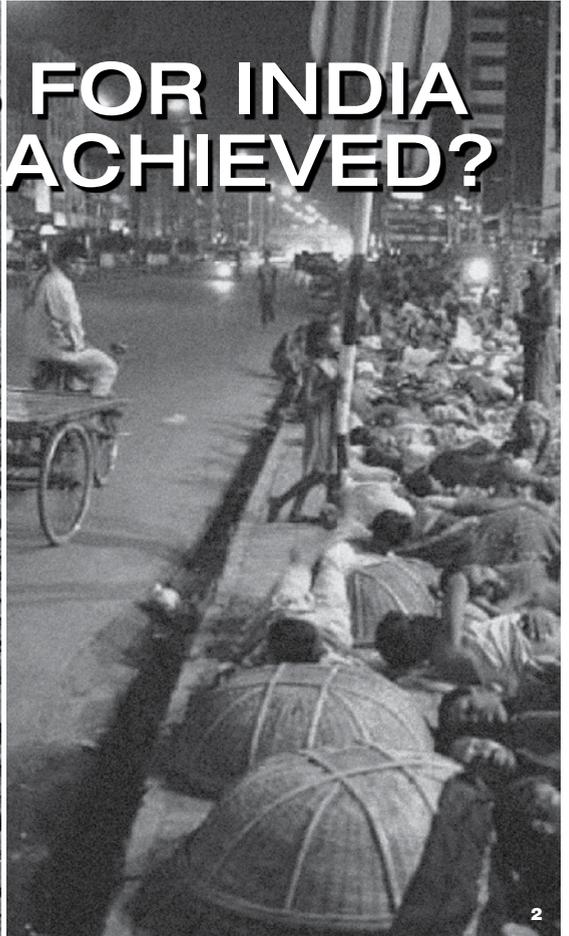
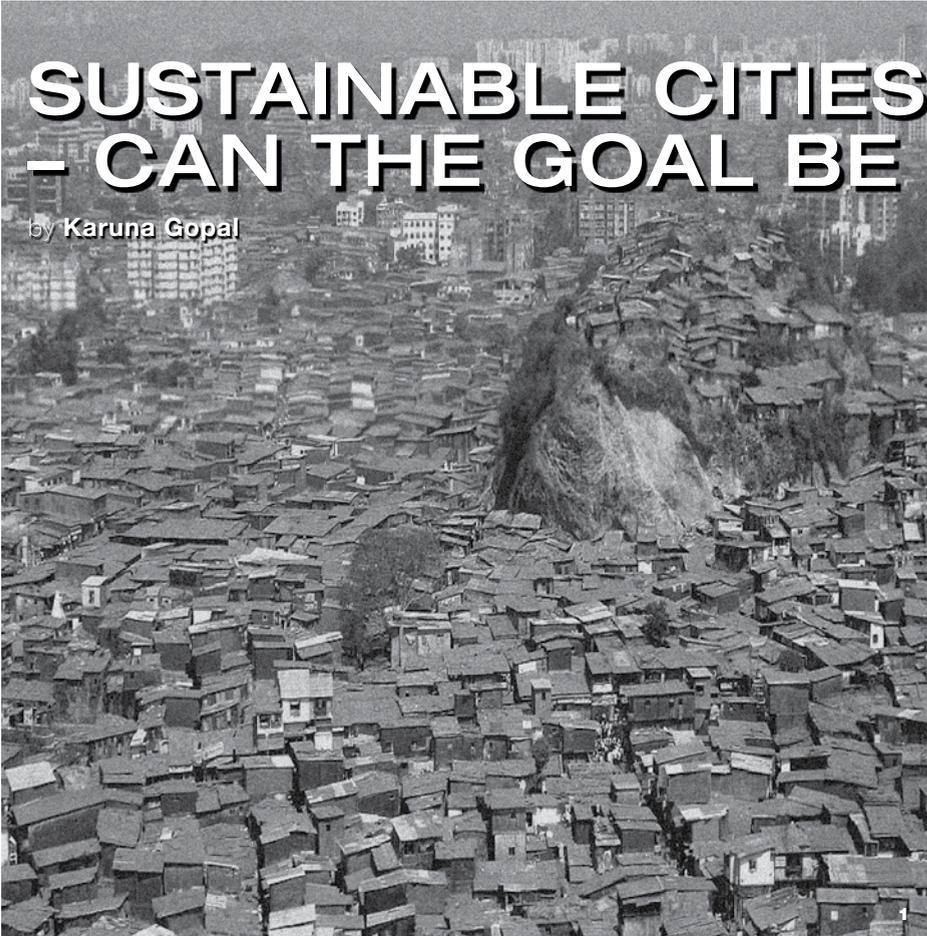


