

37th WEDC International Conference, Hanoi, Vietnam, 2014

**SUSTAINABLE WATER AND SANITATION SERVICES
FOR ALL IN A FAST CHANGING WORLD**

**Who eats away the money? The dilemma of urban water
and sanitation services in Bangladesh**

A. Opel, Bangladesh

BRIEFING PAPER 1877

Bangladesh is experiencing rapid urbanization in recent decades. Nearly one-third population of the country lives in the urban areas with a high growth rate. The number of urban centres has increased by over five times from 108 in 1974 to 557 in 2013. The unregulated increase of urban centres demands institutional reform, capacity building and resources to make the service agencies responsive and able to cater the increasing demand. Unfortunately, development programmes and the resource allocation scenario over the past years shows a great neglect towards the small and medium towns with over 80% of the total allocation goes to the big cities to maintain the existing infrastructure. As a result, the country has seen a declining urban WASH coverage trend over the past decade. This significantly affects the well-being of the low income people living in the urban areas.

Introduction

The world today is predominantly urban. More than half of the world's population now lives in the cities and towns in different regions with a rapid growth rate. Currently, over 63 million people are added to the urban population annually (UN-Water, 2014). Driven by the economic growth, this population growth rate is expected to rise further. Thus, it is projected that 6 out of every 10 people will be living in the cities and towns by the end of the next decade, rising to 7 out of every 10 people by mid-century (WHO and UN-Habitat, 2010). There is no difference of this growth pattern in developed and developing regions. Even in some cases, urbanisation in developing countries is more rapid than that of the developed regions (UN 2013a) which pose new challenges for the already saturated service sector as well as increase competition among the poor for labour market opportunities.

Urbanisation and economic development is closely related. It is generally observed that urban productivity as well as national productivity grows with an increase of the level of urbanisation (Grübler and Fisk, 2013; UN-Habitat, 2013a). In case of India, it is observed across the states that although the level of urbanisation and that of economic development go hand in hand over time, the relationship between the two variables is not so strong (Cali, 2009). Shahu (2013), on the other hand, provided an intensive analysis of the trend, pattern and process of urbanisation in China over a period of 37 years (1975 to 2011) and concluded that although growth of urbanisation and growth of real per capita GDP is not significantly associated for the current years but growth of urbanisation in China has significant correlation with per capita GDP over the past years. A recent analysis, however, confirmed that rising urbanisation and per capita income are strongly correlated for the world as a whole over the past five decades (UN-Habitat, 2013a).

Unfortunately, economic growth and rising urbanisation does not necessarily mean that they will have a certain and trickle-down effect on reducing urban inequality and rising urban poverty. Instead, urban poverty and deprivation is increasing in many developing countries (UN-Habitat, 2013b). As a result, although the MDG slum target (Target 7.D) has already been met (UN, 2013b) global slum population is rising with an annual average increase of 6 million people during 2000 and 2010 (UN-Water, 2014). Almost one-third of the total world urban population (863 million) were residing in the slums in 2012, most of which are in the developing regions (UN, 2013b). If no action is taken it is projected that the number of people living in the slums might triple by 2050 (UN, 2013a). This is often termed as urbanisation of poverty which is reflected

in poor housing, low access to essential services, health facilities, unstable and informal employment, insecure income flow, low social and human development opportunities and so on (UN-Habitat, 2010; Ooi and Phua, 2007; Garland, et al., 2007; Opel, 2005).

On the other hand, rightly or wrongly, although a persistent urban bias continues to dominate the development policy and investment priority over the past decades (Bezemer and Headey, 2008; Satterthwaite and Tacoli, 2003) urban development has typically been focussed on gaining and sustaining economic productivity (Ooi and Phua, 2007). Aspects of urban inequality has largely been either misunderstood or ignored in macro and micro level policy and programmes. As a result, development has always been big city biased and within the big cities, biased towards the rich and the middle-classes (Satterthwaite and Tacoli, 2003). Large parts of the slum population in the big cities remain excluded from the benefits of improved services (Olinto, et al., 2013; Opel and Islam, 2012).

Ignorance towards small and medium towns is possibly even bigger and deeper manifestation of urban inequity and inequality. In terms of numbers as well as population, small and medium size towns play a pivotal role in the pace of urban growth. A recent UN report estimated that a net 1.3 billion people was added in small towns during 1950-2010 which is almost half of the current world urban population. This number is more than double the number of people added in medium towns (632 million) or large cities (570 million) (UN, 2013a). These small and medium towns essentially play a very critical role for the growth of the rural economy as well as in the distribution of goods and services to the surrounding rural areas (Satterthwaite and Tacoli, 2003). Unfortunately, as a result of widespread ignorance towards these small centres, poverty is widespread and deeper in these small urban transitional centres than in the large or very large cities (Ferré, et al., 2010).

