Urban infrastructure

Importance of urban problems

9.93 In the 21st century, the first urban millennium in human history with over half the population of the globe now living in cities and towns, India faces an unprecedented challenge in throwing up sound institutions to cope with the rapid growth of cities. Roughly 30 per cent of India's population is in cities, but this number (30 crore) is already the second largest urban system in the world. It is expected that by 2025, half of the population will be urban. Roughly a third of the urban population today lives below the poverty line. Urban slums in some areas may have health indicators that are more adverse than rural ones.

9.94 Urban infrastructure consists of drinking water, sanitation, sewage systems, electricity and gas distribution, urban transport, primary health services, and environmental regulation. Many of these services are in the nature of 'local' public goods with the benefits from improved urban infrastructure in a given city limited to the citizens living in that city. Much of urban infrastructure is hence intimately linked to decentralisation of economic and political powers to sub-national tiers of government. In the light of the 74th amendment to the Constitution, there is a need to create fully empowered city governments to manage the urbanisation process, while having political accountability for it.

9.95 The urban shift has two important aspects, output and poverty. On one hand, large and small urban centres are disproportionately important to obtaining GDP growth. Roughly 50 per cent of India's GDP is presently estimated to come from the urban sector. Hence, growth of GDP and growth of the tax base depend on improving public goods in cities. At the same time, in the urbanisation process, poverty takes on an urban face. National policies on growth and poverty will increasingly have to focus on public goods and poverty alleviation in urban areas.

9.96 There is a close linkage between urban poverty alleviation and administrative and institutional reforms in the urban sector. Poverty reduction programs are intrinsically linked to efficient systems of service delivery and local government management. Efficiency gains from the restructuring process enables more resources in general to be diverted to specific social services and to subsidies for the poor. In addition, specific poverty programs such as slum-upgrading can be designed more systematically. For example, a slum-upgrading program will have a better chance to be scaled up to a city program if the delivery of municipal services and land tenure program is working more efficiently.

9.97 International experience suggests that without reforms in the institutional framework for urban infrastructure, central or state level government funds directed into the urban sector will not have the expected economic and social returns. On the contrary, the urban sector could make larger fiscal claims when faced with acute problems of infrastructure or poverty, and thus exacerbate India's fiscal problem. The success of central or state fiscal reforms is thus dependent on the efficiency of the cities themselves.

Urban-rural linkages

9.98 While urban infrastructure is important in its own right and is in the nature of a local public good, there are important urban-rural linkages and externalities. The organisational capacity, and professional staff, that comes about for cities can take on additional functions in a significant 'footprint' of outlying rural areas. This would harness economies of scale and scope. For example, a regional water utility for a cluster of small towns can also serve neighbouring rural communities - either directly as a service provider, or indirectly through technical inputs for panchayat-led delivery systems.

9.99 Rural areas surrounding cities tend to indirectly derive significant income from the prosperity of the city, through sale of high value crops, through SMEs and through labour supply. Urban centres provide income diversification, as rural families often have some family members working in urban centres. Hence, improvements in local public goods in cities, which spur GDP growth in cities, help impact on rural incomes in surrounding areas.

Urban transportation

9.100 Urban transport is one of the most important elements of urban infrastructure. Of the two broad modes, viz., private and public transport, the latter empowers the poor, who may otherwise be constrained to pursue economic and personal activities within walking distance of their living quarters. Public transport improves energy efficiency of the economy in comparison with solutions with an accent on private transport and reduces the problems of environmental pollution. In addition, public transport systems help maximise urban-rural linkages and improve the access of the rural/semi-urban population in the periphery to city centres for the purpose of labour supply, without proliferation of slums within and around cities. The major objective of urban transport initiatives is, therefore, to provide efficient and affordable public transport link between workplace and residence to all sections of the urban population. Towards this end, a draft National Urban Transport Policy has been drawn up and circulated to State governments and other stakeholders to elicit views and comments.

9.101 The Delhi Mass Rapid Transit System (MRTS), a joint venture between the Government of India and Government of National Capital Territory of Delhi is an important initiative in this regard. The project is being implemented by the Delhi Metro Rail Corporation (DMRC), a special purpose vehicle set up under the Companeis Act for this purpose. Box 9.4 summarises the salient features of this project.

9.102 Another important initiative for the National Capital Region (NCR) is the Integrated Rail-cum-Bus Transit (IRBT) System, envisaging development of a commuter rail system connecting Delhi with towns in the NCR. It comprises three corridors, viz., (i) Shahdara-Ghaziabad (14.92 kms), (ii) Sahibabad-Shivaji Bridge (17.36 kms), and (iii) Trinagar-Gurgaon (30.53 kms). The project is expected to be a joint venture between the Government of India (Ministry of Urban Development and Ministry of Railways), on the one hand, and the Government of National Capital Territory of Delhi, Haryana and Uttar Pradesh, on the other. The project proposal (estimated cost of Rs. 2239 crore) is being referred to the Planning Commission for 'in-principle' approval.