SUSTAINABLE CITIES FOR INDIA – CAN THE GOAL BE ACHIEVED?

by Karuna Gopal



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The 21st century is the century of the city. According to the United Nations, more than half the world's population now lives in cities. Urban growth rates are the highest in the developing world that is absorbing an average of 5 million new urban residents every month. The developing world is also responsible for 95 percent of the world's urban population growth. The cities of India, the largest democracy and one of the fastest-growing countries in the world, are at the forefront of this change. India has the second largest urban system in the world with more than 350 million people living in more than 5,000 cities. It is predicted that India will have close to 600 million living in cities by 2030.

Being at the epicentre of this furious urbanisation is both an advantage and an adversity for India. Cities, the hubs of entrepreneurship and innovation, have been contributing nearly 60 percent of the nation's GDP and almost 85 percent of the tax revenues—predictions are that the GDP contribution will go up to 70 percent by 2012. Indian cities are now being acknowledged as the engines of economic growth.

But rapid urbanisation is something that India was not prepared to deal with. Urbanisation happened at a time when the nation was still singing paeans to her rural hinterlands and anything remotely city-centric attracted the 'elite' label. The rural bias is very much reflected

in national policies and investments even till today. In per capita terms, India's annual capital spending of USD17 on urban infrastructure is a mere 14 percent of China's USD116 and a dismal 4 percent of United Kingdom's USD391.

THE STATE OF INDIAN CITIES

Propelled by globalisation and increasing economic cooperation between nations, India experienced industrialisation, urbanisation and motorisation. They came in quick succession just as triplets who share the same umbilical cord do. The trio have historically been the cause and consequence of economic prosperity of cities around the world. India was no exception. Indian cities prospered and choked at the same time. The country had to learn that playing an unwilling host to urbanisation had its own costs.

Infrastructure in cities started crumbling under pressure. The quality of life deteriorated so much that experts alerted the policy makers—urban decay was imminent they said. The second largest urban system in the world was characterised by rickety infrastructure, lopsided development, slum proliferation, traffic congestion, as well as water and sanitation deficits. Cities were screaming to be saved from noise and air pollution when the government of India decided to react. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was announced by the Prime Minister of India in 2005 with an outlay of USD20 billion. Touted

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as the largest ever initiative for urban renewal, the JNNURM was anything but an ambitious plan. It was reactive; it spoke of renewal and rejuvenation, not about envisioning the future of Indian cities.

But the programme proved to be useful after all. In the last five years, it unearthed the systemic problems of Indian cities. It managed to pull the veil off the Indian urban service delivery machinery exposing the gaps in policy, process and people.

GREATER CITY - GREATER VULNERABILITY

India is being swept away by a new phenomenon lately. Cities have started merging with surrounding municipalities and villages to become greater cities. Delhi, Bangalore and Hyderabad grew to anywhere between three to four times. Other cities followed suit.

Hyderabad, the capital city of Andhra Pradesh, was declared a greater city in 2007. As the population doubled, the city swelled from 174 square kilometres to 625 square kilometres. The urban sprawl of Hyderabad experienced the "Doughnut Effect" resulting in a dense periphery that demanded more infrastructure and services in that area. The city as such was experiencing difficulties in providing water supply and sewerage services to areas in the old municipal limits—the "Hi-tech City" that boasts state-of-the-art infrastructure and iconic buildings had a maze of fibre optic lines for communication but had no underground sewer lines. This was the state of infrastructure before the greater city status. After the city was declared a greater city, even as the municipal corporation was restructuring itself to provide services to the larger area, in October 2010 the city grew yet again. The municipal limits were extended to cover 800 square kilometres and the urban agglomeration around it ballooned to 7,000 square kilometres.

