, this would probably result in a majority urban population by 2040³⁹. As we have seen, this will merely follow the experience of the rest of Asia.

As Figures 7 and 8 indicate, India's cities need to prepare for the influx of tens of millions of people at a pace unprecedented in history. According to estimates, by 2025 there will be more than 13 urban agglomerations of more than 10 million people⁴⁰. As stated earlier, the urban agglomerations around

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Mumbai and Delhi were already at 19 million and 15.9 million in 2007 respectively. UN projections suggest that by 2025, Mumbai will have 26.4 million people and Delhi 22.5 million, making them the second and third largest urban agglomerations in the world respectively (Tokyo will remain the largest with 36.4 million).

Figures 7 and 8 also show the changing proportion of urban to rural population in India from 1960 until 2050. Today, although only 30 per cent of the country's total population resides in urban areas, it contributes over 60 per cent of the country's total GDP and accounts for nearly 90 per cent of the government's total tax revenues.

³⁸Sanyal, S. (2008b)

³⁹Sanyal, S. (2008 c)

⁴⁰World Economic Forum and Confederation of Indian Industry, 'India @ Risk 2007'

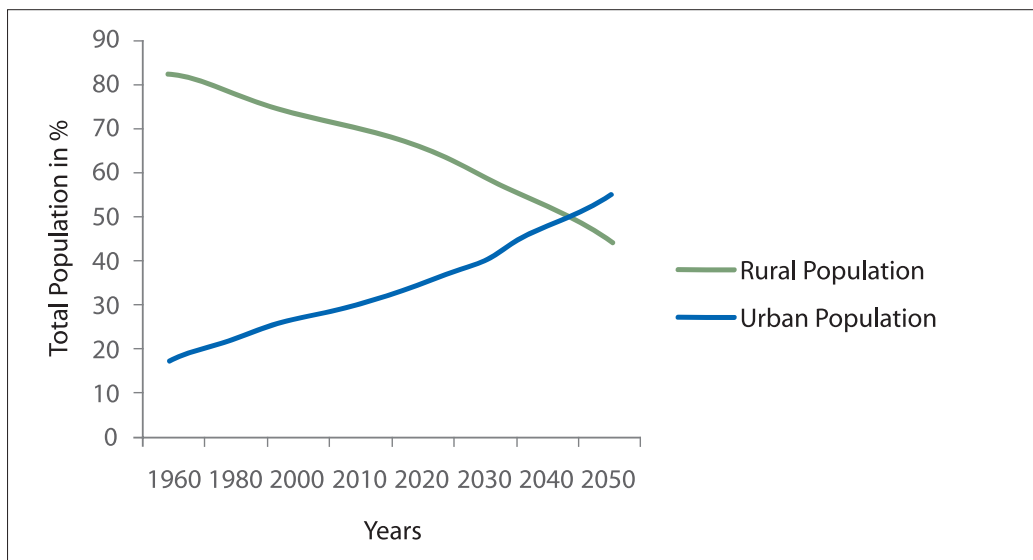


Figure 7: Changing Proportion Of Rural And Urban Populations in India

Source: United Nations Population Division⁴¹

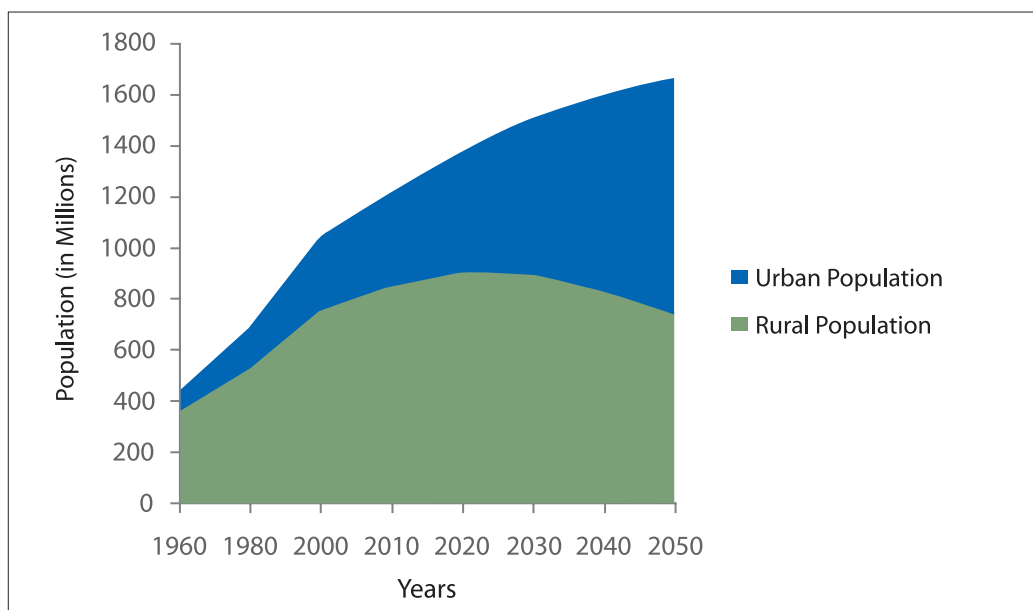


Figure 8: Urban Versus Rural Populations in India

Source: United Nations Population Division

Given the above expectation of accelerated urbanisation, it is important that India prepares to adjust to the implications of this phenomenon and tries to guide it. At present, the governance mechanism for planning and implementation of urban policy in India is weak (see Annexure 1). Cities and towns lack the resources, the skill sets and the technical expertise to cope with rapid urbanisation. On the other hand, since India is in an early phase of urban growth, it presents an opportunity to direct its future trajectory.

⁴¹United Nations Population Division, World Urbanisation Prospects: The 2007 Revision Population Database

2.3 india's urban history

Cities tend to get hardwired by their history. As noted in the previous chapter, the urban form of a city, its transportation system and patterns of energy use are key factors in determining a city's ecological footprint. The way many of today's cities look is based on how they have developed historically, particularly that of the underlying transport system. According to Urban Age, London School of Economics' think tank on urbanisation issues: "Infrastructure development for mass transit, whether metro, trains or buses as well as for private vehicles has had an enormous impact on the patterns of urban growth, shaping land use, densities and the residential distribution of different social groups." Thus, we now turn to the historical development of three of India's largest cities, especially keeping in mind the impact of evolving transport systems.