Box 9.4 : Delhi Metro Rail Transit System

- Phase I of the Delhi MRTS project consists of the following three corridors:

		Total length (kms.)	Underground (kms)
(i)	Shahdara-Trinagar-Barwala	27.84	—
(ii)	Vishwa Vidyalaya-Delhi Govt. Sectt.-ISBT-Connaught Place-Central Sectt.		
(iii)	Barakhamba Road-Connaught Place-Dwarka	22.90	1.12
	Total	**60.58**	**11.96**

- The Project (phase I) is scheduled to be completed by September, 2005. Shahdara-Tis Hazari section (7.92 kms.) of the Shahdara-Barwala corridor was commissioned on 24th December, 2002 and the Tis-Hazari-Inderlok Section (4.74 kms.) of this corridor on October 3, 2003. Commercial operation of the Inderlok to Rithala section (9.40 kms.) was commissioned on March 31, 2004.
- The remaining corridors are scheduled to be completed as under:

(i)	Rithala-Barwala	31.12.2004	5.78 km.
(ii)	Vishwa Vidyalaya-Kashmiri Gate	31.12.2004	3.94 km.
(iii)	Kashmiri Gate-Central Secretariat	30.09.2005	6.90 km.
(iv)	Barakhamba Road-Kirti Nagar	30.06.2005	8.41 km.
(v)	Kirti Nagar-Dwarka	30.09.2005	14.49 km.

- The Detailed Project Report (DPR) for Phase II of the Delhi MRTS is under preparation.

9.103 The Bangalore Mass Transit System (MRTS) envisages construction of a metro railway along East-West (18.1 kms) and North-South (14.9 kms) corridors in Bangalore. The Detailed Project Report (DPR) of the project estimates the completion cost at Rs. 4989 crore (including escalation and interest during construction). The proposal, submitted by the Government of Karnataka, has been accorded 'in-principle' approval by the Planning Commission and is being processed for further clearances.

Financing patterns

9.104 In terms of financing patterns, the foundation of urban infrastructure has to be user charges. It is possible for urban institutions to access resources from the capital markets to finance a large portion of urban capital expenditure, to be serviced by user charges in the future. This approach makes it possible to have a massive increase in capital expenditure on urban infrastructure without worsening the fiscal problem. In addition, the tariff restructuring or subsidy design in the context of a restructuring process allows for more efficient and targeted impact on the poor. In this context, Table 9.20 summarises India's experience with municipal bond issuance. While these bond issues have indeed taken place, the magnitude of resources involved is as yet insignificant.

Present problems in urban service

9.105 In terms of institutional structures, municipal functions are fragmented between different corporations, agencies, and local government bodies across state and local levels with conflicting lines of accountability. Existing agencies for municipal service delivery are structured along line-function systems with limited accountability, limited incentive for innovation in delivery of services, and limited use of private sector capacity to manage and finance services. There is a limited interface and accountability between political and administrative systems and communities. In particular, poor communities have a limited voice over city policies.

9.106 In terms of fiscal problems, there is persistent under-performance on revenue effort with unsustainable tariff structures and non-transparent subsidy schemes. The general property tax system requires restructuring and modernisation. Low income households are often at the regressive end of the fiscal system. At the same time, improvements in tax revenues and user charges are likely to be most acceptable in the context of concurrent improvement in the institutions of service delivery. This is perhaps analogous to the political acceptance of tolling of highways after high quality highways came about.

9.107 In terms of financial aspects, urban bodies have limited creditworthiness, with opaque financial and accounting systems and limited treasury management systems. Cities depend on fiscal transfers from other tiers of government or central government

Table 9.20 : Municipal bond issuance

Sl. No.	Name	Amount (Rs. in crores)
	2001-02	
1.	Ahmedabad Municipal Corporation	100.00
	2002-03	
2.	Hyderabad Municipal Corporation	82.50
3.	Nashik Municipal Corporation	50.00
	2003-04	
4.	Visakhapatnam Municipal Corporation	50.00
5.	Hyderabad Metropolitan Water Supply and Sewerage Board (HMWS&S Board)	50.00
6.	Ahmedabad Municipal Corporation	58.00
7.	Chennai Metropolitan Water Supply and Sewerage Board	42.00

Source : Ministry of Urban Development.

intermediation, e.g. through HUDCO. The limited access to private finance in turn limits the targeting of public funds for broader social programs and safety nets for the poor. However, access to capital markets is dependent on the institutional and fiscal reforms.