This proclivity for greater cities is known to work against the goal of sustainability. Commissioners who manage Indian cities admit that large cities are administrative nightmares. Evidence shows that compact and dense cities optimise transport infrastructure, consume less fuel and cause less emissions. As walking to work and places of recreation is possible in compact cities, they promote community bonding and social harmony—the corner stone of sustainability.

International experiences have shown that

doubling of residential density would reduce almost 30 percent of driving requirement. Compact cities normally have high-rise buildings. But unlike in developed countries, enforcing strict norms on structural safety, environment and fire safety presents quite a challenge in the Indian context. Lack of support infrastructure and FAR (floor area ratio) norms too work against the possibility of compact cities in India.

URBAN SLUMS - UBIQUITOUS AND UNFAZED

Mumbai, the financial capital of India, is also notorious for its slums. Sixty percent of the city—a whopping eight million—lives in slums characterised by degraded housing, poor hygiene, congestion, inadequate civic services and deplorable quality of life.

Mumbai is not alone; most of the metros in India have anywhere between 30 to 50 percent of people living in squatter settlements. Increasing prosperity in the cities paradoxically increased the number of poor people too. The unskilled migrants from the rural counterparts have access to neither land nor jobs. It is estimated that India has a deficit of 50 to 70 million houses; the need for other social infrastructure too is not far behind.

Most of the cities have a schizophrenic configuration—extreme poverty is juxtaposed with extreme wealth. People in slums and those in iconic bungalows are street mates who never share the same quality of life. Social unrest, crime, violence and vandalism are the consequences of such a city form.

Efforts in healing cities and making them slum free have not been fruitful so far. A case in point is the Dharavi Redevelopment Project. Dharavi, Asia's largest slum in Mumbai, has almost 700,000 people crammed into just 1.75 square kilometres. The arc lights were on Dharavi recently when 80 real estate giants were vying to invest USD240 million for its makeover. In August 2007, the state government advertised in leading newspapers across 28 countries, inviting bids from developers. Large international consortia bid for the project. After creating great excitement the project that was originally approved in 2004 is still only a project on paper even today. Why? The ruling party that mooted the idea is no longer in power; the bureaucrat who led the project has been transferred; and the number of bidders interested in the project has come down to six from 14. The project cost swelled from INR 9,000 crores to INR 15,000 crores while Orangi (in Karachi) has overtaken Dharavi as Asia's largest slum.

URBAN TRANSPORTATION - TOUGH ON TRAVELLERS

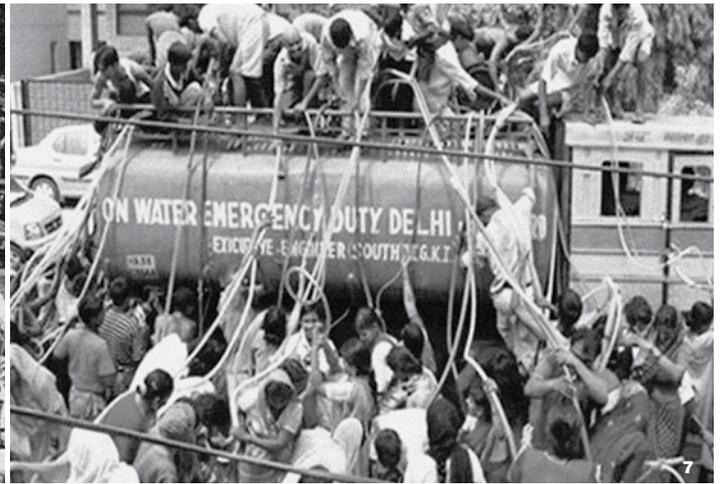
Delhi, the National Capital Region, loses nearly 420 million person-hours every month to commuting between home and work. This is just one statistic that speaks of the state of congestion on Indian streets, a snapshot of the Indian city's traffic scenario.

Several million vehicles ply on the streets where vehicle-to-road length ratio is poor. Respirable particulate matter (RPM) is always several notches above the acceptable level; 50 percent of the road accident victims are pedestrians; and billions of working hours are lost with people stuck in traffic. Footpath-to-road ratio is poor in most cities. Walkability index is less than 0.6 on average and captive walkers are not walking by choice—they have no access to public transport.

The traffic composition has significantly changed across all cities between 1994 and 2007. The share of motorised vehicles increased from 65 percent to 90 percent while the share of non-motorised vehicles decreased from 35 percent to 10 percent.

