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**Managing the Urban Transition in a Rapidly Growing and Transformational Economy**

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Managing the Urban Transition in a Rapidly Growing and Transformational Economy

# Urbanisation and Development

Urbanization and development are highly and positively correlated. Cities lead the growth engine owing to high economic density ((value-added per unit of space) and proximity to the factors of production. It is no accident that high- and middle-income countries are more urbanised and their urban areas have higher economic densities than low-income countries (Figure 1). The correlation between urbanisation and GDP is indicative of the productivity advantage of urban areas.

##### Figure 1: Urbanisation, Urban Economic Density and GDP (2000)



***Source: World Bank (2012)***

Bangladesh is no exception (Figure 2). The urban-rural value-added and productivity differentials in Bangladesh are larger than the population density differential (World Bank 2012).

* Population density in urban areas (1,800 people per km2) is twice as high as in rural areas (800 people per km2). As compared to this, urban economic density (US$2.7 million per km2) is eight times as high as rural economic density (US$320,000 per km2).
* The average GDP per capita in urban areas (US$1,500) is almost four times as high as in rural areas (US$400).
* It is obvious that urban areas have been the growth centres for Bangladesh

##### Figure 2: Rural-Urban Density and Productivity Differentials in Bangladesh[[1]](#footnote-1)



***Source: World Bank (2012)***

Urbanisation and economic growth will therefore go together in the future as Bangladesh aspires to attain Upper Middle-Income Country (UMIC) status by FY2031 and High-Income Country (HIC) by FY2041. But there are two possible spatial economic paths to UMIC and HIC for Bangladesh (Figure 3). The first entails a shift toward a higher-value-added products and services in the existing urban growth centres (Dhaka and Chittagong). The second calls for higher diversification into non-farm production and employment outside Dhaka and Chittagong. This later strategy results in a more diversified urbanisation with greater economic role of other cities.

While both paths are possible, as exemplified by the experience of several HIC and UMICs, the present chaotic experience with concentrated urbanisation in Bangladesh suggests that path B that entails a more diversified pattern of urbanisation would appear to be a less risky option

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##### Figure 3: Urbanisation Path to UMIC– A Scenario Analysis[[2]](#footnote-2)



***Source: World Bank (2012)***

The pattern of urbanisation is an important determinant of the GDP growth rate for many reasons:

* Private sector investment is necessary to accelerate growth.
* Urban areas are attractive locations for firms because they provide better access to factor and goods markets, infrastructure and proximity to services.
* But urban centres also tend to be costly locations as concentration increase the cost of land and wages.
* If urbanisation is not properly managed, it can lead to congestion, pollution and inefficiencies in service provision. These could choke off the growth engine.

# Urbanisation Experience in Bangladesh

## Rapid growth of urban population

Over the 50 years during 1961-2011, the Bangladeshi population nearly tripled in size, growing from 51 million to 150 million (Figure 4). The urban population increased nearly twenty-fold, galloping from less than 3 million in 1961 to 42 million in 2011 (Figure 4). Owing to these population dynamics, the share of urban population grew from around 5 percent in 1961 to 28 percent in 2011. It is projected to have reached 31 percent in 2017 (Figure 5). The urbanization trend started early from the 1960s and gathered momentum in the 1970s after independence. The growth of urbanization was particularly rapid between1974-1981. Since 2001 the pace has stabilized at around 3%, but still 2.5 times faster than the national population growth (Figure 6).

##### Figure 4: Urbanization in Bangladesh

***Source: Bangladesh Bureau of Statistics (BBS) 2011***

##### Figure 5: Share of Urban Population (%)

***Source: BBS 2011***

##### Figure 6: Pattern on Urbanization

***Source: BBS* *2011***

Although the urban growth in the first phase (1961-1991) was very high (6.4% growth rate per year), the urban growth in the recent 20 years has been more in line with the observed international pattern (Figure 7). Nevertheless, Bangladesh continues to urbanize at a faster pace than the averages for Asia, Latin America, the middle-income countries and the world a whole. Africa and low-income countries are urbanizing faster than Bangladesh, but they are more comparable with the first phase of urbanization experience in Bangladesh compared to this more recent phase.

##### Figure 7: Urban Growth International Comparison 1995-2015

***Source: United Nations 2016.***

## Heavy Urban Concentration: Primacy of Capital City Dhaka

A major characteristic of the ongoing urbanisation experience in Bangladesh is the heavy concentration of urban population in the capital city of Dhaka (Figure 8). Along with population there is also a heavy concentration of economic activities in Dhaka. The next largest city is Chittagong, which is about a third the size of Dhaka. It is a port city and has also attracted considerable private sector interest. Dhaka and Chittagong together have served as the primary growth centres for Bangladesh over the past two decades. The other five divisional city centres, Rajshahi, Khulna, Sylhet, Barisal and Rangpur have failed to take-off as growth centres.

##### Figure 8: Primacy of Dhaka

***Source: BBS 2011***

Dhaka Metropolitan City was ranked the15th largest metropolitan city of the world in 2016 by the Demographia 2017 (Figure 9). Projections by the UN suggests that if the present pattern of urbanization persist then by 2030 Dhaka will become the 6th largest metropolitan city in the world (UN 2016). This will pose a tremendous urbanisation challenge. Dhaka is already the most densely populated metropolitan city of the world (Figure 11). For example, the average population density of Dhaka megacity is 27 times more than Metropolitan New York and 10 times more than Metropolitan Tokyo. It is simply incredible to imagine the implications of further increases in the density of Metropolitan Dhaka for city logistics and the livability of the city. The risks of such high urban concentration are obvious. The other major cities of Bangladesh including Chittagong are much less densely populated and can accommodate much more of the urban population than Dhaka. Yet, there is very little indication at present that a more balanced city development spread over to at least the 7 divisional city centers is underway. This is one of the biggest challenges for urban development strategy for Vision 2041. There is a lot that Bangladesh can learn from the experiences of China, Japan, Korea and the USA in managing urbanization.

##### Figure 9: The World's Mega Metropolitan Cities

***Source: Demographia 2017.***

##### Figure 10: Population Densities of Megacities

***Source: Demographia 2017.***

## Haphazard Urbanisation

Although the urban areas, especially Dhaka and Chittagong metropolitan cities, have been the leading growth centres of Bangladesh, urbanisation has been haphazard. Some of the characteristics of this disorganized and unplanned urbanization have been particularly worrisome, especially regarding housing, basic urban services and urban natural environment, although progress with urban poverty reduction has been solid.

## Urban Poverty

Consistent with national poverty performance, urban poverty has been on a declining trend over the longer term (Figure 11). The poverty reduction progress has been particularly good during 2000 and 2010. Both moderate and extreme poverty fell, but extreme poverty declined at a much faster pace. Urban poverty fell faster than rural poverty despite considerable rural-urban migration and a rising share of urban population in total population. Notwithstanding this progress, the number of moderate urban poor is large – an estimated 9.2 million poor in 2010.

##### Figure 11: Urban Poverty Trend

***Source: BBS HIES Various Years***

The spatial distribution of urban poor varies considerably (Figure 12). Well until 2005, urban poverty was a serious problem in Barisal, Khulna and Rajshahi, exceeding 50% in Barisal and Rajshahi and 46% in Khulna. In comparison to this, the urban poverty incidence was in the low 30% range in Chittagong, Dhaka and Sylhet. There was a substantial narrowing of the spatial urban poverty gap between 2005 and 2010. Urban poverty fell much faster in Barisal, Khulna and Rajshahi. Urban poverty progress remained strong in Chittagong and Sylhet, but slowed considerably in Dhaka owing to migration of poor form other divisions, especially Barisal and Khulna. In 2010, Chittagong and Sylhet Divisions exhibited significantly lower urban poverty incidence than Dhaka. Despite this progress in 2010 and continued out-migration, the urban poverty incidence remained high in Barisal and Rajshahi in 2010.

##### Figure 12: Trend in Divisional Urban Poverty (UPL)

***Source: BBS HIES Various Years***

The quality of life of the urban poor is particularly bad. Owing to high land and housing prices and high rental costs, most of them cannot afford to rent a proper home forcing them to live in slum areas characterized by sub-human living conditions. An estimated 29.3 million people of Bangladesh (55% of the entire urban population) live in slum areas (UN 2016)[[3]](#footnote-3). This is amongst the highest percentage of slum dwellers outside Africa and for lower middle-income countries (Figure 13). Much of the slum population lives in Dhaka. As a result, this percentage is even higher for Dhaka city.

##### Figure 13: Proportion of Urban Population Living in Slums (%)

***Source: UN 2016***

***Urban Housing Crisis***

* Growing urbanization has put serious pressure on urban land. Consequently, urban land and housing prices have soared. In particular, large concentration of economic activities in Dhaka and Chittagong has put insurmountable pressure on land prices in these metropolitan areas. Availability of urban land in these cities, especially Dhaka, has now become a binding constraint to manufacturing sector growth. For example, land prices in Dhaka grew by almost 100% per year between 1972 and 2012 (Ahmed 2012).
* Owing to the high cost of land, housing for low and even middle-income families has become unaffordable in Dhaka and Chittagong. For example, according to 2011 Population Census (BBS 2011) while 49% of total urban households own their own homes, only 16 % of households in the Dhaka City Corporation jurisdiction and 28% in Chittagong City Corporation jurisdiction have home ownership.
* The quality of housing is a serious concern. In 2011 only 32% of the dwelling was pucca and another 325 was semi-pucca. The remaining 36% was either kutcha or jhupri (BBS 2011)
* The housing crisis seems to have worsened in recent years due to soaring land prices. The fact that some 55% of urban population lived in the slums in 2014 as compared with a poverty incidence of 21% in 2010 suggests that some 34% or more of urban dwellers are above the moderate poverty line. But their income is not adequate to enable them to afford a decent living space. Affordable housing is one of the most important urbanization challenges in Bangladesh.

