

## URBAN INFRASTRUCTURE

9.118 The increasing pressure of population on urban infrastructure makes it necessary to improve the urban civic services like drinking water supply, sewerage, solid waste management and urban transport. Municipal institutions responsible for providing these civic services are facing acute shortage of capacity and resource.

### Jawaharlal Nehru National Urban Renewal Mission

9.119 JNNURM, launched in 2005-06, enables the Mission cities to take steps for sustainable improvements in their civic services levels, through an additional central assistance (ACA) of Rs. 50,000 crore for seven years beginning from 2005-06 and an equal amount from the State Governments and urban local bodies (ULB). Out of the ACA, Rs.25,500 crore is for the submission, urban infrastructure and governance (UIG), which, inter alia, includes urban renewal, water supply (including desalination plants), sanitation, sewerage and solid waste management, urban transport, development of heritage areas and preservation of water bodies. Memorandum of Agreement (MoA) for urban reform agenda has been signed with 62 mission cities and 6 ULBs falling under the urban agglomeration of the cities. There is now a better appreciation at the state level of the importance of developing and sustaining the infrastructure through appropriate user charges. Further, many states and ULBs have started meeting timelines committed for implementation of the reforms under the MoA.

### Fresh initiatives under JNNURM

9.120 The mission cities have undertaken reforms which contribute to sustainable functioning of local bodies, which, inter alia, include; comprehensive land titling legislation in Rajasthan, creation of a municipal cadre-municipal accounts service in Andhra Pradesh, setting up of urban transport fund in Surat and Pimpri-Chinchwad and setting up of urban transport authority in Hyderabad, Jaipur, Chennai, Bangalore and Mumbai. ULBs have initiated various steps to improve collection of property tax and user charges.

#### *Additional central assistance*

9.121 Rs. 4,455.37 crore was provided for 2008-09 as ACA for the sub-mission on urban infrastructure and governance. Since inception till March 2009, 461 projects have been sanctioned at an approved cost of Rs. 49,422.48 crore for 62 cities across 31 states. While ACA admissible for these projects is Rs.23,411.09 crore, ACA released has been

Rs. 7,428.40 crore. Of this, 138 projects have been approved with project cost of Rs. 19,065.85 crore during 2008-09. The ACA admissible for these projects is Rs. 8,685.90 crore, of which Rs. 3,545.49 crore has been released. While sanctioning projects, priority has been accorded to sectors that directly benefit the common man and the urban poor, viz, water supply, sanitation and storm water drainage.

9.122 Mission cities in states such as West Bengal, Maharashtra, Kerala and Gujarat have adopted public-private partnership (PPP) through appropriate policies and projects as a part of the reform agenda. PPP initiatives have been taken by Indore, Vadodara, Pune and Ahmedabad for establishing city bus services and in Kochi in solid waste management.

#### *Initiatives for non-mission cities*

9.123 A parallel scheme of Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) for non-mission cities and towns was also launched in 2005-06 under JNNURM. An amount of Rs.3, 279.69 crore was provided as ACA in 2008-09 for the scheme. Since inception till March 2009, a total number of 747 projects have been sanctioned at an approved cost of Rs. 12,793.81 crore for 632 towns. ACA admissible for these projects is Rs. 10,311.76 crore against which Rs. 5,820.71 crore has been released. During 2008-09, 315 projects were approved with project cost of Rs. 6,478.55 crore. The ACA admissible for these projects is Rs. 5,229.12 crore, out of which Rs. 3,280.26 crore has been released.

#### *Monitoring of JNNURM*

9.124 A programme called PEARL (Peer Experience and Reflective Learning) has been instituted for creating networks between JNNURM cities for cross learning and knowledge sharing on urban reforms and city governance. The other measures taken for monitoring projects under JNNURM include: (i) supporting professionally manned programme management unit (PMU) at state level and programme implementation unit (PIU) at ULB level, (ii) appointment of independent review and monitoring agencies (IRMA), (iii) capacity building and communication activities for slow performing cities through rapid training programme (RTP) and (iv) community participation fund for increasing engagement of citizens in urban management.

### Debt financing for urban infrastructure

9.125 To facilitate leveraging of debt for urban infrastructure projects, credit rating of ULBs has been undertaken in the mission cities. Of the 58 ULBs

which have been assigned draft ratings, 36 ULBs have investment grade credit rating. Under the Pooled Finance Development Fund (PFDF) Scheme, which is envisaged to provide credit enhancement to ULBs to access market borrowings through state-level pooled finance mechanism, Eight states have set up their "State Pooled Finance Entity" as per guidelines. The first proposal for issue of tax-free Pooled Finance Development Bond worth Rs. 45.00 crore by Water and Sanitation Pooled Fund, the designated instrument of Tamil Nadu, was notified and appropriate releases towards the Fund and project development cost were made in February 2008. In the present economic scenario, however, the progress of the scheme has been generally slow.

