

## INFRASTRUCTURE

### CHALLENGES

## Urban Infrastructure Development in India

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*There is need to strengthen all aspects of city management and to build capacities of city-level agencies to provide good governance*

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**T**HE YEAR 2008 was an important milestone in the evolution of human settlements. For the first time in human history, the population living in urban areas exceeded that in rural areas. According to the population estimates prepared by the United Nations, out of the total world population of 6.7 billion in 2007, 3.3 billion persons lived in urban areas. It is estimated that by 2050, this number will increase to 6.4 billion. Globally, the level of urbanisation is expected to rise from 50 % in 2008 to 70% in 2050 and much of the future urban growth will happen in developing nations. It has also been projected that the increases in the world urban population will be concentrated in a few countries, with China and India expected to account for about a third of the increase in the world urban population in the coming decades. By 2050, China will have

the largest urban population, about 1 billion, followed by India with 0.9 billion (UN, 2007).

Although India is a relatively less urbanised country, with only 30% of its population living in cities, the size of its urban population is the second largest in the world. While the rate of urbanisation has been slowing down during the last two decades, the size of urban population in India is very large and is expected to continue to grow. It is projected that by 2030, India will be 41% urban and by 2050 it will cross the 50% mark.

Urban population in India is concentrated in the approximately 400 Class I cities, those with population greater than 0.1 million. At present, more than two thirds of the urban population lives in these cities. In contrast to the Class I cities, the small and medium towns numbering about 4000, have experienced slow, declining and

unstable growth during the past three decades. These Class II-V towns also have higher poverty levels. Infrastructure investment in small cities is minimal and their ability to mobilize resources is very limited. Significant regional disparities exist in urbanization rates across the country, for instance the state of Gujarat is 38% urban while the level of urbanization is only 10% in Bihar. A matter of great concern for policy makers is that as the level of urbanization increases, it may lead to further disparities across regions and among different categories of cities.

Since India's independence in 1947, the main thrust of urban policies has been to control the rural-urban migration in order to slow down the rate of urbanization. However, demographic data for India shows that most of the increase in urban population in recent years has been on account of natural growth and not primarily due to rural-urban migration. Now there is increasing realisation that people migrate to cities mainly due to economic opportunities and that the migrants make a significant contribution to the economic growth of cities. Many experts believe that economic growth of cities may suffer if migration is stopped forcibly and that cities must be able to absorb the surplus rural population.

#### Role of infrastructure

Infrastructure is both a catalyst for local economic development and a necessary response to rapid urban growth. It is integral to all production and consumption

activities in a city. City infrastructure is a critical determinant of local business efficiency, productivity and the citizens' quality of life. In a globalising world economy, competitiveness of cities would depend a great deal on the efficiency of urban infrastructure and human capital. The projected growth of urban population implies that the demand for urban services would continue to grow and large investments in urban infrastructure would be required.

Urban infrastructure has strong local public good characteristics. It is difficult to exclude citizens from using roads and public amenities. Exclusion is feasible for water supply, but difficult in practice. Sanitation and solid waste disposal have significant positive externalities which justify public provision. Although urban infrastructure has natural monopoly characteristics, these can be overcome through appropriate unbundling. However scope for competition in urban infrastructure is limited. While public provision is necessary for political and social acceptability, significant private sector participation in this sector can be leveraged.

#### Present status of urban infrastructure in India

There is a huge gap between demand and supply of urban infrastructure in Indian cities. In recent years, there has been significant improvement in provision of roads and bridges, water supply, and sewerage systems in the larger metropolitan cities. Smaller Class I cities and small and

medium towns have not been able to create adequate infrastructure for basic urban services due to lack of resources and neglect by state and local governments.

There is very large variation in the level of water supply across different cities in India. The access of poor to water supply is extremely low. Very few cities have provided metering of connections and water charges do not reflect even the O&M cost of supply in most cities. There is neither the willingness to charge nor the willingness to pay. High distribution losses, contamination, limited duration of supply, and poor maintenance are common in urban water supply.

In many Indian cities wastewater is collected through surface drains. Only a handful of cities are covered by sewerage networks. Not a single city has sewage treatment facilities to fully treat the wastewater that is generated. While all metropolitan cities have at least a partial sewerage system, only a third of the Class-I cities and less than one-fifth of the smaller sized urban centers have underground sewerage. The status of infrastructure for solid waste management is also inadequate as most cities lack containerized storage sites, vehicles, maintenance facilities and well-managed landfill sites.