***Traffic Congestion***

* Transport congestion has reached nightmare proportions in Dhaka. It takes an average of 1.5 hours to commute to work each way within 7-8-kilometer distance. In some instances when there is a public event, movement of high officials and heavy monsoon rains, traffic movements come to a virtual halt for hours. Traffic pattern in Chittagong, although less congested than Dhaka, can also be very difficult.
* Mass transit options are absent in all cities. Buses, public or private, are over-crowded and environmentally unsafe.
* Human-pulled Rickshaws are environmentally safer, but they add to the traffic congestion and slow-down of traffic movement while also presenting serious safety risks.
* Safe walking options are virtually absent in Dhaka. In addition to health risks from air pollution, standing garbage and overflowing sewerage drains, pedestrians face the risk of being run over by a moving vehicle and/ or becoming a source of traffic accidents.
* Weak zoning laws and poor parking enforcement add to the chaotic urban layout and traffic nightmare.

***Poor Urban Services***

Many of the basic urban services are heavily constrained. Table 1 shows the access to basic services for the urban population for Bangladesh and compares this with distribution by City Corporations[[4]](#footnote-4). The main results are:

* Bangladesh has done well to make electricity available to urban areas. The urban households in the City Corporation areas have near universal access to electricity. This is an important milestone. Yet, the average of 86.4% access suggests that a sizeable urban population outside the City Corporation areas did not have electricity as of 2011.
* In terms of basic services, such as access to tap water and proper sanitary toilets, the gap is very serious. In 2011, on average, some 63% of the urban households did not have access to tap water, while 58% of the households did not have access to sanitary toilets with water seal.
* The large service gaps by city corporations and between city corporations as a group and urban households outside city corporations provide a major indication of the weak urban planning in Bangladesh and the bias in favor of Dhaka.
* In almost all the urban centres, except Dhaka, there are no sewers. Even in Dhaka waste water treatment facility is only partial. Consequently, for Bangladesh, most human excrement and waste water ends up untreated in rivers, streams, canals and ditches creating huge water pollution problem.
* Most urban centres face problems with the collection and disposal of solid wastes. The challenge is more serious in larger urban centres where a significant percentage of the total solid waste remains uncollected.
* The drainage system is grossly inadequate in all urban area resulting in frequent flooding and water logging when heavy rain falls, especially in the monsoon season.
* Noise and air pollution have reached stressful proportions.
* The combination of water and air pollution contributes to serious health hazards in urban areas.

#### Table 1: Access to Basic Urban Services 2011 (Percentage)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Area** | **Tap water** | **Sanitary toilets with water seal** | **Urban Drainage Coverage** | **Electricity** |
| *Bangladesh* | *37.4* | *42.0* | *28.0* | *86.4* |
| Dhaka City Corporation | 85.4 | 59.1 | 35.0 | 98.6 |
| Barisal | 9.3 | 43.5 | 30.0 | 94.2 |
| Chittagong | 56.3 | 49.2 | 30.0 | 97.7 |
| Khulna | 5.3 | 48.7 | 30.0 | 95.4 |
| Rajshahi | 17.8 | 65.1 | 30.0 | 91.0 |
| Sylhet | 51.2 | 49.8 | 30.0 | 98.2 |

***Source: BBS 2011; Urban Drainage Coverage from Government of Bangladesh 2017.***

***Urban Environmental Hazards***

High population density, poor drainage, inadequate sewage and weak management of solid waste all combine to inflict serious damage to the urban environmental condition for Bangladesh cities. Added to that water pollution from industrial activities, especially leather and denim manufacturing enterprises, combined with severe air pollution from unregulated carbon emission of vehicles and brick fields, and emission of a large dose of dust particles from unregulated and heavy construction activities create a very difficult urban environment. The air and water pollution in urban areas, especially Dhaka, is very severe. All urban water bodies are heavily polluted from the dumping of raw sewage from human and industrial waste as well as dumping of solid waste. High population density has severely limited the availability of green space for recreational activities and clean air.

**Urban air pollution:** Available evidence suggests that the urban air environment in Bangladesh is amongst the most polluted in the world. For example, the 2014 Environment Performance Index (EPI) developed by the Yale Center for Environmental Law and Policy (YCELP) and the Center for International Earth Science Information Network (CIESIN) at Columbia University (YCELP- CIESIN 2014) ranks Bangladesh at 169 among 178 countries (Figure 14). Bangladesh gets a very low score of 25.61 out of 100 as compared with a score of 86.67 for the best performer Switzerland. The ranking for air quality component is even lower, at the bottom of all countries included in the list (178).

***Source: (YCELP- CIESIN 2014)***

Independent air quality monitored by the World Health Organization (WHO) similarly ranks Bangladesh as the 4th most air- polluted country out of 202 countries in 2014 when urban pollution is measured in terms of annual mean concentration of fine particulate matter (PM 2.5)[[5]](#footnote-5). The three countries that have higher urban air pollution are Saudi Arabia, Qatar and Egypt. WHO has also compiled data for 1624 cities from 91 countries for the periods 2008 to 2014. Urban air pollution found in Dhaka puts it at the bottom 2% of the cities compared. The comparison of air quality for world’s top 15 megacities is shown in Figure 15. Dhaka is the third most polluted city in terms of air pollution when compared with top 15 mega cities; only Delhi and Karachi has worse air pollution than Dhaka.

***Source: World Health Organization database 2010-2014***

**Urban water quality:** The major causes of surface water pollution are related to land based activities, including industrial effluents, agrochemical, faecal pollution, and oil and lube spillage. Since the rivers are frequently used as dumps, overall inland surface water quality drops below the permissible limit of Department of Environment (DoE) standards in the dry season although it improves in the wet/monsoon season.

Industrialization has developed near the major rivers due to the availability of water and easy dumping of effluent in the absence of proper regulations. Industrialization got a boom in the early 1980s with the beginning of investment in garments sector. However, most of the industries did not consider the danger created by dumping effluent into rivers without any treatment. This has led to a serious degradation of river water quality over the years and it continues to do so.

Urban area is heavily industrialized with most of the industries located in Dhaka, Narayanganj, Gazipur, Narsingdi, Chittagong, Comilla and Khulna. Buriganga and Turag River are the two major rivers of Dhaka. They are most susceptible to water pollution from industries relating tannery, fabric dying and chemical processing, fabric washing, garments, plastic products etc. located on the banks of these two rivers (CEGIS, 2015). Dumping of untreated effluent has caused major degradation of water quality of these rivers. In many places sewerage lines also end up in these rivers carrying sewage and municipal solid waste.

The parameters that are considered to measure water pollution are: the acidic level of water (pH), Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), and Chemical Oxygen Demand (COD). The typical reference values for unpolluted water are: pH: ≤7; DO: >3.5; BOD5: <1; and COD: >200

The pH of Buriganga river is around 7 (Saifullah et al, 2011) and Turag river is between 6.18 and 7.46 (Mobin et al., 2013). The DO varies along the stream of Buriganga. In wet season DO is around 4.9 mg/L and in dry season around 3.7 mg/L. The BOD5 of Buriganga River is over 25mg/l in most places and it can go up to 38mg/l (Saifullah et al., 2011). Also, the COD level is very low. For Turag river the values are: DO: <1; BOD5: 5-38; and COD: 9-290. Overall, these data suggest that the waters of the two rivers are severely contaminated.

The city of Narayanganj is located along the Sitalakhya River. It is a major industrial belt and a part of Metropolitan Dhaka. The ricer Sitalakhya is heavily polluted owing to the dumping of industrial and human wastes. The pollution indicators are: pH: 6.3-8.8; DO: 0-6.2; BOD5: 2-16; and DO: <200.

Sylhet is one of the rapidly developing urban areas and is in the hilly portion of the country. Gas based industries have boomed in Sylhet region. Surma and Khushiara are the two main rivers of this region. The urbanization of Sylhet city is a threat for the environmental quality and economic gains of the city dwellers. The pH of river water in this region varies between 6.5 and 8.5, DO value varies between 5.28 mg/L to 6.88 mg/L and BOD ranges from 27.33 mg/L to 44.33 mg/L (Rahman et al., 2013). The water of Surma River is not suitable for drinking purpose.

The main cities of west part of Coastal areas are Kushtia, Jessore, and Khulna. The major rivers of this region are Padma, Madhumati, Chitra, Rupsha, Kaliganga etc. Shrimp culture is the common practice in this area. Usually the water has higher salinity in the areas where shrimp farms are located. The pH of surface water varies from 7.29-7.46 in summer season which is higher than the ground water pH (6.46-6.71). The salinity of the ground water was higher than the surface water both in the summer and in the rainy seasons. The average ground water quality of the area is not good (Haque et al., 2010). Most of the shallow aquifers in this region are found to be saline. Salinity is also a problem for cities located in the central part of Coastal (Barisal, Patuakhali and Bhola). Shrimp culture has intensified salinity at some of the southern districts.