2.3.1 mumbai: a railway city

As shown in the eighteenth century map below, Mumbai (till recently called Bombay) was once a city of many small islands. It was used as a trading port first by the Portuguese and later by the English East India Company. It grew as the British consolidated their power-base in India but it was initially less important than either Calcutta (today's Kolkata) or Madras (Chennai). However, in the second half of the nineteenth century, it went through a big expansion due to the "Cotton Boom" and the



Mumbai circa 1720

(Courtesy: Sanyal, S.)

Opening of the Suez Canal in 1869. Over time, land reclamations connected the small islands and consolidated them into one large island. Meanwhile, the railways were introduced. The first track in India was laid by the Great Indian Peninsular (GIP) Railway Company between Thane and Bombay; it was inaugurated on April 16, 1853. The early introduction of the two major railway lines – the Western and the Central Lines, continues to define the urban form and the character of the city to this day. The first trams were introduced in Mumbai in 1874 and ran between the localities of Parel and Colaba (the trams were later discontinued). Buses made their first appearance in July of 1926. In 1947, there were 242 buses in operation on 23 routes and carried 238,000 passengers per day. Today there are 3380 buses that transport 4.5 million passengers daily on 335 routes⁴². All this has heavily influenced Mumbai's DNA, ranging from its extremely dense urban form to its relatively egalitarian culture (despite large income disparities). To this day, urban growth into the suburbs has tended to cluster around train stations along the Western, Central and Harbor lines.

⁴²The Brihan Mumbai Electric Supply and Transport Undertaking



Mumbai's Suburban Rail Network

Source: www.wikimedia.org

Given the above pattern of urban development, Mumbaikars have traditionally preferred to rely on various forms of public transport. 55.5% of people walked to work in 2001, 22% used trains, 14.4% used buses⁴³. Only 1.6% used cars and 3.1% used a two-wheeler. These ratios have probably grown in recent years but car ownership in Mumbai is still the lowest amongst large metropolitan cities of India. Planners in Mumbai have recently added another element to their transport system through the Bandra-Worli Sealink Project. At present, the highly congested Mahim Causeway is the only road link connecting the western suburbs to south Mumbai. This project aims to ease this congestion through an 8-lane motorable bridge in the first phase of the proposed West Island Freeway system. The irony is that the project, which opened in mid-2009⁴⁴, is being built exclusively for fast-moving vehicles, thus catering to a mere 2 percent of the city's population with access to private cars⁴⁵. The rail network, meanwhile, has changed little from a century ago.

