



Challenges in Indian mega cities

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ADDRESSING INFRASTRUCTURAL DEFICIENCIES in mega cities is a daunting task. These cities are expected to continue to grow in the foreseeable future. Therefore, the deficiencies too will become ever more pressing problems. One-fifth of the urban population of the country already lives in six mega cities. The number of people without adequate water and sanitation services will grow unless drastic changes are made in the present policies and practices.

The constraints inherent in the present scenario include lack of sufficient water resources, inefficient delivery mechanisms, lack of funding resources, and insufficient management and technical skills. Most disturbing, however, is the apparent lack of political will on the part of the Government to take action to solve these problems.

In this paper, the authors have addressed various challenges faced by managers when dealing with problems and issues related to the water supply and sanitation sector in the mega cities of India.

The trends in urbanisation and city growth which reflect an increasing spatial imbalance, coupled with other factors such as employment opportunities, are leading to tremendous pressure on infrastructure systems including water supply, sanitation, solid waste management, open space, urban transport, etc. In this regard, the large and metropolitan cities present a particularly dismal picture today.

These cities are the generators of national wealth. It is estimated that urban India contributes to more than 50 per cent of the country's GDP while containing only 27 per cent of its total population. The contribution of the large cities to the national income is disproportionately large. The high level of productivity in cities results from a number of factors including agglomeration economies.

Yet they suffer from several problems accompanying economic development, namely, high density unplanned settlements, slums, traffic pollution, shortages in housing and services, pollution, environmental decay, mounting poverty and unemployment, social tension and unrest. Consequently, the state of the urban environment — land, water and air — is deteriorating in many cities.

If proper mitigation measures are not taken in time, this will have serious repercussions on the vital economic base itself of the mega cities especially as city growth is bound to get a push with liberalisation and opening of the economy. The productivity of cities in the short, medium and long run cannot be sustained without a supporting environment that impacts on the quality of life.

Urban scenario

As per the 1991 census, there are 3768 urban agglomerations/towns having a population of 217.18 million, which works out to about 25.72 per cent of the country's population. The class-I towns account for 65.2 per cent of the urban population of the country. There are 23 metropolitan cities with a population of more than 1 million as compared to 12 such cities in 1981. These 23 cities account for roughly 1/3rd of the country's urban population and 1/12th of the total population of the country.

Due to the better availability of employment potential, education facilities, trade and commercial opportunities and other infrastructure facilities in these cities, there is continuous migration of people from rural areas and smaller towns to metropolitan and mega cities.

Though urbanisation contributes to the growth process, by and large, this positive aspect is often overshadowed by deterioration in the physical environment and quality of life in urban areas on account of the widening gap between demand and supply of essential services and infrastructure. Most of the increase in urban population is normally accommodated in slums and squatter settlements, the so called 'informal settlements.'

Mega city scheme

Pursuant to the recommendations made by the National Commission of Urbanisation and in response to persistent demands by the concerned State Governments, the Centrally Sponsored Scheme for Infrastructural Development in Mega Cities was introduced during 1993-94. The Scheme covers Bombay, Calcutta, Madras, Bangalore and Hyderabad — the five mega cities with a population of 4 million and above as per 1991 census.

The Bombay Metropolitan Region Development Authority, the Calcutta Metropolitan Region Development Authority, the Madras Infrastructure Development Corporation, the Hyderabad Urban Development Authority and the Karnataka Urban Infrastructure Development and Finance Corporation are the designated nodal agencies responsible for implementing this Scheme in the mega cities.

The fund sharing between the Central Government and the State Government is 25:25. The balance 50 per cent is to be met from institutional finance through public Financing Institutions or the capital market. The Housing and Urban Development Corporation has generally agreed to meet this component. Further details are available with the authors.

Challenges ahead

To meet the challenges ahead, old approaches based on Government prescribed solutions will have to be jettisoned. New approaches are needed, these include:

- *Improving water resource management:* water may need to be reallocated from other uses to meet the needs of the mega cities.
 - *Introducing institutional reforms:* it is necessary to create water and wastewater agencies capable of capturing, treating, and distributing water in a cost-effective manner.
 - *Improving resource mobilization and cost recovery:* one of the most pernicious misconceptions is that the poor are unable or unwilling to pay for water. Yet the opposite is true: in many cities the poor pay more for water services than the rich. Governments must have the courage to raise tariff levels to cover costs, which would help to raise sufficient revenue to dramatically improve service level and quality.
 - *Encouraging participation:* helping those suffering from service deficiencies to participate in decision making, and encouraging people to have their opinions and preferences heard and accepted by the Government is essential.
- *Complementing water service with sanitation:* safe disposal of excreta, personal hygiene, and proper water use ('from the tap to the mouth') are essential to reap the health benefits derived from clean water.
 - *Building effective public-private partnerships:* reliance on the private sector will be essential to provide the management and operation skills and the financial resources necessary to address water and sanitation problems in mega cities. Recent experiences in Argentina, Chile, and other countries demonstrate the capacity and willingness of the private sector to tackle complex and critical problems in the provision of water and wastewater services. These experiences may lead the way to similar arrangements throughout the world where public administrations have insufficient capacity.

Finally, tackling the problems of mega cities will require open minds, acceptance of reality and a willingness to try new approaches. Capacity building on all levels and by all concerned is needed to better understand problems and to find ways of providing safe, appropriate, and affordable water and sanitary services for all.