9.126 The Ministry of Urban Development has prescribed standardized service level indicators for four basic urban services (water supply, sewerage, solid waste management and storm water drainage) for enabling cities to monitor, manage and improve their services delivery. Comprehensive set of guidelines with indicators (covering access to services, quality and reliability of services, cost effectiveness) and a framework for data collection, collation and analysis and a reporting mechanism as well as bench marking has been prepared and circulated. The mission cities in particular are expected to keep these bench marks in view while implementing projects under the Mission.

9.127 While capacity building for JNNURM mission cities and towns covered under UIDSSMT are addressed through the specific provisions in the programme parameters, a separate capacity building programme, capacity building scheme for urban local bodies (C-BULB) has been drawn up to address the needs of those municipal bodies which are not covered under JNNURM.

9.128 Further, financial support under C-BULB are extended to the identified institutions/cities/states for setting up of centres of excellence, addressing specific capacity gaps including in areas such as urban planning, socio-economic and environmental planning, project implementation and management, preparation of detailed project reports, municipal service delivery including water supply, sewerage and sanitation, solid waste management, financial management, urban transport, cost recovery and user charges, implementation of capacity building programmes in pursuance of National Urban Sanitation Policy, implementation of municipal reforms like property tax reforms, accounting reforms, e-governance, public private partnership etc, and undertaking applied research and development programmes related to water supply, sanitation, solid waste management and urban development.

## National Urban Sanitation Policy

9.129 The policy, formally launched in November 2008, the international year of sanitation, envisages transforming all the towns and cities of the country into 100 per cent sanitized, healthy and livable spaces and ensuring sustained public health and improved environmental outcomes for its citizens (Box 9.7). Special focus has been given to hygienic and affordable sanitation facilities particularly for the urban poor and women. The policy focuses on achieving outcomes and building capacities rather than on mere construction of infrastructure. The main components include; awareness generation and bringing about behavior change, achieving open defecation — free cities, re-orienting institutions and mainstreaming and prioritizing sanitation in all urban management initiatives; sanitary disposal of wastes, promoting proper usage and maintenance of sanitation facilities; strengthening urban local bodies to provide sanitation services by supporting capacity building and training at state level.

### Box 9.7 : Recent decision

Desalination plant at Chennai: In January 2009, the Central Government approved construction of a 100 million litre per day (MLD) sea water reverse osmosis desalination plant at Nemmeli near Chennai at a total cost of Rs. 908.28 crore, of which Rs. 871.24 crore will be grant from the Central Government to the State Government of Tamil Nadu. The project is likely to be completed in 2010-11 and augment per capita water supply from 100 litre per capita per day to 144 lpcd.

## Urban Transport

9.130 Urban transportation covers private and public modes. The public transport provides easier access to economic opportunities to the poor by maximizing urban-rural linkages and is more energy efficient and less polluting. The Ministry of Urban Development launched the National Urban Transport Policy (NUTP) in 2006 to ensure accessible, safe, affordable, quick and sustainable mobility for all.

9.131 The Ministry had been providing grants to the extent of 40 per cent for studies in urban transport, which, inter alia, included studies to develop comprehensive traffic and transportation plans, feasibility studies and detailed project reports (DPR) for urban transport projects, under the Centrally-sponsored scheme of Urban Transport Planning. The response of the states, however, has not been satisfactory. To make it more attractive, a

new scheme was launched w.e.f. August 2008 to provide central financial assistance up to 80 per cent for taking up studies/DPRs (50 per cent in case of DPRs). The objective is to guide and facilitate implementation of National Urban Transport Policy.

### Box 9.8 : Urban Transport

Buses for Urban Transport under JNNURM: As a part of the second stimulus package for the economy, the Central Government decided in January 2009 that the states, as a one-time measure, will be provided assistance under the UIG component of JNNURM for purchase of buses for their urban transport systems. The purchase of 14,240 buses at a cost of Rs. 4,581 crore has been sanctioned, against which Rs. 995 crore of ACA has been released till end-March 2009.

### Metro Rail Systems

9.132 Delhi and Kolkata have introduced metro rail system in their cities. Delhi Metro Railway Corporation (DMRC) is a joint venture company of the Government of India and the Government of National Capital Territory of Delhi. Delhi Metro Rail System, technically known as Delhi Mass Rapid Transit System (MRTS), has incentivized modal shift from cars to public transport by virtue of its fast, efficient and environment friendly services. It has set high standards for project completion with quality and without time and cost overruns.