⁴³Urban Age, London School of Economics & Political Science (2008), 'Integrated City Making, Governance, Planning and Transport'

⁴⁴Viju, B. and Tembhekar, C. (2009), 'Bandra-Worli Sealink, Still a Dream Drive?', The Times of India, 16 February

⁴⁵Integrated City Making (2008), Urban Age. The report further notes that the reason for this is that, "the project has been planned and commissioned by the Maharashtra State Road Development Corporation (MSRDC) and since only streets were within the State's ambit, transport solutions were only thought of in the form of more roads."

2.3.2 delhi: a city of imperial grandeur... and roads

Delhi is an ancient city and has served as an imperial capital under many dynasties. Parts of the present city have been rebuilt many times by various rulers. The above map shows Delhi in 1857, when it was still in the form of the “walled city” of Shahjahanabad – built by Mughal Emperor Shah Jahan in the seventeenth century. While the city was built from a defence perspective, display of Mughal grandeur was also a major motivation for its urban design. The centerpiece of the city was the imposing Red Fort which enclosed the palace complex. Shahjahanabad went into decline after it was sacked by the British after the Revolt of 1857 and the last Mughal Emperor was sent into exile in Burma. Political and economic power had already shifted to Calcutta.

In the early twentieth century, the colonial government decided to shift the capital back from Calcutta to Delhi. Under the guidance of architect Lutyens’ New Delhi was commissioned to be built to the south of the existing walled city. The core of Lutyens’ Delhi was built between 1911 and 1931 and was an unabashed display of Imperial grandeur. The centerpiece was the Viceroy’s palace complex (now the Presidential Palace or Rashtrapati Bhavan). Grand boulevards led to imposing government buildings and to the bungalows for senior officials. Given the then recent invention of the automobile, roads were made wide and the city was deliberately spread out.



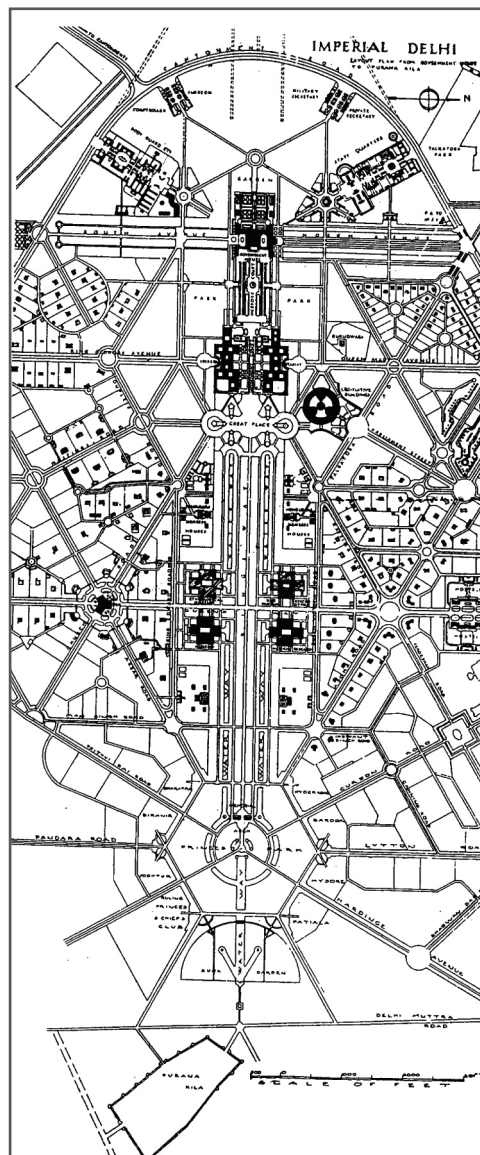
Delhi circa 1857

(Courtesy: Sanyal, S.)

It was this city that became the capital of independent India in 1947. Unlike in Mumbai, rail transport was not given much importance in the initial structural development of Delhi. The use of the automobile got embedded in the DNA of Delhi and subsequent expansions were almost always envisaged with road transport in mind. As recently as the late nineties, satellite cities of Gurgaon and Noida were built with only automobiles in mind.

The emphasis on roads has translated into Delhi having the highest level of car ownership in India; public transport, too, is dominated by buses. According to the Delhi Economic Survey 2007-2008, there has been an exponential growth in the number of vehicles, which increased from 2.848 million in 1996-97 to 5.232 million in 2006-07 at an annual compound growth rate of 6.06 percent. This does not include the number of cars in the wider metropolitan area. The survey also quotes the Society of India Automobile Manufacturers to state that Delhi has 85 private cars per 1000 individuals putting the car density in Delhi at 10 times the national average. It notes that the share of buses (which until 2003 catered to 60 per cent of the city's total transport load) in total number of vehicles has been going down steadily since 2003⁴⁶.