The eastern part of Coastal area is comprised of some of the biggest industrial cities of the country. The major industrialized cities in this region are Chittagong and Comilla. Meghna is one of the major rivers of this region. The other rivers of this region are Gumti, Titas, Haora, Dakatia etc. Ship breaking industry plays a significant role in this region’s environmental quality. Ship dismantling is a reason of concern due to its economic values and environmental hazards. Up to 2.2-2.5 M tons of national steel production comes from the ship breaking industry (Talukder et al., 2015). The ship breaking yard has profound effect in its vicinity area. In the perimeter of the ship breaking yard area, DO level is low (1-5 mg/l) at some points.

The ground water of Bangladesh is heavily contaminated with Arsenic. About 25% of the national population is exposed to arsenic level above 0.05 mg/L (NWMP 2001). According to a survey report (Hossain 2006), out of 64 districts comprising 126,134 km2 of Bangladesh are exposed to the arsenic contamination in drinking water (Figure 16).

##### Figure 16: District wise Incidence of Arsenic Poisoning

***Source: Hossain, 2006***

Among the hydrologic regions, the south east (SE) and south central (SC) regions are worst affected by arsenic. The ground water of Comilla (0.17 mg/L), Chandpur (0.13 mg/L), Feni (0.1 mg/L) are well above the standard for Bangladesh which is 0.05 mg/L. Among the districts of central part of Coastal area Faridpur (0.16 mg/L), Madaripur (0.12 mg/L), Barisal (0.18 mg/L) are heavily contaminated with arsenic. Though the south west region is in a relatively better state than the other two regions, Khulna has the arsenic contamination of 0.31 mg/L which is the highest in the country. The arsenic contamination in Haor area is in the range between 0.022 mg/L to 0.09 mg/L. Dhaka’s ground water has arsenic contamination of around 0.035 mg/L whereas Narayanganj has an overwhelming amount to 0.176 mg/L of arsenic in water. The eastern portion of Coastal area has overall good quality of ground water in terms of arsenic within ranges between 0.013 mg/L to 0.02 mg/L.

As evident, arsenic poisoning presents a serious threat to health for a large segment of the population. A recent study (Flanagan et al. 2012) reports that over the next 20 years arsenic-related mortality in Bangladesh (1 of every 18 deaths) could lead to a loss of US $12.5 billion assuming a steady economic growth and an unchanged population exposure to arsenic contamination.

**Urban Flooding, Water Logging and Drainage Problem:** The urban centers of Bangladesh are highly vulnerable to economic losses emerging from a host of natural disasters and climate change effects. The most serious threat is flooding due to poor drainage. When economic losses are measured as a share of city GDP, Bangladesh urban areas are most vulnerable in South Asia (World Bank 2016). Many urban centers are highly vulnerable to flooding, but the most damage in terms of economic losses happen to the Dhaka Metropolitan Area. This is not surprising in view of the high population density and huge concentration of physical assets in Dhaka. The challenge posed to urban flood management in Dhaka, and by implication to other urban centers, is illustrated in Box 1.

###### Box 1: Coping with Urban Flooding in Metropolitan Dhaka

Flooding from intense rainfall is a recurring phenomenon in Metropolitan Dhaka that contributes to substantial loss of assets and productivity and causes immense miseries to the residents. Unplanned and rapid urbanization has intensified the problem by filling up of low-lying flood plains, rivers, canals, and other water bodies, thereby preventing drainage opportunities. The Bangladesh Delta Plan (Government of Bangladesh 2017) notes that the effects of climate change will further aggravate the flooding problem in Bangladesh including Dhaka owing to a more erratic pattern of monsoon. Consequently, urgent actions are needed to cope with this challenge.

A recent study by Dasgupta et. al. (2015) provides estimates of incremental costs of infrastructure adaptation upto the year 2050. It also identifies the vulnerable populations and infrastructure, quantifies outstanding deficits in addressing current climate-related risks, and estimates the adaptation cost of avoiding further damage due to climate change. The main findings of the study are:

* “The cost of meeting Dhaka’s current adaptation deficit, even without climate change, would total Tk. 2.7 billion, equivalent to just 0.35 percent of the government’s annual development budget expenditure for 2014–15. Of this amount, Central Dhaka would comprise the largest investment, at about Tk. 1.4 billion.
* The added cost of closing the climate change gap would require the other Tk. 1.3 billion.
* Implementing the recommended additional investments can result in significant damage savings for Dhaka, given that the expected damage from flooding would be quite significant for the city overall. For example, if an extreme rainfall event like that of 2004 were to occur in 2050, then, without investment to address the current adaptation deficit, the increased damage caused by climate change would amount to Tk. 2.0 billion; however, it would be reduced significantly (to Tk. 0.9 billion) by investing to close the current adaptation gap.
* Such savings in damage of Tk. 1.1 billion in just one year reveal how quickly the investment of Tk. 2.7 billion in current adaptation deficit can be paid back.”

It is important to note that the above values are all in 2014-15 prices. The study correctly observes that these are conservative estimates because first the intensity of future flooding events could be much more damaging and secondly, the assumption that the existing drainage pipes and connections and khals work as per expected design is too optimistic. The study also assessed the total cumulative damage between 2014 and 2050, using random assignments of 1-year to 100-year storms for each year. The cumulative damage savings would amount to Taka 96.8 billion. The potential rate of return to timely investments in urban flood control and proper drainage is indeed very high. The important points of the study are: first, the need to do a full assessment of the flooding risks in major city centers and; second, the need to take timely actions to prevent much bigger longer-term damages.

***Source: Dasgupta, et. al. 2015***

***Source: World Bank 2015***

***Poor Quality of Urban Life***

The growing list of urbanisation problems in terms of traffic congestion, water and air pollution, urban flooding and water logging, and inadequate basic urban services has lowered the quality of city life, especially in Dhaka (Ahmed et. al. 2007). Several international agencies do systematic surveys on an annual cycle to provide an indication of the quality of life in the cities. The indicators differ by source of the survey and they are perception based and as such are subject to perception biases. Nevertheless, they provide a useful benchmark to compare the livability of cities. The results are:

* Mercer city livability index (Box 2) ranks Dhaka as the most unlivable of the 15 top megacities (Table 2). Indeed, among the total of 231 cities reviewed, Dhaka ranks at 204 (bottom 5% of the cities ranked).
* Economics Intelligence Unit (EIU) city livability rankings are broadly consistent with this, suggesting that the Mercer city livability rankings are not misaligned.
* When comparing the largest metropolitan cities, Tokyo, Osaka, New York, Seoul and Shanghai are rated as better livable cities than others. These mega cities belong to the top 32 % or above of all high-quality cities among the 231 that were ranked. New York and Tokyo are in the top 20%.

###### Box 2: Mercer City Livability Index

Mercer evaluates local living conditions in more than 450 cities surveyed worldwide. Living conditions are analysed according to 39 factors, grouped in 10 categories:

* *Political and social environment* (political stability, crime, law enforcement, etc.);
* *Economic environment* (currency exchange regulations, banking services);
* *Socio-cultural environment* (media availability and censorship, limitations on personal freedom); *Medical and health considerations* (medical supplies and services, infectious diseases, sewage, waste disposal, air pollution, etc.);
* *Schools and education* (standards and availability of international schools);
* *Public services and transportation*(electricity, water, public transportation, traffic congestion, etc.); *Recreation* (restaurants, theatres, cinemas, sports and leisure, etc.);
* *Consumer goods* (availability of food/daily consumption items, cars, etc.); *Housing* (rental housing, household appliances, furniture, maintenance services);
* *Natural environment* (climate, record of natural disasters).

***Source: Mercer 2017.***

#### Table 2: Mercer 2016 City Livability Rankings (231 Cities)

|  |  |
| --- | --- |
| **Cities** | **Rankings** |
| Tokyo | 44 |
| Jakarta | 143 |
| Seoul | 75 |
| Delhi | 161 |
| Shanghai | 95 |
| Manila | 135 |
| Karachi | 204 |
| New York | 44 |
| Sao Paulo | 121 |
| Mexico City | 128 |
| Cairo | 165 |
| Beijing | 119 |
| Osaka | 60 |
| Mumbai | 154 |
| Gangzhou | 121 |
| Dhaka | 214 |

***Source Mercer 2017***

# Urbanisation Constraints

Several factors constrain urban development in Bangladesh. These include unclear legal mandate, overlapping functions and accountabilities, weak capacities, poor governance and weak finances.