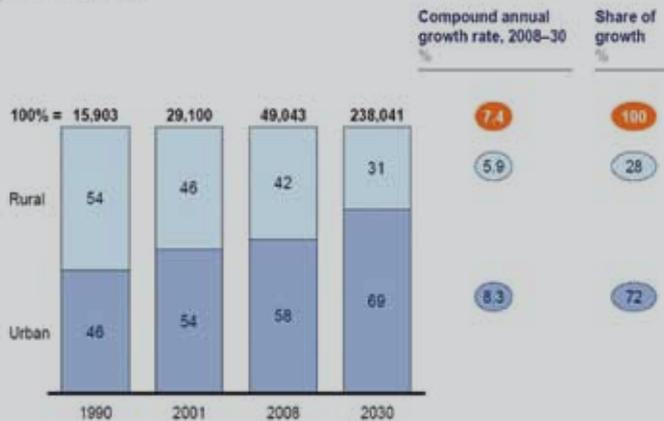
Most cities showed a continuous decline in the public transport during the same period. Even as the public transportation share decreased, urban sprawl increased—trip lengths, fuel consumption, and emissions went up exponentially. For growing cities like those in India, the share of public transport should ideally be around 80 percent but most have it in the range of 40 percent. It is also a fact that many cities in India do not have any kind public transport at all.

Realising that mass transport will be the only way forward, the Indian government sanctioned Metro Rail infrastructure for several cities. There were implementation bottlenecks in some cities. Activists protested only after billion-dollar contracts were signed. Issues such as the felling of trees, absence of Environment Impact Assessments studies, not consulting citizens, demolition of private properties and heritage structures and huge public money associated with the project were not acceptable to them (the cost of Metro Rail is USD45 million per kilometre while the Bus Rapid Transit System or BRTS costs only USD4 million). Transport choices were not made in a city-centric fashion based on the transportation needs, available

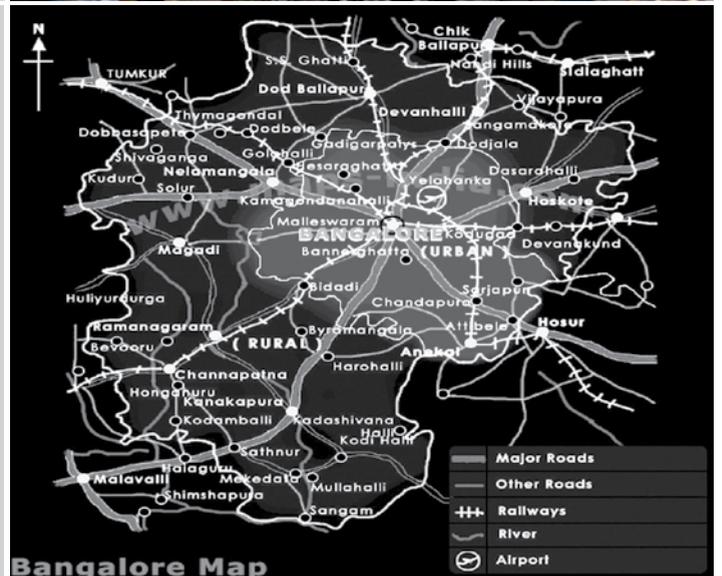


Cities will account for nearly 70 percent of India's GDP by 2030

Share of India's GDP
%: rupees billion, real 2008

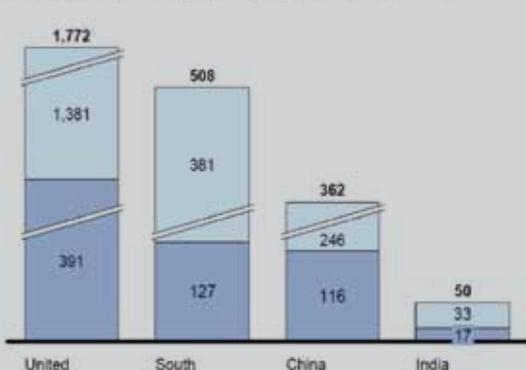


SOURCE: India Urbanization Economic Model, McKinsey Global Institute analysis



India chronically underinvests in its cities in comparison with other urban centers around the world

Comparison of per capita spending on urban capital expenditure on services' \$/capita, capital (CapEx) and operational expenditure (OpEx), FY 2007, 2008 prices



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budgets and the readiness of people to accept that mode of transportation.