This paper seeks to explore the dilemma of urban inequity and inequality in the context of urbanisation and urban development in Bangladesh. Based on secondary materials, the paper provides analyses of the trends and patterns of urbanisation and growth of small and medium towns in the country and examines public sector development programmes and resource allocation trends to explain as to why the extent of urban inequality in the water and sanitation sector persists in Bangladesh that results a falling urban water and sanitation service coverage trend.

Urbanisation and urban poverty in Bangladesh

Bangladesh is rapidly urbanising. High rural to urban migration for various economic and non-economic factors at the source of migration as well as at the destination, physical expansion of the existing cities and towns and development of new urban centres are the prime causes. The urban population has reached close to 30 per cent in 2013, and it is projected to outnumber the rural population by the middle of the century (Chart 1). Urban population density is highest in the world, excluding the city-states and small islands (Muzzini and Aparicio, 2013). Population density and growth rate in the urban slums is much higher compared to urban areas in general (Fleischer et al., 2010).

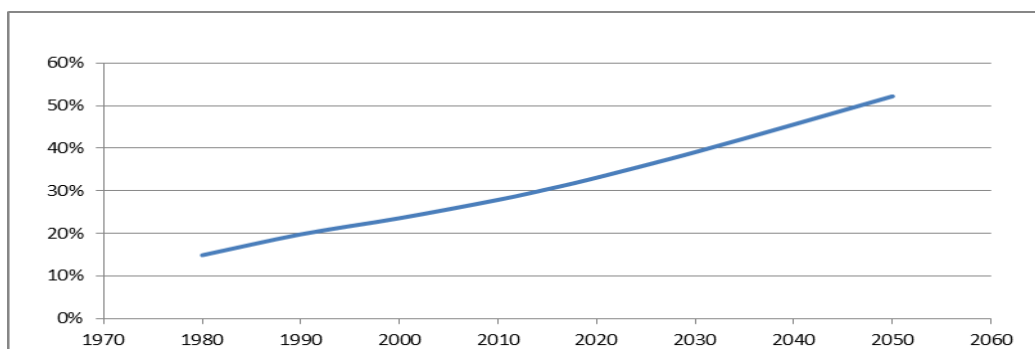


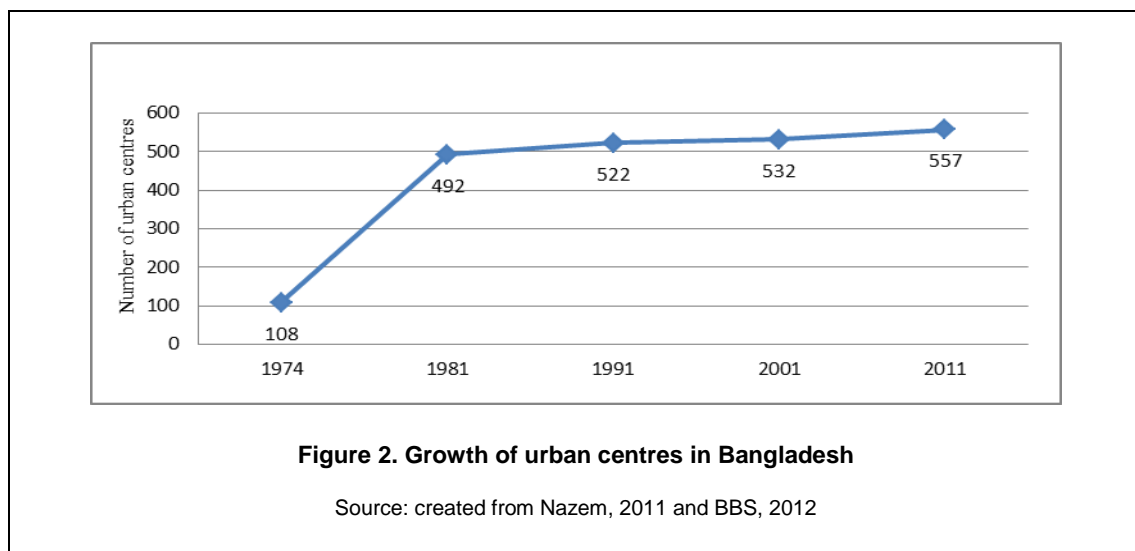
Figure 1. Urbanisation in Bangladesh

Source: World Urbanization Prospects

Economic growth has led to an overall decline of poverty in Bangladesh. Likewise, urban poverty has also declined over the past decade - from 35.2% in 2000 to 21.2% in 2010 (BBS, 2011) which means that still 10.22 million people in the urban areas lives below the poverty level income. Although poverty situation has improved, unfortunately, more than half of the urban population throughout the country still live in slum settlements (61.6% in 2009) (UNDATA, 2014) with very basic service level.