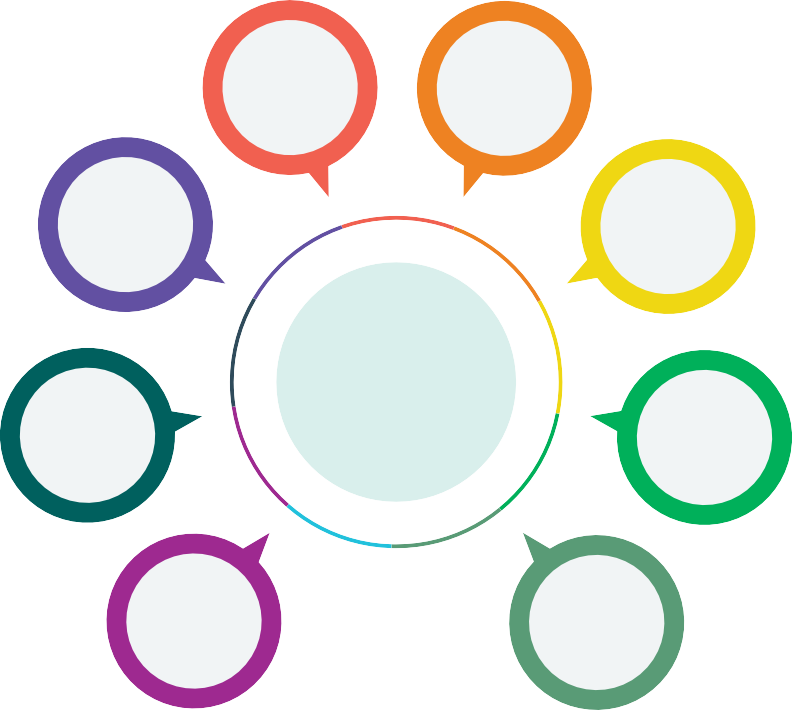
## Legal Framework

Historically, the legal framework for local government institutions (LGIs) has evolved in a stop-go fashion. Some more orderly shape emerged only in recent years with five tiers: two concerning urban areas and three relating to rural areas. The two urban LGIs are: municipalities (small towns) and city corporations (large cities). The three rural LGIs are: Zila Parishads (District Councils), Union Parishads (Union Councils) and Thana Parishads (Thana Councils). However, proper allocation of responsibilities and financing has not happened. Only a limited number of functions are assigned to the urban LGIs. Even so, the demarcation of responsibilities is unclear and overlapping with other line Ministries. The governance structure in theory is democratic and is elections based, but in practice LGIs have little autonomy and are controlled by the national government. Resources available to LGIs are very limited. There is very little financial autonomy that creates a huge dependency syndrome on the national government.

## Confused Overlapping Mandates

The picture of urban service delivery in Dhaka illustrates the confused and overlapping mandate problem in urban management (Figure 14). There are as many as nine specialised institutions and several line ministries providing urban services with little or no coordination, overlapping mandates, weak capacities and financial limitations. As a result, service delivery is inefficient and accountability is poor.

##### Figure 14: Service Delivery Arrangements in Dhaka



Bangladesh T&T Board (BTTB)

Various Line Ministries (Land, Works)

Bangladesh Road Transport Corporation (BRTC)

Water and Sewerage Authority (WASA)

**DHAKA MEGACITY MANAGEMENT**

Dhaka

City Corporation (DCC)

Titas Gas

Dhaka Electric Supply Authority (DESA)

RAJUK

Dhaka Metropolitan Police (DMP)

* Mayor’s office
* Tax collection
* Waste disposal
* Street maintenance
* Civic services
* Land management
* Building control
* Urban planning
  + Law and order
  + Traffic control
* City bus service

***Source: Ahmed, et. al. (2007***)

## Weak Capacities

Capacities of city corporations and municipalities are weak primarily due to lack of financial resources. City Corporations tend to be somewhat stronger than the municipalities. But in general inadequacy of resources limits ability to recruit good quality and adequate number of staff. This in turn seriously constrains the quantity and quality of urban services.

**Poor Governance**

Although urban LGIs are elected local bodies, they have very limited political and administrative authorities (Islam 2013; Nasiruddin 2015). De facto, they basically function as extended arms of national political parties to which they belong. Urban LGIs that belong to the same political party as the national government tend to be favored in terms of resource allocation. As a result, their independence to serve their constituency is often compromised by the need to be loyal to the party higher ups. There is also frequent intervention from the members of parliament. Lack of political autonomy often results in favor distribution in matters of contract awards and selection of staff. At the administrative level, there are coordination problems with national government staff posted at the district level.

## Weak Finances and Poor Financial Autonomy

Perhaps the most fundamental constraint is the inadequacy of resources available to urban LGIs and associated poor financial autonomy. Under the Legal Framework, urban LGIs can obtain resources from several sources. These include:

1. property tax;
2. rents from markets owned by urban LGIs;
3. fees from licenses issued to traders and non-motor vehicles;
4. fees from advertisements, cinema and entertainment;
5. sale of property/assets and
6. grants and loans from the government.

However, in practice, the returns are very low and resources are grossly inadequate in comparison with needs. Other than property tax, all other taxes are assigned to the national government. Transfers from national government to LGIs are ad-hoc and are not based on well- defined principles in the context of assigned accountabilities enshrined in the legal framework.

## Severity of Urban Financing Constraint

Table 3 summarises the evolution of urban finances in Bangladesh. The highlights are:

* Government transfers account for some 61 percent of total urban LGI resources.
* Charges and fees account for 25 percent.
* Taxes account for only 14 percent.
* There is no market borrowing. The Government budget is responsible for all transfer funding including grants and loans. Since the urban LGIs do not have any capacity for loan servicing, these government loans stay in the books as outstanding dues.

#### Table 3: Bangladesh Urban Finances (Taka millions)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Items** | **FY1974** | **FY1978** | **FY1992** | **FY2001** | **FY2011** | **FY2012** | **FY2013** |
| **Taxes** | 27 | 88 | 995 | 3027 | 8154 | 8784 | 11177 |
| **Charges & fees** | 57 | 112 | 681 | 2360 | 15103 | 16319 | 19830 |
| **Total own resources** | 84 | 200 | 1676 | 5387 | 23257 | 25103 | 31007 |
| **Government transfers** | 33 | 58 | 1319 | 8909 | 27802 | 38068 | 47608 |
| **Total resources** | 117 | 258 | 2995 | 14296 | 51059 | 63171 | 78615 |
| **Total spending** | 110 | 261 | 2984 | 14296 | 51059 | 63171 | 78615 |

***Source: BBS Statistical Yearbook Various Years***

***Financial autonomy of urban LGIs:*** The traditional way of measuring financial autonomy of LGIs is the amount of public spending assigned to them. Financing arrangements tend to vary by countries. While tax collections normally tend to be centralised, many countries assign a significant number of tax instruments to city governments to raise their own resources. Importantly, decentralised countries have a system of transfers that is based on clearly defined principles. These are important elements of a decentralised fiscal system. They provide predictability of resources and support the proper planning and implementation of assigned services by urban LGIs. What is the experience in Bangladesh?

* Figure 15 shows the share of urban LGI in total government spending in Bangladesh. Despite some progress, urban LGIs account for only 4.2 percent of total government spending.
* In terms of GDP, they account for less than 1 percent (Figure 16).
* The powerful government regulator, the Ministry of Local Government, controls and manages most urban and rural development public pending.
* Government transfers are the biggest instrument of resource transfer.

##### Figure 15: Share of Urban LGI spending in Total Government Spending

***Source: BBS Statistical Yearbook Various Years***

##### Figure 16: Urban LGI Spending as Percentage of GDP

***Source: BBS Statistical Yearbook Various Years***

***Poor predictability of government transfers:*** As noted, urban LGIs are heavily dependent upon transfers from the national government. This is not unusual as compared with many other developing countries. However, what is different is that there is no formal resource transfer mechanism and there is often little or no correlation between assigned responsibilities and resource transfers. The resource transfers are determined centrally based on political considerations and competing national priorities.

***Weak tax handles:*** Urban LGIs account for less than 3 percent of total government revenues (Figure 17). This is mainly by design as almost all potent sources of revenues are controlled at the national level. The only tax source assigned to urban LGIs is the property tax. Yet, yields are insignificant mostly owing to lack of political will. LGIs cannot decide on their own to change rates or property valuation.

##### Figure 17: Urban LGI own Revenues as Percentage of Total Government Revenues

***Source: BBS Statistical Yearbook Various Years***

**Fiscal decentralisation--international comparison:** A review of international evidence suggests that Bangladesh is fiscally amongst the most centralised countries in the world measured in terms of both expenditures and taxes (Table 4)**.** Data from a sample of 16 developing countries and 26 developed countries shows that spending by all LGIs (urban and rural) account for 19 percent of total government spending in developing countries and 28 percent for industrial countries as compared with only 7 percent in Bangladesh (urban plus rural LGIs). Taxes similarly are heavily centralised in Bangladesh. Thus, sub-national government taxes account for 11.4 percent of total taxes in a sample of 16 developing countries and 22.7 percent in a sample of 24 industrial countries. In Bangladesh, it is only 1.6 percent of total government taxes.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table 4: Fiscal Decentralisation: International Comparison for the 2000s | | | | |
|  | Sub-national government expenditures | | Sub-national government taxes | |
|  | % of total government expenditure | % of GDP | % of total taxes | % of GDP |
| Developing countries | 18.8  (n=16) | 5.1  (n=20) | 11.4  (n=16) | 2.3  (n=20) |
| Industrial countries | 27.8  (n=26) | 13.9  (n=26) | 22.7  (n=24) | 6.4  (n=25) |
| Bangladesh | 7.0 | 1.11 | 1.6 | 0.15 |
| ***Source: Bhal, Linn and Wetzel (2013).*** | | | | |

It is no accident that cities of industrial countries tend to have better services and significantly higher fiscal decentralisation. A system of well-defined revenue sharing and resource arrangements not only provides larger funding, the predictability of resources makes it that much easier to plan and provide better services. Good city governance and greater fiscal autonomy tend to be positively correlated and together they enable better urban services.