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Original Plan of
Lutyens' Delhi

Source: Byron, R., New Delhi, New
Capital of India, Asian Educational
Services, Reprint of The
Architectural Review, London

⁴⁶Economic Survey of Delhi, 2007-2008, pp 139 ⁴⁶Vijju, B. and Tembhekar, C. (2009), 'Bandra-Worli Sealink, Still a Dream Drive?', The Times of India, 16 February

delhi: a city of imperial grandeur... and roads



National Highway 8 that Connects Delhi to Gurgaon

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It is interesting that the embedded DNA of a city can sometimes over-rule attempts to change. Take for instance, the failure of the Delhi Ring Railway, a part of the Delhi Suburban Railway services. Conceived during the 1982 Asian Games, the Ring Railway failed because of lack of proper connectivity of stations to other modes transport and less population density in areas of reach⁴⁷. The Ring Rail is now largely defunct.

Nonetheless, things are changing. In recent years, the Delhi Metro Rail Corporation (DMRC) has been trying to radically alter this dependency on road transport and attempting to hardwire the city differently (See Box “Delhi Metro Rail Corporation”). The attempt appears to be succeeding in parts of the city – especially in the dense ring of urban development than now surrounds Lutyen’s Delhi. In addition, the city is also trying to radically change road transport by introducing the Bus Rapid Transport System (the jury is still out on this).



Delhi’s BRTS has been a controversial introduction into the city’s transportation mix and has faced severe opposition from private car owners



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⁴⁷Sinha, B. (2002), ‘Commuters Stay Away from Quick, Clean Ring Railway’, The Times of India, April 22

delhi metro rail corporation



Delhi Metro has become the first rail network in the world to get a UN certificate for preventing over 90,000 tonnes of CO₂ from being released into the atmosphere from 2004 to 2007 by adopting regenerative braking systems in the metro trains which help in deducing its power requirement. Three phase-traction motors installed on them act as generators to produce electrical energy goes back into the Over Head Electricity (OHE) lines. The regenerated energy that is supplied back to the OHE is used by other accelerating trains in the same service line, thus saving overall energy in the system, thus about 30 per cent of electricity requirement is reduced.



Delhi's new metro

© Verma, A.

By the mid-nineties, the boom in car ownership was clearly straining the road network. It was felt that Delhi needed something more than a road-based bus system. To rectify this situation the Government of India and the Government of National Capital Territory of Delhi, in equal partnership set up a company named Delhi Metro Rail Corporation Ltd. (DMRC) on 5th March 1995. The planning for a Metro in Delhi dates back to the 1970s⁴⁸. Actual work towards building the metro, however, only started three years after DMRC was established.

The first phase of the project finished in December, 2005, on budget and nearly three years ahead of schedule⁴⁹. Phase 2 of the network comprises 128 km of route length and 79 stations, and is presently under construction, with the first section opened in June 2008 and a target completion date of 2010. Phase 3 (112 km) and Phase 4 (108.5 km) are planned to be completed by 2015 and 2020 respectively.

With the network spanning 413.8 km by then, Delhi Metro will be larger than London's Underground (408 km)⁵⁰. An average of 500,000 commuters travel underground daily instead of driving their own cars and scooters or packing into buses. The rail investments are yet to achieve its full utilisation as its share of commuter traffic is only a mere 2 per cent⁵¹. It is, however, expected that once all four phases are complete by 2021, the share of commuter traffic for the entire network will go up to about 25 per cent.

⁴⁸Delhi Metro Rail Corporation Ltd, 'Need for a Metro'

⁴⁹Lakshman, N. (2007), 'The Miracle-Worker of the Delhi Metro', BusinessWeek, March 19

⁵⁰Delhi Metro Master Plan 2021

⁵¹Delhi Metro Rail Corporation Ltd, 'Need for a Metro'