Rise of small and medium towns

Tremendous pace of urbanisation has also given rise of unregulated growth of small and medium size towns throughout the country (Chart 2) (created from Nazem, 2011; BBS, 2012). Number of these urban centres has increased by over five times in just less than four decades - from 108 in 1974 to 557 in 2011. With more economic growth and more industrialisation, this number is bound to increase further in the near future. Nearly half of the total urban population (49%) lives in four big cities (Dhaka, Chittagong, Rajshahi and Khulna) while the remaining half lives in the small (45%) and medium towns (6%). Most of the inhabitants in the low income settlements in the big cities as well as in small and medium urban centres enjoy extremely low access to essential services since the service sector has not grown enough commensurate to urban growth rates to cater the needs of increased urban population (Nazem, 2011; Jahan and Rous, 2011).



Who serves the small and medium towns?

Clear administrative typology for the urban centres exists in the country, according to which there are presently 11 urban centres defined as City Corporations (CC). Out of these, four CCs are big urban centres in terms of population size (> 1 million populations) including Dhaka city which is one of the fastest growing mega cities in the world with over 15 million current populations. In addition, there are three types of Municipalities (A, B and C) also determined by population size living in those centres. Altogether, there are 326 Municipalities in the country. In addition, there are 231 unrecognised urban centres throughout the country (Table 1).

As per the provision, all the CCs should have separate water supply and sewerage authority (WASA) to provide required services but unfortunately only four of them have these authorities. Dhaka WASA alone covers three city corporations (Dhaka North, Dhaka South and Narayangong). There are also separate WASAs in Chittagong, Khulna and Rajshahi Cities. The city corporations that do not have separate WASAs and all three types of municipalities have separate department or unit to implement and oversee programme and activities related to water and sanitation. They have defined organisational structure but none the CCs nor the municipalities have required human resources, financial resources and capacity to serve the people.

Urban centres which do not yet got the status of municipality or unrecognised urban centres (40.67%) falls under the authority of respective rural local government institutions and government department responsible for rural water and sanitation services (DPHE – Department of Public Health and Engineering). However, all these institutions lack capacity and resources. As presented in the table 1 below, there is specialised

public sector agency (WASA) to implement the water and sanitation services in only less than 1% urban centres throughout the country. Thus, majority of the urban centres in which over half of the total urban population lives remain almost unserved by any public sector agency.

Table 1. Existence of service agencies for water and sanitation		
Institutions	Number	%
City Corporations with separate WatSan authority	4	0.70
City Corporation with no separate WatSan authority	7	1.23
Municipalities (Grades A, B & C)	326	57.39
Unrecognised urban centres	231	40.67
Total	568	100

Financing urban water and sanitation

Public sector financing for water and sanitation has always been low (<0.5% of GDP) in Bangladesh. However, an analysis of the national budget of the past seven fiscal years shows a persistent urban bias in allocation. Cities have always received exceptionally high allocation. Since 2009-2010 fiscal years, urban centres got over 80% of the total national allocation for water and sanitation. In 2011-12, the total allocation for urban areas was the highest (93.9%) (Figure 3).