Transportation chaos is mostly due to a lack of integrated land use and transportation plans. Almost as if inspired by the mythical god Janus who has two heads that look in opposite directions, land use and transportation plans seem to be prepared in isolation. As a result land gets developed with no transport connectivity and vice versa.

The Delhi Metro, a rapid transit system, though proposed in 1960 became a reality only after 40 long years. The Bandra Worli Sea-Link in Mumbai (a new landmark for Mumbai) proposed decades ago materialised recently. It reflects the city's inequality—a USD350 million transport project was built exclusively for 2 percent of the population and for those who own cars at that.

SYSTEMIC PROBLEMS

"Vision statements at best embellish the walls of government departments and strategy documents stay safe in the vaults."

India's penchant for plus size is reflected in all the policy decisions—mega projects; mission programmes and greater cities. A plethora of policies, programmes and projects reflect the nation's attraction to creating everything anew. Instead of reengineering the existing processes and revisiting existing structures, new structures and committees are created at the first hint of a problem. SPVs (special purpose vehicles) have become a norm lately.

"The sheer number of different visions, concepts, plans and strategies put forward by various government departments at different levels makes it difficult to rely on any of them and often makes them obsolete even before being published." (The Urban Age Report)

Reactive plans, poor enforcement, strong theory and weak practice, planning agencies disconnected from implementing agencies, capability and capacity gaps, issues of data asymmetry and reliability, planning as politics, outdated laws are proving to be a recipe for disaster for Indian cities.

And the root cause? The metropolitan governance framework in India has fragmented institutional responsibilities making consensus impossible. Each city has anywhere between 15 to 30 agencies dealing with city management. These agencies have ambiguous role definitions,

overlapping jurisdictions, budgetary and staff deficits, as well as competency and capability gaps.

Bureaucrats get transferred every two to three years, politicians and department heads can never get on the same page, mayors with no power or accountability, and vested interests are some of the realities that add to the existing confusion and chaos. Given the above any decision on infrastructure is bound to work against the goal of sustainability, especially for cities that are ever growing. Moreover, India has to deal with her colonial legacy—antiquated urban laws often referred to as 'Jurassic' laws.

Who owns the city? Who should lead it? Who is accountable and empowered? When there is no clarity on institutions and stakeholders responsible for driving the city's agenda, development will be anything but organised.

THE WAY FORWARD

"Systemic problems cannot be solved by cosmetic solutions."

Sustainability is complex and requires a shift from reactive to proactive approaches. It demands adoption of an integrated approach to management of key services like water, waste and transport. It urges participation at all levels of the community in decision-making.

Many countries like United Kingdom, South Africa and China have been able to turn around their cities in less than 10 years. Prosperous cities elsewhere in the world were never a result of some random action. National policies and corporate strategies that are pro-urban have made a difference.

Bold pro-urban policies, corporatised agencies, and visions that articulate economic, equity and environmental outcomes as opposed to mere spatial plans are the first things that India should have. The country should go ballistic on city-level reforms, gun for reliable mayors assisted by professional city managers and aggressively invest on urban infrastructure. The McKinsey Global Institute Report estimates that India needs to invest USD1.2 trillion just in capital expenditure in its cities over the next 20 years.

Shackles of colonial legacy have to be broken with imagination and boldness. The ground has been prepared with the 74th Constitutional Amendment Act that guarantees financial and administrative autonomy to local bodies. India should not shy away from technology solutions

and should stop being sceptical about private investments. Public-private partnerships have to be pursued with renewed vigour. Concepts like "rurbanisation" have to be explored and exploited.

As urban transformation is an economic necessity for India, cities have to become the nation's priority. Just a few years ago, even as the world was reeling from the effects of the global financial meltdown, India exhibited extraordinary economic resilience by posting a 7 percent growth. With demonstrated capabilities in managing crises, India should get her act right and aim for sustainable development—better sooner than later.

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- 4 & 5 Metro traffic** **6 Comparison graphs**
7 Water shortage **8 Rajiv Gandhi International Airport**
9 Doughnut Effect/urban sprawl