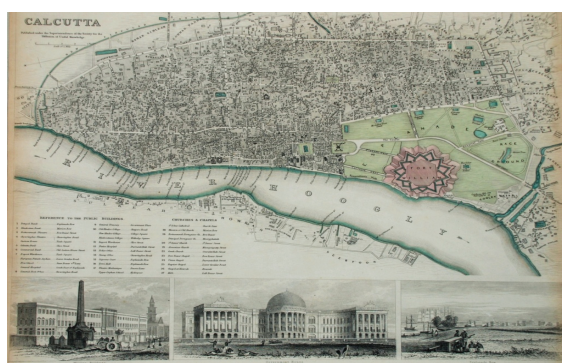
2.3.3 kolkata: a city in three stages

Today's Kolkata (earlier called Calcutta) was originally established by the English East India Company as a trading post in the seventeenth century. Till the mid-eighteenth century it was a small, fortified settlement. The above map of Calcutta, circa 1757, shows how it was surrounded by the fortification called the Maratha Ditch. However, after the Battle of Plassey 1757, Calcutta became the capital of the British Empire in the East. A vibrant and densely-built city emerged and by the 1830s, as shown in the following map, it had spilled over the fortifications. The Maratha Ditch was filled in and turned into the Lower Circular and Upper Circular roads (still the city's arterial roads).



Pre-Colonial Calcutta, circa 1757

Courtesy: Sanyal, S.



Calcutta circa 1842

Courtesy: Sanyal, S.

The second round of expansion happened from the late nineteenth century into the early twentieth century. This was driven largely by industrial growth and the introduction of railways with hubs in Howrah and Sealdah stations. Even after the shift of the capital to New Delhi, Calcutta continued to be India's most important economic and cultural centre till the early 1960s. In the seventies and early eighties, an underground metro line was built. It opened in 1984 as India's first underground rail line. Since then, the city has fallen behind cities like Delhi, Mumbai and Bangalore as a centre of

economic importance. Nonetheless, the city has continued to evolve gradually. New suburbs like Bidhan Nagar (Salt Lake) and Rajarhat are being created. These new areas have been created mostly on a road based framework. As a result, the urban form of the third stage is much more sprawled than that of the older parts of the city.

The three phases of growth have created a city with a very complex array of transportation systems but it has retained a culture of public transport usage that was embedded in its DNA. The British first introduced (horse driven) trams into the city in 1873, thus putting in place a legacy that continues till today⁵². However the tram system is now in decline. While in the 1980s, the Calcutta Tramways used to carry 0.75 million passengers per day with 275 tram-cars on road, twenty years on, it now carries roughly 0.16 million passengers per day with 170 tram-cars running. Yet, Kolkata continues to maintain its legacy of a vibrant public transport system through its bus network, suburban rail, and under-ground metro rail services. Today a significant majority of Kolkata's citizens continue to rely on public transport and walking as their primary means of transportation.



Kolkata's Famous Trams

© Mohit Midha

The examples of these three cities illustrate that there is a clear link between the history and the future of the city. The way we plan and institute a system of transport in our modern and new cities will hardwire their respective urban forms for decades, perhaps centuries, to come. Since India is yet to build most of its cities, we have an opportunity to inject sustainability into the DNA at an early stage. In particular, we need to draw two important implications from the above discussion:

1. Historical development, particularly of transport systems, can have a huge impact on the future trajectory of a city.
2. The hardwiring of a city can be altered but changing the embedded DNA is difficult. For instance, the retrospective densification of Lutyen's Delhi is probably not advisable as the ring of density around it would now get gridlocked. Delhi now depends on the low density of Lutyen's city in its central core. Moreover, one may often face serious opposition from those who have invested in existing systems. Take the example of the introduction of the BRTS in Delhi. There was a severe backlash against the government because it caused a great deal of inconvenience to those who were using the road space for private cars.

⁵²The Calcutta Tramways Company (1978) Limited, 'History'

2.4 the decline of small town india

Urbanisation in post-independence India has not just been slow but has also been dominated by the very largest cities. More than 15 per cent of India's urban population lives in cities of 10 million or more. The comparable ratio for China is just 5 per cent. Today, the urban agglomerations around Mumbai and Delhi already contain populations of 19 million and 15.9 million respectively. Delhi, Bangalore, Kolkata⁵³ and Mumbai⁵⁴ have grown in size but the quality of life has been severely compromised. These megacities with populations of tens of millions occupy significant mind, media and policy space when one talks of urbanisation in India. The fact, however, is that most of India's urban centres are small towns. The 4,378 urban centres/townships⁵⁵ identified in the 2001 census comprise of only 35 cities with a population of over 1 million.

Figure 9 above illustrates the skewed state of urbanisation in India, where metropolitan cities of Mumbai and Delhi have seen their populations grow at explosive rates even as smaller cities and towns such as Kota in Rajasthan have witnessed much lower growth.