#### Recent initiatives in the urban sector

Rapid urbanization in India has resulted in enormous challenges in the form of space and resource constraints, infrastructure requirements and environmental pollution. However, until recently,

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urban infrastructure was not given enough priority by the central and state governments. Public resources available for urban infrastructure could barely meet one tenth of the total investment requirement as estimated by the Rakesh Mohan Committee and the earlier Zakaria Commission.

With the launch of the Jawahar Nehru National Urban Renewal Mission (JNNURM) and Urban Infrastructure Scheme for Small and Medium Towns (UIDSSMT), the urban sector in India has finally started receiving adequate funds for improving infrastructure and providing basic services for the poor. However, only a few states have taken the initiative to benefit from these programmes and the utilisation of funds is very slow.

A unique feature of the JNNURM is that project funding is linked to a reforms agenda under which the beneficiaries are expected to implement several mandatory policy reforms. The major reforms include rationalizing the property tax structure, reducing stamp duties, and repealing the Urban Land Ceiling Regulation Act. Some state governments have undertaken these reforms to become eligible for central funds but others are slow in doing so. Some progressive local governments are mobilising resources through user charges and land development taxes (vacant land tax, betterment levies, impact fees, etc.). Municipal bonds and innovative land taxation techniques are also being increasingly adopted by the metropolitan cities. Tax exemption of municipal bonds has enhanced the ability of urban

local bodies to mobilize financing for infrastructure projects. Pooled financing schemes for infrastructure are an innovative concept, however only a couple of states have successfully implemented these till now.

With the enactment of the 74th Constitutional Amendment Act, the message of decentralization has gone through but most state governments are dragging their feet in implementing the full intent of the Act. While there is greater clarity of functions of local governments, most state governments are resisting meaningful devolution of fiscal powers and autonomy.

The National Urban Transport Policy is another significant initiative in the urban infrastructure sector. By laying emphasis on public transport, it has expedited the introduction of more advanced transport infrastructure in cities in the form of BRTS, Metros, and improved bus services. Some of the mass transit projects are proposed to be implemented on the Public Private Partnership (PPP) model. But on the whole very few PPP projects have been proposed under these schemes.

**Involving the private sector and other stakeholders**

Most of the urban local bodies are under severe fiscal pressure and are therefore not in a position to finance their infrastructure requirements from own resources. Private Sector Participation can help to bridge the gap between required and available funds and to overcome operational weaknesses in terms of efficiency, cost and productivity through better utilization of resources.

However, urban local bodies in India have not succeeded in leveraging the full potential of Private Sector Participation (PSP) due to their inability to mobilize adequate internal resources. They have generally failed to create the enabling conditions of political and social acceptability of PSP in urban infrastructure projects. Private investment is not happening due to slow pace of policy governance and institutional reforms. There is also a need for public participation and institutional mechanisms for accountability and for transparent and participatory city planning processes.

A major unresolved issue is the lack of clarity on cost recovery policies for infrastructure projects and low willingness to impose adequate user charges. This will continue to be a major hurdle for PSP in the urban infrastructure sector. There are critical pricing issues -- in the water sector, for example, subsidies are widespread. Affordability is a major limitation for imposing direct user charges. As a result it has been difficult to attract PSP. Yet there are some obvious solutions -- universal metering; increasing slab rates for water charges; and pricing models to incentivise investment, conservation and other environmental benefits.

**Issues and challenges**

Urban planning continues to be neglected in cities across the country. As a result, city development suffers from poor spatial planning and outdated development regulations. Local economy is not given due consideration in city management

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and planning. Displacement and rehabilitation projects are ignored when implementing large projects. Very few cities have managed to introduce significant property tax reforms and to set up the institutional frameworks for imposing user charges where feasible.

Other unresolved issues with major implications for the urban infrastructure sector are the lack of progress on giving greater fiscal autonomy to local governments despite the 74th Constitutional

Amendment. Urban policies remain vague on issues of access of urban poor and slum dwellers to basic urban services. Without legal rights of tenure, it would be impossible for cities to provide urban services to these segments even if adequate infrastructure has been created.

There is significant scope for PSP in urban infrastructure development. However, there is no 'one size fits all' model. Cities must make objective assessment of how best they can leverage the resources and managerial abilities of the private

sector to provide urban services more efficiently and effectively.

Apart from financial resources, the critical need for urban infrastructure development is capacity building. Cities must develop institutional capacities to plan, develop and regulate the use of land and to implement infrastructure projects efficiently. Above all, there is need to strengthen all aspects of city management and to build capacities of city-level agencies to provide good governance.

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