## Consequences of Centralised Fiscal Framework

Poor LGI governance and weak fiscal decentralisation are the most fundamental constraints to better urban growth and service delivery in Bangladesh. Lack of fiscal autonomy and associated resource constraint reduces the ability of urban LGIs to provide adequate services in several ways:

* Weak fiscal decentralisation contributes to grossly inadequate resources that in turn lead to poor capacities of urban LGIs to deliver services.
* Inadequacy of staffing in both quantity and quality is a major bottleneck o urban service delivery.
* Political patronage and centralised decision-making on urban spending results in poor accountability of City Corporations and municipalities.
* Since transfers have no legal basis and are discretionary, there is no predictability of resources. Government control over revenues and spending essentially means that elected urban managers belonging to the opposition political parties have little control over service delivery.
* Even in cities that have managers who belong to the party in power, service delivery is constrained by the inadequacy of resources. Since government resources at the central level are generally constrained by the inadequacy of revenues, this constrains revenue transfers to LGIs.
* The scope for innovative financial solutions at the local level is limited by the weakness of the property tax design and absence of public borrowing by LGIs.

# 2041 Perspective Plan Vision and Targets for Urbanization

Given the historical positive correlation between urbanization and development, it is natural to expect a major transformation of the Bangladesh urban sector as an essential part of the strategy to transfer to a high-income economy. Consistent with global experience, the urban sector will lead the way to the journey to upper middle country status by FY2031 and eventually to high-income economy by FY2041. The characteristics of urban Bangladesh in 2041 will be like the urban environment found in present day high-income economies.

## 2041 Vision for Urban Sector

Specifically, the 2041 Perspective Plan Vision for the urban sector is to:

* Have an economy where some 80 percent of the population lives urban areas and enjoys a quality of life that is comparable to those found in the present day high income economies of North America, Europe and Asia.
* An urban physical environment where there is a proper balance between ecology, the natural environment and needs of the urban population. In particular, all cities will be flood free with proper drainage, modern sewerage and proper waste management.
* An urban social structure where there is no incidence of absolute poverty, there are no slums and every household has a basic minimum housing quality.
* An urban service industry that provides quality urban infrastructure and urban services on demand and in good quality.
* An urban governance structure that is elected by the residents, is responsive to the needs of the residents, and is largely self-financing with a healthy and sustainable combination of urban betterment taxes, predictable national government transfers, cost recovery from services provided and responsible borrowings.

## Core Objectives and Targets

To translate this Vision into monitorable indicators of progress, the targets for the urban sector are shown in Table 5. The objectives and targets are set in a manner that these are consistent with the urban environment found in high income countries. These targets and objectives are necessary to also ensure the sustainability of the Bangladesh urban environment in terms of urban governance, urban financing, and the urban natural environment.

A careful review of Table 5 will show the large magnitude of the urbanization challenge moving forward. Yet the ability to address the urbanization challenge will also determine the ability to achieve high income target by FY2041. The urbanization agenda and the high-income agenda will need to go hand-in hand.

#### Table 5: Core Objectives and Targets for the Urban Sector

|  |  |  |
| --- | --- | --- |
| **Objectives / Targets** | **2017 Base Year Values** | **FY2041 Values** |
| Share of urban population in total Population (%) | 30 | 80 |
| Number of primary cities | 2 | 7 |
| Share of Dhaka Metropolitan City in total urban population (%) | 33 | 25 |
| Share of 6 other primary cities in total urban population (%) | 23 | 30 |
| Percent of households with electricity | 90 | 100 |
| Percent of households with tap water connectivity | 40 | 100 |
| Percent of households with water-sealed sanitary toilets | 42 | 100 |
| Percentage of households with sewerage connection |  | 100 |
| Incidence of absolute urban poverty (%) | 15.7 | 0 |
| Percent of household living in slums (UN definition) | 55 | 0 |
| Percent of urban centers with modern waste disposal facilities | N/A | 100 |
| Percent of urban centers with waste water treatment facilities | N/A | 100 |
| Share of urban LGI spending in total government spending (%) | 5 | 25 |
| Urban LGI spending as percentage of GDP | 0.7 | 8 |
| Urban LGI taxes as percentage of total taxes | 2.3 | 20 |
| Urban LGI taxes as a percentage of GDP | 0.2 | 4 |
| Green area Dhaka (square meter per million people) | N/A | 5 |
| Green area other 6 major cities (square meter per million people) | N/A | 12 |
| Percent of urban water bodies preserved with 100% compliance with water quality standards | 0 | 100 |
| Air quality (annual average, µg/m3 PM 2.5) | 86 | 10 |
| Percent of cities flood free with proper drainage | 0 | 100 |
| Compliance with zoning laws (%) | N/A | 100 |
| Compliance with parking laws (%) | N/A | 100 |
| Urban streets/ roads with modern traffic signals | N/A | 100 |
| Primary cities with mass transit options | 0 | 7 |

***Source: GED Projections***

# Strategy for Urban Reforms

Bangladesh attained low middle- income country (LMIC) status in 2015. It is now aspiring to achieve upper middle- income country (UMIC) status in FY2031 and HIC status by FY2041. GDP growth is on an upward path, exceeding 7 percent mark in FY2017. The government’s target is to accelerate growth further to reach 8 percent by the end of the 7FYP in FY2020 (Government of Bangladesh 2015). The government’s growth strategy articulated in the 7FYP seeks to further transform the economy into a manufacturing and organised services oriented production structure. This growth strategy will accelerate the urbanisation process, as labour continues to shift from low-income agriculture and rural informal services to urban-based manufacturing and organised services.

Looking beyond the 7FYP, the Perspective plan 2041 will oversee a further transformation of the economy as the share of agriculture in both GDP and employment falls to single digits and the shares of manufacturing and modern services rise. Consistent with the global experience of countries that have moved over to high income economies, the urban sector will take the lead in facilitating this fundamental economic transformation. Therefore, without a major effort to tackle the growing urbanisation challenges, there is a real risk that the growth momentum could be choked off by transport bottlenecks, high land prices, and the inadequacy of infrastructure and basic urban services including housing, urban water supply and waste management.

## The Lessons of International Experience

The Mercer city Livability index and other similar indices suggest that there are good examples of countries that have urbanized well and developed many efficient and high-quality cities. Considerable planning, strategies, institutions and policies have enabled this progress. Bangladesh can learn from these experiences and draw proper lessons in developing its own strategies and reforms for the 2041 Perspective Plan. While there is no one size fits all type template, there are common characteristics of these experiences that can inform urban strategies and reforms in Bangladesh. Some of the basic lessons are as follows;

1. High quality cities are characterised by a governance system that entails democratically elected, strong and accountable city governments. These governments are independent of the political dominance of the national government and are only accountable to the residents of the city.
2. City governments have well defined responsibilities that are enshrined in the legal framework. These responsibilities do not change based on national or local election results. There is no conflict or overlap in delivering with higher levels of government.
3. The coordination mechanisms with higher levels of government in the management of common areas are well defined within the principle that matters that involve exclusively the interest of the city are primarily the responsibility of the city.
4. Financial autonomy of cities is ensured through a legally defined financial framework that involves sharing of taxes, national grants and market borrowing.
5. User charges play a major role in city finances.
6. To protect public interests and provide a common reference point for the country, minimum standards are defined for such issues as environmental protection, water quality and air quality and these standards are monitored by the higher government.
7. To ensure adequate supply of certain merit /public goods, the national grant system is used for co-financing or as incentive payments.
8. Urban planning and strategy is a shared responsibility between city and higher-level governments. At the city level, the planning process is participatory with a well-defined and structured consultation process with the residents.

Given the large magnitude of the urbanization challenge in Bangladesh, it is obvious that some radical thinking is needed and business as usual will not do. It is simply unthinkable that Bangladesh can achieve UMIC without a major transformation of the urban sector. There are a whole host of issues that will need to be tackled. Good practice international experience suggests that on substance there are two major and big picture agenda that will have to be addressed. First is the need to address the urban finances issue. And second is the need to tackle the urban governance challenge. The two are inter-related and will have to go together. The basic challenge is to establish a system of accountable city government that is publicly elected, enjoys considerable political and administrative autonomy, is responsive to the needs of the residents and not to the national government, and has considerable financial autonomy.

## The Urban Reform Law

The implementation of these reforms requires strong political will and proper changes in the legal framework that clearly defines the roles and responsibilities of the urban LGIs in a manner that avoids duplication, especially from competing bodies of the national government as exemplified by the Dhaka city management experience indicated in Figure 14. There is no magic bullet formula for dividing responsibilities between urban LGIs and the national government. The Government could establish a National Task Force of urban experts who could review relevant international experiences and give a recommendation to the Cabinet for review and approval (See Box 3). Once done, this should be become legally binding through an Act of the parliament. The Act should also clarify the degree of political and administrative autonomy granted to urban LGIs and the financing options. The level of fiscal decentralization granted to the urban LGIs should be a critical part of the Act and must clearly define the basis for national transfers to urban LGIs, taxes assigned to them and authority for public borrowing. Again, the National Task Force of experts can provide recommendation by looking at international good practice.