9.108 There is a need of independent regulatory capacity to oversee the operations of private participation in infrastructure, enforce social obligations of governments in particular with regards to the poor, and ensure application of environmental standards. Urban infrastructure reforms therefore have dimensions of institutional, fiscal, financial and regulatory reforms with economic efficiency and poverty reduction as the core objectives of the program. Sector-focused reforms in service delivery - e.g. a program which focuses only on water and sanitation and solid waste - need to incorporate such institutional, fiscal, financial and regulatory dimensions to the reform package.

9.109 One of the most important developments in this area was the 74th amendment to the Constitution. However, the implementation is as yet incomplete, leading to a fragmentation of local responsibilities between State and urban local governments, and a lack of accountability and performance in service delivery at the town and city level. In recent years, the Ministry of Urban Development and Poverty Alleviation has begun to complement its traditional spending approach on funding hardware to providing incentives for urban reform and institutional change in service delivery. It has initiated two important programs: the City Challenge Fund (CCF), and the Urban Reform Incentive Fund (URIF) scheme.

9.110 City Challenge Fund (CCF) has been set up as an incentive based facility that will support cities to fund transitional costs of moving towards and creditworthy institutional systems of municipal management and service delivery. The CCF is an incentive-based grant facility to support projects with the involvement of the private sector in urban services. The CCF will support larger municipalities, with a population of 5 lakh State capitals and cities in the northeast. While CCF has much strength in terms of institutional design, it has (as yet) not been implemented.

Box 9.5 : Salient features of Memorandum of Agreement with State Governments under Urban Reforms Incentive Fund (URIF)

The incentive under URIF is provided as 100 per cent Grant to the States/Union Territories entering into a Memorandum of Agreement with the Central Government addressing the first phase reform in the following areas.

- Repeal of the Urban Land Ceiling and Regulation Act.
- Rationalization of Stamp Duty in phases to bring it down to no more than 5 per cent by end of the Tenth Plan period.
- Reform of Rent Control Laws to remove rent control at lease prospectively.
- Introduction of computerized process of registration.
- Reform of Property Tax so that it may become a major source of Urban Local Bodies (ULBs), and arrangements for its effective implementation with collection efficiency of 85 per cent by the end of the Tenth plan period.
- Levy of reasonable user charges, with full cost of O&M being collected by end of the Tenth Plan period.
- Introduction of a double entry system of accounting.

The Empowered Committee under the Chairmanship of Secretary (Urban Employment & Poverty Alleviation) has been authorized to add the more areas of urban reforms in the second and subsequent phases of reforms.

9.111 Urban Reforms Incentive Fund (URIF) has been created with a corpus of Rs.500 crores per annum as (Additional Central Assistance) for reform linked incentive to State governments. Box 9.5 summarises features of URIF. Up to March 2004, 21 States and 3 Union Territories have signed Memorandum of Agreement (MOA) with the Department of Urban Employment & Poverty Alleviation to undertake the first generation urban reforms. URIF is a State level Incentivisation Programme. It seeks to incentivize State Government (not ULBs) to follow a certain reform programme decided by Government of India. Funds under URIF are untied and can be used for any urban development or housing or poverty alleviation project whereas CCF funds are tied and partly offset costs of transition/loss due to reform.

9.112 In response to these problems, has been an effort on creating a broader “guiding framework” for urban service delivery. A Model Municipal Law (MML) has been prepared and circulated to all States/UTs in October 2003. The MML provides the legislative framework to implement the provisions of the 74th Constitutional Amendment for empowerment of ULBs to enable them more effective and better service delivery. Guidelines on Private Sector Participation (PSP) in water and sanitation have also been issued. In order to maximise impact, both these need to be fully linked to the fiscal transfers.

Strategy for urban infrastructure reform

9.113 The central policy focus, as envisaged originally in the 74th amendment, hence, needs to be on the empowerment of local governments to take economic and service delivery decisions. This involves a new framework for urban expenditures that is driven through urban local governments. This needs to address the current fragmentation of authority between State and local government, support greater urban local government oversight and accountability for urban and municipal functions, and support control of service delivery investments, operations and financing to urban and municipal governments across functional urban areas.

9.114 Central government fiscal and regulatory incentives can catalyze institutional change at the State and local level, support innovative institutional forms of effective service delivery at the local level, and support the development of credit worthy urban local governments. This requires extensive work on improving the Model Municipal Law (MML), extending the Private Sector Participation (PSP) guidelines to cover over services, and strengthening the statistical system so as to have better data about expenditures on producing public goods, and public outcomes. The existing schemes need to be consolidated and rationalised into a system of capital grants to local governments, to support institutional reform and poverty targeting.