9.133 Delhi MRTS Phase I project (65.1 km.) are fully commissioned in November, 2006. The Phase II, sanctioned for construction/extension (121.765 km) consists Vishwavidyalaya -Jahangir Puri, Central Secretariat-Qutab Minar, Shahdara-Dilshad Garden, Indraprastha-New Ashok Nagar, Yamuna Bank-Anand Vihar ISBT, Kirti Nagar-Mundka corridors. Apart from this, Phase II consists of extension of Delhi Metro from Ambedkar Nagar in Delhi to Sushantlok (Gurgaon), extension of New Ashok Nagar in Delhi to NOIDA Sector-32, High Speed Express Link from New Delhi Railway Station to IGI Airport (that will reduce the journey time to only 16 minutes presently from 45 minutes), Central Secretariat to Badarpur, High Speed Express link from IGI Airport to Dwarka Sector-21 and Metro link from Dwarka Sector-9 to Sector-21. Shahdara-Dilshad Garden corridor has been commissioned on 30.6.2008. All these corridors are targeted for completion before the Commonwealth Games scheduled to be held in October, 2010.

9.134 The existing Kolkata Metro is under the direct control of the Ministry of Railways as a

government enterprise. The East-West Corridor Metro Rail project for Kolkata on the DMRC model over a length of 13.77 km. from Howrah to Salt Lake Sector V, has been approved by the Gol in June 2008. Though the project is scheduled for completion by October 2014; some portion may be opened by October 2013. A special purpose vehicle (SPV) of the Government of India and Government of West Bengal at 50:50 equity participation has been constituted for successful execution of the project as well as its operation and maintenance (Table 9.27).

**Table 9.27 : Financing pattern for East-West Metro Corridor Kolkata**

(Rs. crore)				
Sl. No.	Particulars	Gol	Government of W.B.	Total
1.	Equity	(15%)	(15%)	(30%)
		701.50	701.50	1403.00
2.	Subordinate debt	(10%)	(15%)	(25%)
		467.50	701.50	1169.00
3.	Sub Total(1+2)	(25%)	(30%)	(55%)
		1169.00	1403.00	2572.00
4.	Senior-term debt			(45%)
	(JBIC now JICA)			2104.00
5.	Grand total (3+4)			(100%)
				4676.00

Source : Ministry of Urban Development

9.135 The Government of India approved the Bangalore Metro Rail Project in April 2008. This consists of double-line electrified North-South and East-West Corridor, covering total length of 33 km. The East-West Corridor is from Baiyappanahalli to Mysore Road terminal and North-South Corridor is from Yeshwantpur Terminal to Rashtreeya Vidyalaya Road terminal. The tracks would be on standard gauge. The project is a joint venture of the Government of India and Government of Karnataka (Table 9.28 and Box 9.8). The project is scheduled to be completed by December, 2011. The first section of 7 km is scheduled to be completed in March 2010.

9.136 For better connectivity with the National Capital Region, a commuter rail system, namely, Integrated Rail cum Bus Transit (IRBT) System, which constituted Phase-I of the Regional Rapid Transit System (RRTS) is contemplated. The Planning Commission had set up a task force in 2006. The NCR Planning Board (NCRPB) has

**Table 9.28 : Financing pattern for Bangalore metro rail project**

(Rs crore)

Sl. No.	Particulars	Government of India	Government of Karnataka	Total
1.	Equity	(15%)	(15%)	(30%)
		959.25	959.25	1918.50
2.	Subordinate debt	(10%)	(15%)	(25%)
		639.15	959.25	1598.75
3.	Sub Total(1+2)	(25%)	(30%)	(55%)
		1598.75	1918.50	3517.25
4.	Senior-term debt (JBIC)			(45%)
				2877.75
5.	Grand total (3+4)			(100%)
				6395.00

**Source : Ministry of Urban Development**

awarded a consultancy study on an "Integrated Transportation Plan for National Capital Region".

9.137 Proposals for Bus Rapid Transit System (BRTS) have been approved for Ahmedabad, Bhopal, Indore, Jaipur, Pune, Rajkot, Surat, Vijayawada and Visakhapatnam under JNNURM covering more than 408 km at an estimated cost of about Rs. 4,510

crore, of which around Rs. 2,065 crore is Central assistance. A number of other cities are also coming up with BRTS proposals to be funded under JNNURM.

9.138 Considering the need for improving city bus service, urban bus specification, has been prepared and circulated to all states/ UTs, and to JNNURM mission cities, with a view to transform the way city residents travel. The Government has advised the states and cities to introduce ITS-enabled modern city bus service on PPP model. Cities of Bhopal, Jodhpur, Udaipur, Jalandhar, Ludhiana and Jaipur have introduced such service.

9.139 Unified Metropolitan Transport Authority (UMTA) has been set up for Jaipur, Bangalore, Hyderabad, Mumbai and Chennai by the respective State Governments, to facilitate coordinated planning, implementation and integrated management of urban transport projects.

9.140 Since problems of urban transport are of relatively recent origin, the ability to fully understand and deal with them is yet to fully mature. A scheme for capacity building at urban local body, Central and State Government levels has been proposed for sanction.