###### Box 3: Decentralization of Responsibilities to City Governments

International experiences show a wide variety of decentralization of responsibilities to city governments. On average Western Europe, Latin American countries, Australia, New Zealand, Canada and Japan have devolved considerable authorities to city governments. On the other hand, in China and India higher level governments have retained more authority. The United States of America has adopted a middle way. Irrespective, there is a certain minimum level of devolution. By and large all high-performing cities have elected city governments that have well-defined responsibilities that are enshrined in the legal framework. These typically involve: water supply, sewerage, drainage, solid waste management, urban parks and recreation centers, urban water bodies, building permits, urban parking and zoning regulations. Urban planning, housing, health and education are shared responsibilities. In all high-income countries, city traffic management, city road network and city law and order are also assigned to city governments.

For Bangladesh, a two-phased approach might be the way to go. In stage one (FY2018-FY2031), the first- round devolution may involve exclusive assignment of all responsibilities to city governments for water supply, sewerage, drainage, sold waste management, urban parks and recreational centers, urban water bodies, building permits, urban parking and zoning regulations. Urban planning, housing, health and education can be shared responsibilities. In phase 2 (FY203-FY2041), city traffic management, city road network and city law and order can also be assigned to city governments with proper coordination with the national government. The actual outcome should be based on a careful analysis of various experiences, the political economy considerations and implementation capacity considerations. Reform implementation can also start on a pilot basis in Dhaka and can then be adapted and mainstreamed to other cities.

## Towards an Urban Financing Strategy

Reforms of urban governance and urban finances are critical for improving urbanisation and urban services in Bangladesh. They will need to go together to get results. Strong political will of the national government is the key. In Bangladesh, the members of Parliament typically tend to oppose decentralisation in all forms (political, administrative or financial) because of the perception that this will reduce their ability to influence the vote bank at the local level. On the other hand, without a major change in urban finances and management, there are very little prospects for Bangladesh to achieve higher income status. There is no example of a HIC that does not have decentralized strong and accountable urban governments with considerable financial autonomy. Fiscal decentralisation is essential to establishing accounting LGIs at both the urban and rural levels.

The financing needs for urban infrastructure are large. It will be nearly impossible to meet the financing requirements based simply on transfers from the national government. International experience shows that the strategy for urban financing needs to combine taxes, service charges, predictable transfers and responsible borrowing.

***Tax reforms and fees:*** Since at present the tax administrative capacity is generally weak even at the national level, the scope for decentralisation of tax responsibilities to LGIs is very limited in the near future. This is not even necessary at this stage of Bangladesh’s development. However, in the property tax, the LGIs have a potentially powerful source of revenue that must be better used. Once the property taxes are well developed and the urban governments gain experience, other options including urban income taxes could be considered.

* The first stage should focus on a major revamping of property taxes. A properly designed property tax could yield 1.0-1.5 percent of GDP equivalent of tax revenues that will revolutionize urban LGI financing. This compares with a mere 0.16 percent of GDP yield presently.
* Technical assistance can be sought from national institutions to help LGIs develop an effective system of property taxes.
* Service fees and charges have grown significantly over time, but they still account for only 0.14 percent of GDP. With better service, urban LGIs should be able to increase resources from this source equivalent to about 0.5 percent of GDP by FY2020 and 1.0% of GDP by FY2031.
* Together, the property tax and the service fee and charges could help jump-start the fiscal autonomy of urban LGIs in a substantial manner.
* Over time, consideration could be given to raising additional income taxes, over and above the national income taxes, as in other advanced economies like the USA.

***Reform of government transfers:*** Government transfers must be reformed to assign greater transparency and predictability of the transfers. The transfers will also need to match assigned responsibilities. The transfer system should also be enshrined within a legal framework to depoliticize the use of national resources to influence local level politics.

* There should be a much better balance between spending by national ministries and LGIs based on a clearly articulated devolution of responsibilities and matching transfers that is enshrined in the legal framework.
* There is a considerable body of international experience that could help with the design of a proper transfer system that will work in the Bangladesh context. Basic principles include factors relating to population, poverty, endowment and performance. Broadly speaking cities that have a larger share of the population, higher poverty and weaker options for local tax mobilization will receive larger grants. This equity principle is particularly important to facilitate the growth of lagging cities like Khulna, Barisal, Rangpur and Rajshahi
* A two-tier transfer system combining equity and incentives (performance) is also possible. This is important to promote competition among cities. Thus, cities that are innovative and make special effort to improve its efficiency of service delivery might have opportunities to tap special incentive funds from the national government.
* National government may also earmark special-purpose funds to promote national development goals related to health, education, environment, social protection and poverty reduction.

**Reform of urban LGI borrowings:** International experience shows that responsible borrowing by urban LGIs from the local market can be a major source of funding urban infrastructure (Bahl, Linn and Wetzel 2013). However, borrowing is not risk free and requires careful management with special attention to the debt repayment capacity of the borrowing entity. In the case of Bangladesh, following points are note-worthy:

* Presently, all transfers (grants or loans) come from the national budget. The restriction on local borrowing is understandable in the present environment of weak finances and poor capacities of urban LGIs.
* Over time as urban LGIs gain experience and capacity, the government may want to rethink its policy for their borrowings. Such borrowings could be important for delivering urban infrastructure.
* Again, there is considerable international experience and Bangladesh can learn from those experiences.
* In general, the loan financing should be done responsibly based on well-designed projects and in line with debt servicing capacity of the concerned LGI. International experience shows that strong urban LGIs can attract considerable long-term capital by floating municipal bonds. National government will not underwrite such borrowing and it must be based on full assessment of the creditworthiness of the urban LGI. However, national governments may support such borrowing by credible urban LGIs by offering tax free status to these bonds.
* The borrowing strategy of urban LGIs also needs to be made consistent with national debt management. The Finance Ministry of the national government will need to monitor such borrowing and be ready to take corrective actions to ensure full consistency with the national debt strategy.

## Urban Governance Reform

At the heart of the poor functioning urban LGIs in Bangladesh today is the fundamental problem of governance. Public administration in Bangladesh is heavily centralised. Within the civil administration, almost all authority is exercised by the head of the government and the cabinet. Local governments are very weak, with little administrative and financial authority. There have been attempts in the past to establish a stronger system of local governments. The main success has been the establishment of a system of elected urban and rural LGIs. But beyond that, nothing much has changed. The setting of expenditure priorities, allocation of resources, procurement of goods and services, and the implementation of projects are still largely centralised at the ministry level in the capital city of Dhaka. Even for the limited authority given to the mayors, the control of the central government in terms of policy setting and finances is overwhelming.

The progress on decentralisation has suffered in Bangladesh from a lack of effective political support, even though the rhetoric has been different. At the heart is the contentious issue of division of power between the national legislators and the LGI officials. While similar conflicts arise in other countries as well, in Bangladesh this has become particularly complicated because of the small physical size of the country, the homogenous nature of the people and the relative ease of physical mobility. Consequently, national legislators have tended to argue that they can take care of their constituencies without the need for an intermediary political agent (elected and empowered local governments). Progress can only happen if the lead comes from the top leadership.

The 2041 Perspective Plan provides a unique opportunity to articulate the government’s vision for urban management in the context of managing the urban transition in a rapidly growing and transformational economy. As noted, decentralized and autonomous urban governments are a key part of the political and administrative layout underlying a HIC. The main strategy and policy question is how quickly this transition can start along with sustained efforts to carry through this critical institutional reform.

## A Strategy for City Reforms

What are the reform options that will lay the basis for the emergence of a well-planned and sound city administration that is responsive to the needs of the residents? The urbanisation experience in Bangladesh and a review of international good practice experience suggest that the management problems of Bangladesh cities cannot be addressed in a piece meal fashion. While massive investment will be needed, given the large backlog of unmet demand, deployment of additional resources alone will not work. Experience shows that corruption, mismanagement and lack of accountability are serious constraints. Unless these are tackled, the effectiveness of additional spending will be limited. As well, given weak fiscal capacity at the national level, much of the new resources will need to come from user fees and greater tax compliance by residents, neither of which will be forthcoming without improved service. So, there is a need to fundamentally and systemically rethink the governance of the cities.

A sound strategy for reforming city management calls for a three-pronged approach: (i) redefining public-private roles with a view to strengthening this partnership for better services; (ii) strengthening capabilities of public urban service institutions; and (iii) establishing an accountable city government.

***Public-Private Roles and Partnerships***

Capacity constraint to service provision in mega cities is not uncommon. Many cities have found it helpful to redefine its role to provide only those basic services that are public goods and let the private sector handle commercial activities. Thus, services such as housing, electricity, telephone and gas are assigned to private providers with regulatory environment provided by the public sector. For some services, both public and private supply have prevailed allowing consumers choices, thereby improving service quality, while also meeting equity and "merit good" objectives. Examples include: urban transport, health, education, water supply, sanitation, solid waste. More and more experiments with this public-private partnership are now underway in South Asian countries. Thus, in Kolkata, toilet blocks have been handed over to the private sector for operation who charges a nominal fee for the use. Partial privatisation of street lights and flyovers has also been implemented there. In Ahmadabad, the slum networking initiative has brought in the private sector to provide all basic physical and social infrastructure services to the 200 slums in the city. The World Bank's slum improvement project in Mumbai has also been very successful by bringing in participation of local slum dwellers to partially pay for their sanitation facilities.