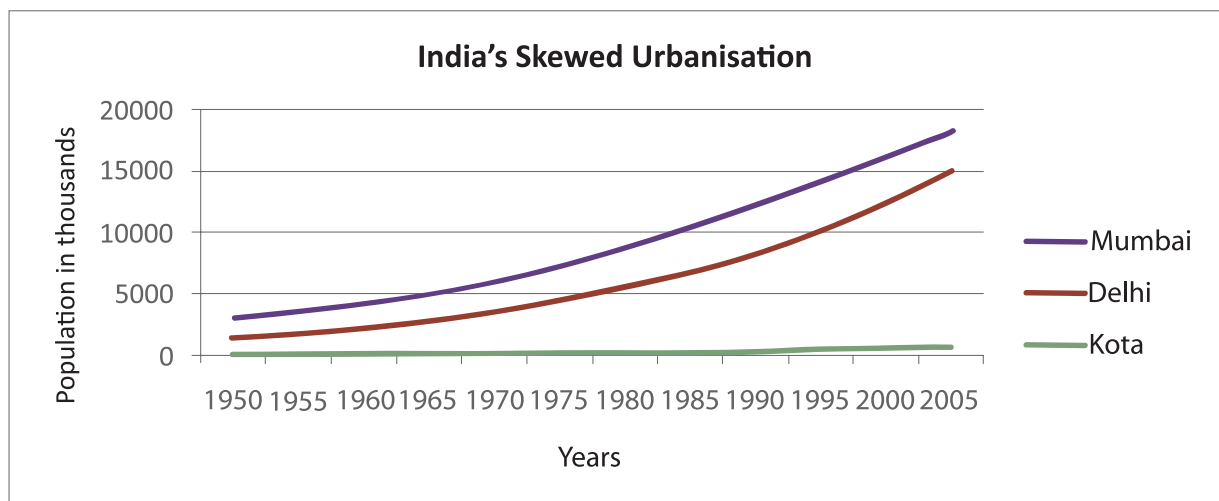


Figure 9: India's Skewed Urbanisation

Source: United Nations Population Division⁵⁶

Growth of smaller centres has been even lower. However, the real deterioration has been in the decline of small towns as centres of economic and social activity. Towns like Allahabad and Aligarh which were once vibrant university towns have seen steady brain drain for the last fifty years. Social institutions, some of them very vibrant in colonial times, have decayed in many of these places. Indeed, there has been a systematic shift of the small-town middle-class to the mega-cities. The migration patterns from rural areas have followed the middle class. Thus, urbanisation today is seen as the direct migration of rural workers from Bihar/Uttar Pradesh to the big cities of Mumbai and Delhi. The small *moufassil* towns of Bihar and Uttar Pradesh do not play a serious role as intermediate centres for migration.

There are many reasons that have caused this bias. A generalised deterioration of municipal governance in small town India has been a major factor. This should not be surprising since the district administrations of most areas are oriented towards rural rather than urban issues. The

⁵³CNN (September 2005), 'Saving Kolkata's Colonial Heritage'

⁵⁴Subramanyam, S. (2004), 'Knowledge Centres', The Hindu Business Line, 30 July

⁵⁵According to the Government of India Census 2001 the break up of these urban habitats are as follows: 1,334 urban agglomerations with population between 10,000-20,000; 1,151 urban centres with population between 20,000-50,000; 888 urban pockets with population between 5,000-10,000, 393 cities with a population of 100,000 or more and 191 urban centres with population of less than 5,000.

⁵⁶World Urbanisation Prospects: The 2007 Revision Population Database (<http://esa.un.org/unup>)

kanpur: the decline of a vibrant industrial town

The Ganges river basin is one of the most densely populated and fertile basins in the world. It is home to a twelfth of the world's population. There are some 30 cities, 70 towns, and thousands of villages along the banks of the river. A large section of the Gangetic river-system lies in the state of Uttar Pradesh, India's most populated, and Kanpur is the biggest city of the state. Kanpur was once the second most industrialised city in India after Calcutta⁵⁷. It is also home to the famous Indian Institute of Technology. However, it is now better known as a heavily polluted and chaotic industrial city that is slowly poisoning the Ganga river.

Kanpur is spread over an area of 260 sq km and has a population of almost 3 million⁵⁸. It is one of the biggest producers of textile and leather products in India. The city is home to 400-odd tanneries from where at least 250 million litres of waste water run straight into the Ganga daily and on days with power cuts, when treatment plants do not work, the number hovers closer to 300 million.