In Bangladesh, a vibrant private sector has emerged in the delivery of telecommunications, transport, housing, education, health services. There is also a strong partnership between the government and NGOs in the delivery of basic education services, which has contributed to important gains in reducing gender disparity and improved overall access to education. But for other commercial services such as electricity and gas, they remain public monopolies with mixed performance, weak finances and limited investment. For core urban services such as housing, transport, water supply, sewerage and solid waste disposal, the picture is also mixed (Ahmed, et. al. 2007; Jahan and Maniruzzaman 2007; Jahan and Kalam 2013; Jahan 2014). The private housing market is generally buoyant and competitive but it is constrained by high cost of land, inadequacy of long-term housing finance, an inefficient land market and other regulatory problems. More recently, because of progress with banking reforms, long-term financing options are emerging. The private sector is bypassing the regulatory constraints on registration, permits etc. through alleged private payments to concerned public agencies. The main problem though is affordability, primarily due to land scarcity, but also due to inappropriate tax and financial sector policies, the high cost of doing business and inadequate attention to low-cost and innovative housing solutions.

Given the magnitude of the housing challenge facing Bangladesh, a rapid reform of the housing market is essential. It is near impossible for the public sector to address this challenge and the private sector will need to play the dominant role. Yet, the government’s role in improving the functioning of the land market, helping develop the long-term mortgage industry, developing urban transport and a policy of tax/subsidy to encourage low-cost housing supply is imperative. Land market reforms include digitization of land records, simplification of land transactions including registration and reduction of financial cost of land transfers. Efficient urban transport can be very helpful in deconcentrating city centers and developing suburban areas for residential purposes. The government can also help ease the housing constraint by releasing government owned land for low-cost housing and relaxing space use restrictions for this type of housing.

Regarding mortgage industry, the main challenge is to develop housing finance programs that provide flexible sources of financing at relatively low rates of interest. The Bangladesh Bank can commission a study that looks at international experience to facilitate this. In high-income countries housing finance is the most attractive business given the safety of the investment and as such the availability of low-cost long-term finance is quite adequate. There is also a secondary market for housing mortgage that allows private investors to the private mortgage companies to leverage their finances.

Fiscal incentives like tax write off for interest payments, low taxation of capital gains from primary residence sale and capital/ interest subsidies for low-cost housing are possible ways to spur home ownership. Finally, policy attention is needed to create incentives for the development of low-cost housing solutions using new technology and environment-friendly construction options. Bangladesh has many civil engineering and architectural talents. The government can support research in new design and technology for low cost housing that is consistent with the natural climate and hazard risks. There is considerable research ongoing in India in the context of its Housing for All by 2022 Initiative[[6]](#footnote-6). Bangladesh can learn from this experience.

Regarding transport, while the road network infrastructure is provided by the public sector, transport service is largely provided by the private sector along with limited public bus service. The lack of a proper mass transit is a major problem for Dhaka and other large cities. For private buses, inadequate road network, poor traffic management and weak regulations related to service and safety standards have contributed to low service quality. Over-crowding of buses is overwhelming causing serious safety concerns. Moving forward, the highest priority is to establish a system of mass transit for all large cities starting with Dhaka. Considerable improvement is needed in urban traffic management relating to traffic signals, strict enforcement of traffic laws, enforcement of parking restrictions, and time of use of congested traffic corridors. Bangladesh can learn a lot from studying traffic management in advanced economies. A particularly good example is from Singapore. There is adequate scope to improve private supply of private transport options through tax breaks to bus/taxi service providers and regulatory reforms on seating capacities and quality of private transport.

For piped water and modern sewage service, public sector is the only source of service. Autonomous service agencies called Water and Sewerage Authorities (WASA) exist in three major cities of Dhaka, Chittagong and Khulna. All three provide piped water but only DWASA provides limited modern sewage service. In other cities, piped water is provided by the municipalities and concerned city corporations. Private water provision as a commercial activity is absent in the urban areas, although illegal private water markets through control over use of public stand pipes by *mastans* are known to exist in the slum areas. Private hand tube wells and groundwater extraction through motorised pumps are common sources of water supply for areas not served by municipalities or where this supply is unreliable. Since a modern sewage system whereby the human waste is treated before release to water bodies does not exist in most urban centers of Bangladesh including Dhaka, much of the human excreta goes into underground pits or in portable containers. These are mostly serviced by private service providers. Garbage disposal is also primarily provided by the city corporations/ municipality. An organised private service delivery does not exist, although small-scale and informal private services of garbage disposal prevail in areas not served by public service providers or as an added community initiative to keep the neighborhood clean.

The lack of private supply of water and garbage disposal is a major constraint to the adequate provision and quality of urban services in Dhaka. This tends to exacerbate the problems resulting from poor service supply from the public providers. A strategy for encouraging more private investment in these areas involves proper regulations and appropriate cost recovery policy. Proper regulation on waste/ sewage disposal and coordination with public waste /sewage treatment facilities is essential.

***Strengthening Public Urban Service Agencies***

While private participation in water supply and disposal of solid waste will be helpful, a top priority is to institute adequate supply of modern sewage facilities in all cities. The serious health risk from water pollution due to inadequate management of sewage and solid waste is unacceptable and must be addressed on a war footing. Sewage disposal and its proper treatment is a prime example of a public good and it is best provided by the public sector. All City Corporations and Municipalities must be equipped with WASA type institutions that will have accountability for piped water supply and sewage disposal. Existing WASAs should be re-assigned to the respective City Corporations where they provide service. This is necessary to strengthen the accountability of the urban LGIs and make them responsive to the needs of the residents they oversee. Cost recovery policies must be strengthened to improve the financial viability and service delivery capacity of these service agencies.

Proper disposal of sewage and sold waste requires modern waste treatment facilities. There is considerable global progress in this area and Bangladesh can learn from these experiences. Coordination between the Ministries of LGRD and Environment and urban LGIs in the matter of standards and waste disposal channels is essential.

In urban transport, the highest priority is to establish efficient mass transit systems. This can be based on surface high-speed urban rails or underground rail system. These high-priority urban investments need to fast-tracked starting with Dhaka but extended to all the 9 divisional city headquarters. Since these are highly capital-intensive enterprises, the funding will come from the ADP. However, pricing policies for services must provide for coverage of all O&M costs to ensure their sustainability.

***Towards An Accountable City Government***

The third and most fundamental leg of the reform strategy is improved city governance. The reform strategy must seek to address the key constraints to the effective functioning of the city government: unclear mandate and service responsibilities; lack of accountability; weak finances and financial autonomy; proliferation of service agencies with poor coordination and control; and weak management. These problems cannot be resolved by tinkering at the margin; they clearly call for a major rethinking and wholesale change in city management and its enabling environment. Fundamentally, key functions will need to be devolved to city governments and, in turn, city governments should be organised to best manage these functions -- a two-step process that will need to be sequenced and managed jointly between national and city governments in a strategic way. Embedded in this approach is the assumption that strengthening voice – the ability of citizens to reveal their preferences and hold their government to account -- will be essential in sustaining city reforms.

The other critical assumption is the devolution of financial autonomy. City government's finances must be well defined based on assigned responsibilities and a proper balance of assigned taxes (principally the property tax), block grants from the national budget, user charges and city government bonds.

Devolving authority to the city level raises the important question of how to organise a city government to manage those responsibilities. Based on international experience, the options range from some form of non-metropolitan government to various forms of metropolitan governments with economic decentralisation as the guiding principle. In a non-metropolitan model, one option is that Dhaka can be arranged as a series of contiguous municipalities, each with its own set of devolved responsibilities, services, tax bases and management system. For example, Gulshan, Dhanmondi, Dhaka central, and Uttara can be self-contained municipalities, each with its own mayor and council. Washington DC and its surrounding suburbs that are municipalities in their own rights is an example of how a contiguous set of municipalities can loosely form a broader metropolitan area.

An alternative model is to formally and legally merge all municipalities into one jurisdiction -- a centralised metropolitan government where the residents of the urban area would directly elect a mayor and a council of city members. All urban functions would be managed by this one city government. The cities of Toronto in Canada and Johannesburg in South Africa have adopted a version of this model.

In a centralised metropolitan model based on economic decentralisation, the city government is structured as a metropolitan government, but it does not organise its systems of service delivery in the form of traditional line departments. Instead, the city establishes service delivery under formal corporations owned by the city. Water distribution in Johannesburg, for example, was transformed into a water corporation along the principles of the Companies Act, owned by the city, but managed by an independent board and CEO on behalf of the city. Solid waste was also formed into a corporation, owned by the city but contracting the management to a private firm. While water and solid waste represent services with user charges – more akin to private goods -- which enabled a corporation structure to be formed, Johannesburg also innovated in services that are dependent on local taxes. For example, road construction, traditionally more suited to a line department organisation, was also structured to mimic a corporate system. Formal contracts were given to teams within the department with delegated budgets and their outcomes were measured against indicators based on performance of private contractors. In sum, the city became a policy maker and a regulator with service management delegated to corporations or line departments set up as corporate entities or structures that were proxies of corporations.

Under a decentralised metropolitan system, metropolitan governments are structured in two tiers: a metropolitan tier overseeing a series of separate municipalities. The metro tier and the municipalities jointly form the metropolitan government. Functions can be separated between the two tiers depending on principles of public finance with services that require economies of scale -- e.g. network systems -- placed at the metropolitan level. Services that do not exhibit scale economies, such as solid waste collection, could then be placed efficiently at the level of municipalities. Landfills, which have scale economies, on the other hand, could be placed at the metro level. Similarly, tax instruments can be allocated between the two tiers based on spatial incidence. For example, personal property taxes could be delegated to municipalities while commercial property taxes whose incidence is beyond narrow municipal boundaries are better placed at a broader, metropolitan level. Minneapolis-St. Paul, the twin cities in Minneapolis, is structured as a two- tier system with the metro tier playing the function of a pure redistributive tier.

While there is no one size fits all approach to city governments, the idea of organising Dhaka city a centralised metropolitan model with economic decentralisation is the recommended approach. This avoids the emergence of too many competing city governments that could create enormous capacity and coordination constraints. In this model, the metropolitan government will be responsible for overall planning, budgeting, regulations. Other city services such as, water, housing, urban transport and sanitation will be provided by some combination of private providers and corporate public entities that are city-owned but run by private managers. The bulk of city finances for day-to-day operations will come from property taxes and user charges. Capital spending will require government block grants and city government bonds.

The implementation of a city government model will present political challenges, especially for the capital city of Dhaka and commercial city of Chittagong. The national government might feel that with proper decentralisation, the city governments will become too powerful and thereby weaken the authority of national cabinet. To overcome this perception risk, a phased approach is suggested. The most contentious issue is the devolution of law and order and urban traffic responsibilities to the city governments. This may not be devolved now. Instead the focus may shift to the delivery of certain well-defined services such as city transport, city zoning laws, building permits, water supply and sewerage, waste management, parks, lakes and recreation services, and slum upgrading. Other functions like health and education might be devolved partially as a shared responsibility between the national and LGIs (both urban and rural). There is no magic rule here. It should be tailored to the political comfort zone of the national leadership and capabilities of the LGIs. A phased, long-term approach with well-defined steps might also work provided there is enough steam to start with. What is clear though is that the present status-quo is a path to urban disaster and must change.

## Coordination of City Agenda with the National Agenda

While the system of devolution will need to ensure that there is no conflict between the city agenda and the national agenda, there will be common areas where coordination is necessary. These typically involve setting of standards for environmental protection, water quality, air quality, zoning laws, and safety standards. For all matters relating to national interests, the national laws and regulations will prevail and all cities will be required to comply with them. But implementation of these laws, regulations and standards will often require proper dialogue and consultation. The concerned line Ministries will take the lead on these matters with participation by city governments.

## Planning and Monitoring

Presently the Ministry of Local Government takes the lead in planning and investment of major urban projects. It allocates funds to all local governments and supervises major service institutions like the Water and Sewerage Authorities (WASAs). Under the envisaged reforms the Ministry’s role will change drastically. With devolution to the city governments most of the budget allocation and investment financing roles of the Ministry will disappear. The WASAs will devolve to city governments. Similarly, RAJUK in its present form will cease to exist. For all cities, the city planning will become an integral part of the city government.

The major role of the Ministry will be planning of the entire urban scenario, policy making to facilitate urban development based on the approved national scenario and monitoring the sound implementation of urban development. The Ministry will take the lead in defining and designing the national urban priorities and related urban reforms and ensuring their proper implementation in close consultation and coordination with the city governments. It will monitor progress with urbanization, identify emerging issues and challenges and seek to resolve them in consultation with the concerned city governments.

On the financing side, there will be a more limited but strategic role. This will involve the administration of two types of funds: the incentives fund and the special programs funds. The incentives funds will seek to encourage competition among cities in innovating in service delivery and taking risks. The special programs funds will involve providing matching grants to cities to adopt and implement programs identified as priorities by the national government.

The precise roles and coordination mechanisms on urban planning and monitoring will emerge from a careful review of relevant international experiences. There is no one size fits all template available. Social and political realities and implementation capabilities will play important roles in evolving the devolution of planning functions. What is important is to define clear responsibilities and accountabilities along with proper coordination mechanisms with different levels of government. Involvement of citizens in the planning process is equally important.

# Financing Requirements and Options

The funding needs of the urban sector are large. The quality of urban infrastructure is low and there is a huge unmet demand for urban services (Table 5). However, the proposed governance and financing reforms suggested by the 2041 Perspective Plan Strategy in Section 5 should provide a solid foundation.

Presently, the only source of public investment spending on urban infrastructure is the national government through the Annual Development Programme (ADP). The total investment on urban infrastructure (housing, water, sewerage, and city corporation/municipality services) amounts to about 1.2% of GDP. The urban LGIs cannot even meet their operational funding requirements from their own resources and there is no investible surplus from own resources. Private urban services mainly involve housing and urban transport services (private buses, CNG three wheelers and rickshaws). The absence of a well-thought-out strategy is obviously reflected by the low levels of financing.

Reflecting the financing needs of the urbanization agenda, the 2041 Perspective Plan projects that the investment programme for the urban sector to grow from 2.4% of GDP now to 5.0% of GDP by FY2031 and 7.0% of GDP by FY2041 (Figure 6). This is a huge increase and the ADP alone cannot finance this even with the solid progress in tax mobilization. Two other financing strategies will be necessary. The first involves private financing and the second involves a strong cost recovery programme for urban services. Nevertheless, the ADP funding of urban sector is expected to increase from 1.2% of GDP in FY2017 to 2.0% in FY2031 and 2.5% in FY2041. Most of these resources will be transferred to city governments as block grants based on legally mandated formulae. A small percent will be transferred as incentive funds.

## Private Provision of Urban Services

Presently, the housing services are mostly provided by the private sector. The private sector also provides urban transport services. The investment for private sector is estimated at 1.2% of GDP in FF2017. For the future, this should grow substantially to provide the growing services needs of the modern Bangladesh urban sector. Specifically, private provision of urban services is projected to grow from 1.2% of GDP now to about 2% of GDP by FY2031 and 3% of GDP by FY2041. Much of the additional investment will be in housing. Yet, areas where private provision can prevail include urban transport, urban water supply and solid waste disposal.

## Self-Financing and Cost Recovery

Presently, there is zero self-financing of urban infrastructure from own resources of the urban LGIs. The resource mobilization strategy for urban LGIs identified in Section 5 above will play a major role in changing this. As international experience shows, no urban development agenda can be sustained without a strong own resource mobilization effort. Of special mention in this regard is cost recovery. While local government tax resources will help finance operating costs of the city government and spending programs on public goods like local roads, drainage systems, parks and maintenance of water bodies, cost recovery will play a dominant role for such services as water supply, sewerage and solid waste disposal. The cost recovery policy will initially target 100% recovery of operations and maintenance. Over the longer term the cost recovery will also target a substantial recovery of capital costs. As self-financing improves, urban LGIs can also undertake limited borrowing for quality infrastructure projects.

#### Table 6: Urban Sector Financing Requirements and Options

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Funding Sources/Options | FY2017 | FY2020 | FY2031 | FY2041 |
| Annual Development Program (% of GDP) | 1.2 | 1.5 | 2.0 | 2.5 |
| Self-Financing (Cost Recovery) (% of GDP) | 0.0 | 0.3 | 1.0 | 1.5 |
| Private Investment (% of GDP) | 1.2 | 1.5 | 2.0 | 3.0 |
| Total Investment (% of GDP) | 2.4 | 3.3 | 5.0 | 7.0 |
| Total Investment (Tk Bl. 2017 Prices) | 470 | 806 | 3010 | 10437 |

***Source: GED Projections***

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1. Based on FY2010 data. [↑](#footnote-ref-1)
2. The original World Bank analysis was done in 2012 and used 2021 as the reference point for MIC. Bangladesh in 2012 was a low-income country (LIC). Bangladesh achieved lower middle income (LMIC) status in 2015. It now aspires to move to UMIC and HIC. However, the underlying analytical framework for urbanization scenario remains unchanged. [↑](#footnote-ref-2)
3. The definition of slum population used by the United Nations Human Settlement Programme is very different from the one used by the Bangladesh Bureau of Statistics. The UN defines the slum population as population living in household that lack either improved water, improved sanitation, sufficient living area (more than three persons per room), or durable housing. [↑](#footnote-ref-3)
4. A detailed analysis of water, sanitation and drainage issues for urban Bangladesh is available in Chapter 10, Government of Bangladesh 2017. [↑](#footnote-ref-4)
5. The WHO sets a standard of annual average of 10 for airborne particulate matter (PM) for particles smaller than 2.5 microns (PM 2.5). The PM 2.5 is considered fine particulate matter as opposed to PM 10 that is labelled as gross particulate matter. The presence of annual mean concentration higher than10 microns per cubic meter (µg/m3) of fine particulate matter (PM 2.5) is considered unsafe. Values of 88 µg/m3 found in Bangladesh urban areas for 2014 is an indication of very high air pollution. [↑](#footnote-ref-5)
6. “The Housing for All By 2022” Initiative was launched by the Government of India in 2015. [↑](#footnote-ref-6)