The pollution of the Ganga is not just a threat to the river itself but to the existence of Kanpur and various other cities which have long flourished on the banks of Ganga. The pollution in the river has already rendered the water unfit for drinking and bathing. The pollutants have even contaminated the groundwater and the shortage of water is increasing at a rapid speed. The noxious chemicals have largely killed off the fish that once thrived in the river. Kanpur resident Ashok Mishra says, "Kanpur is drowning in its own filth"⁵⁹.

Collaborative efforts are, at last, being made to revive the ecology of the river. WWF's Living Ganga project, which is funded by HSBC, works in partnership with key local and regional organisations such as the International Water Management Institute, the Indian Institute of Technology, Local Governments for Sustainability (ICLEI), an NGO called Ecofriends, various industry associations, and central and state government institutions. It is developing a framework for sustainable energy and water resource management in a critical stretch of the Ganges river basin⁶⁰. It is too early to judge if these efforts will be able to reverse damage to the Ganga.

decline of old universities and social institutions is another factor. Even when new institutions were built in the post-independence era, no effort was made to link the institution with the wider urban community. For example, the Indian Institute of Technology (IIT) in Kanpur plays no role as a driver of urban re-generation in its host city (see Box "Kanpur: The Decline of a Vibrant Industrial Town"). As a result, Kanpur is better known for its polluting industries rather than the thousands of brilliant engineers it has produced, many of whom played an important role in triggering the global IT boom. Contrast this with the role universities have played in cities in the West – for instance, Boston, Oxford and Cambridge.

There is now some recognition that the smaller centres need help and some efforts are being made in this direction (see Annexure 2). However, we feel that efforts are still not reaching down to the large numbers of really small towns. This is an important issue because the current orientation towards mega-cities is causing a great deal of social, political and economic stress. Note the frequent frictions between native Marathi and the migrant Hindi-speaking populations of Mumbai.

⁵⁷Kanpur City Development Plan, 2006–2012, Jawaharlal Nehru National Urban Renewal Mission, Kanpur Municipal Corporation

⁵⁸Census 2001

⁵⁹Narain, P.P. (September 2008), 'Kanpur's Tanneries Earn it Title of the Worst Polluter of Ganga', Mint

⁶⁰World Wide Fund for Nature, 'For a Living Ganges- India'

2.5 failure of new cities in modern india

India has now been independent for over two generations yet the 'successful' cities of today are still those originally built by the British or even earlier (Chandigarh is perhaps the only exception). Indeed, even within the cities, the old colonial and pre-colonial parts of the city continue to be more attractive than the newly built areas. There are a number of reasons for this failure.

First, the failure to provide adequate urban infrastructure and governance. Even when new urban centres have apparently succeeded, we have found that municipal systems break down within a decade of the growth boom. Gurgaon and the newer parts of Bangalore are good examples of this experience (See Box "Gurgaon- Overwhelmed by Growth"). However, the biggest failure has been one of urban form. As we will argue later in this report, it is not meaningful to think about "infrastructure" without having a vision of the city's urban form. If the overall form itself is fundamentally flawed, the building of more roads and flyovers will not solve the problem.

Second, a related failure is that of not investing in urban "software". The new cities built post independence have been unable to work as vibrant social hubs. Navi Mumbai, built as a satellite city in the seventies to decongest the main city of Mumbai, has failed as a social eco-system: its roads, neighbourhoods and railway stations wear a desolate look compared to the vibrancy of "old" Mumbai. Urban Age notes, "The city in parts remains a ghost city and its vast amount of housing and office buildings are only slowly filling up". Unfortunately, most studies still take a "hardware" view of this failure. Two reasons are usually identified: first has to do with real estate speculation, and secondly, the lack of new bridges over the Thane Creek, connecting Navi Mumbai with the old city. However, we feel that the biggest problem with Navi Mumbai is the lack of urban "software". Even though it has high quality physical infrastructure, it ignored the value of urban software: good pedestrian paths,

parks, museums, theatres, temples, sports facilities and, in general, public spaces that facilitate social clustering and community interaction. As a result, Navi Mumbai has developed as a boring and inhuman space that still lags behind the colonial era charms of the old city. Some efforts are being belatedly made to remedy this, but the overall approach is still an industrial "hardware" one and it is yet to yield real results. The same mistakes have been re-created in the brand new city of Gurgaon.

THE NEW CITIES BUILT POST INDEPENDENCE
HAVE BEEN UNABLE TO WORK AS VIBRANT
SOCIAL HUBS. [THEY IGNORE] THE VALUE OF
URBAN SOFTWARE: GOOD PEDESTRIAN PATHS,
PARKS, MUSEUMS, THEATRES, TEMPLES,
SPORTS FACILITIES AND, IN GENERAL, PUBLIC
SPACES THAT FACILITATE SOCIAL CLUSTERING
AND COMMUNITY INTERACTION

gurgaon- overwhelmed by growth

Gurgaon is a flashy boom-town that has emerged, almost overnight, with shopping-malls, condominiums and swanky office towers. It is often touted as “planned” development⁶¹. Yet, it lacks a meaningful municipal waste disposal system. Garbage and raw sewage is simply taken some distance away and dumped. Similarly, till very recently, no thought was given to public transport. As a result, the city, still half-built, already suffers from traffic jams, power shortages and water-supply constraints.



Gurgaon's Sprawl

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When Arun Maira, the former Chairman of Boston Consulting Group (presently Member, Planning Commission, Government of India) in India moved to Gurgaon he was impressed with the sense of space that the city projected. “There were a few high-rises but they were scattered here and there. The overall feeling was still of a less congested city.” Five years down the line he has reason to be disappointed. Urban ‘development’ in Gurgaon, part of the National Capital Region and one of Delhi’s 4 satellite towns, has spiraled out of control. “There are buildings everywhere and these office and residential complexes are little islands providing lifestyles and services unheard of in India till recently.” But between these islands there is chaos and breakdown of law and order he says⁶². Gurgaon he points out is a city with modern glass and concrete structures but feudal infrastructure. “It just grew too fast. It became a city while governance and infrastructure capabilities were still oriented towards a village.” According to Maira, who is also involved with a local NGO, Society for Urban Regeneration of Gurgaon and its Environs (SURGE), the fundamental problem here has been the fact that urbanisation has been driven by bad planning and a thought process which doesn’t believe in devising viable urban spaces. The philosophy, he says, seems to be to let people

⁶¹Urban development in Gurgaon is a joint operation of the government and the private sector. The government agency, HUDA and over 45 private players are involved in Gurgaon’s property market; Integrated City Making, Urban Age (LSE, 2008)

⁶²Huge tracts of land were given to private developers in Gurgaon. “These developers, over time, appropriated most designated green spaces and public spaces, extracting as much revenue as they could out of the land. So a city was created, but the opportunity of setting new benchmarks in civic life was lost.”; Integrated City Making, Urban Age (LSE, 2008)

failure of new cities in modern india

build residences and offices arbitrarily and as they get occupied, infrastructure and other economic activity will follow. This is a prime example of ad hoc and unsustainable urbanisation.

Umesh Anand, Editor and Publisher of Civil Society magazine is even more vehement in his indictment of present day Gurgaon. “Liveability in Gurgaon has gone down considerably in the last few years. There is absence of public transport as well as sewage and waste disposal systems; there are inadequate police personnel and a complete absence of a sustainable and reliable water supply.” All this, he says stems from an absence of a vision for urban India and a complete failure of governance.

The above reaction from some of Gurgaon’s leading citizens is damning. Yet, the city was built only from the nineties and suffers no lack of financial muscle. So what went wrong? Three things in our view.

First, the city was sliced up into large sections that were handed to developers but there was little effort to maintain overall urban order. A district administrative apparatus oriented to a largely rural population was suddenly given the task of running a large city (now estimated to have 3mn inhabitants). Meanwhile, in the absence of government supervision, the real estate developers took a great deal of liberty in the way they planned and executed their townships. As a result the infrastructure of city is either grossly inadequate or totally uncoordinated and misaligned.

Second, the urban form of Gurgaon was envisaged on an outdated vision of a road-based suburbia. Indeed, for many years, the municipal laws deliberately discouraged densification. Public transport was not given much importance. Walkability was hardly considered and there are virtually no footpaths and pedestrian underpasses in the city even today. There is a national highway (NH8) that bisects the city but there are few places that one can cross it by foot. As a result the city is structurally fractured.



Gurgaon's Sprawl

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Finally, in common with Navi Mumbai, there is no thought of urban software. The city consists of office blocks, shopping malls and gated communities. There are very few public spaces of any kind. The few green areas are in form of private golf courses – hardly conducive for creating a vibrant urban community. There are very few places for generalised social interaction such as public parks, sports complexes, temples, art hubs and so on. Indeed, it is even difficult to identify a city centre. The result is a largely soulless collection of buildings that do not add up to a vibrant city.

Very recently, there has been a belated effort to remedy the situation. The Delhi Metro is being extended to Gurgaon. A new municipal governance structure is also being developed. However, as we have seen, it is difficult to change the DNA of a city once it has been embedded. Hopefully, it is not too late for Gurgaon.