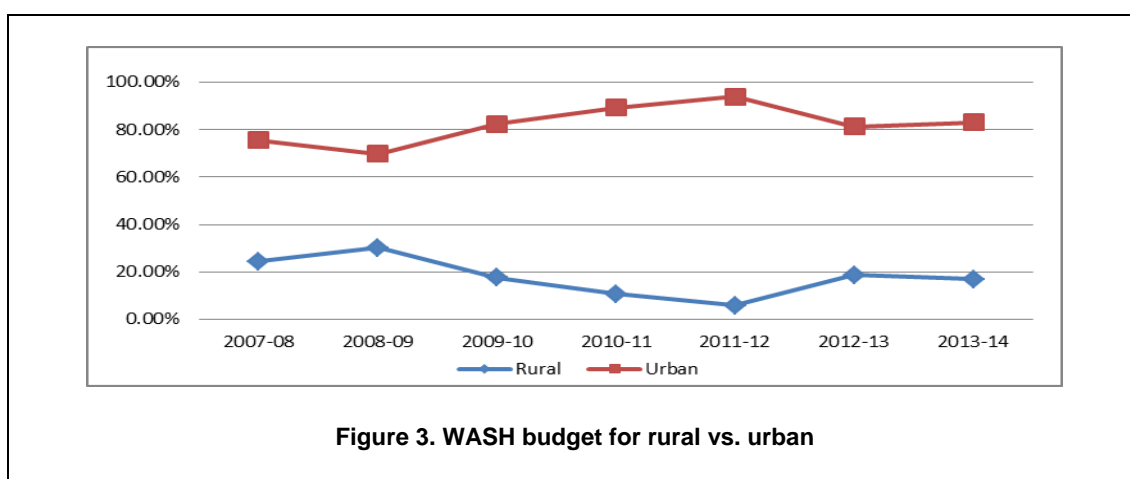


Figure 3. WASH budget for rural vs. urban

Further analysis of the national WASH budget suggests that the allocation is highly big city biased (Table 2). Big cities received over 80% of the total allocation that went to urban over the past three fiscal years. Among the big cities, Dhaka (the Capital) and Chittagong (the second largest city and the main commercial city) eats away almost all the money, 54.2% and 37.1% respectively of 2012-2013 fiscal years' budget. The trend was almost similar over the past seven fiscal years. Detail analysis of the development programmes in these two cities further suggest that most of the funds were allocated to maintain the existing water and sewerage networks and increase supply of water. Not much as has been allocated to bring unserved people into the service coverage.

Table 2. Distribution of national WASH budget		
Fiscal years	Big cities (%)	Municipalities (%)
2010 – 2011	86.6	13.4
2011 – 2012	82.7	17.3
2012 – 2013	74.1	25.9

Implications

Although a persistent urban bias exists in public sector WASH financing, water and sanitation service coverage data suggests no improvement in the urban areas. Rather, urban water coverage data shows a declining trend. Urban sanitation has shown no progress over the past decade too (Figure 4) while there has been improvement in both water and sanitation coverage in the rural areas. The reasons have been manifold. Due to population growth in the cities and towns, there has been lots of pressure on the existing infrastructure. Thus, maintenance of the existing infrastructure is essential to keep the services going. On the other hand, whatever new development has happened, benefits have not been trickled down to the low income people. As a result, it is seen in Dhaka city that still <1% of the total water connections of DWASA goes to the low income communities while over 35% of the total population of the city lives in the slums and squatter settlements.

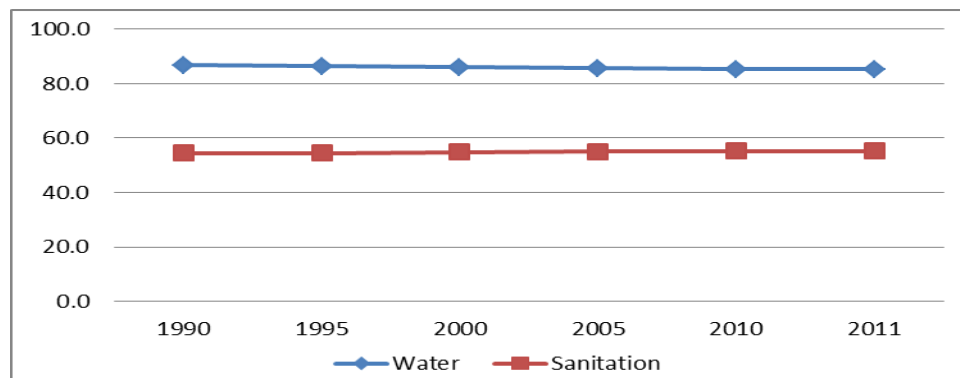


Figure 4. Use of improved water and sanitation in urban areas in Bangladesh

Source: WHO-UNICEF <http://www.wssinfo.org/>

Similar pattern is evident in many other big cities and medium towns where there is some level of services available provided by the public sector agencies. As usual, they hardly reach to the poor. As a result, self-service is the major option. A slow emergence of private sector is evident in the service provision in regions with extremely low service coverage (Opel, 2013). However, quality self-service as well as private service is almost beyond the affordability of the poor people. As a result, they depend on the unimproved and unsafe sources.

Conclusions and ways forward

Water and sanitation is a low priority sector in Bangladesh. Big city bias and persistent neglect towards small and medium towns made them victim of double neglect although these growth centres host more than half of the total urban population of the country. These urban centres play an important role for the rural economy as well play a bridging role for the economy of the bigger cities. There is no reason to assume that there will be no further increase of these types of urban centres and their need for improved services will be eliminated. Instead, with further economic development, the number and spread of such urban centres will be increased. It is therefore important to recognise their role for the economy as well as bring the need of their WASH services in the development agenda.

It is also important to recognise that poverty is much deeper in the small and medium towns and that self-service is not affordable to the majority of the people living in those centres. Thus, there is no other ways to attain a full water and sanitation coverage without giving proper attention to these small and medium urban centres. Water and sanitation has to be an integral part of poverty alleviation agenda in general as well as any urban development programme in particular. In terms of equity and equality, small and medium towns as well as the low income communities in the big urban centres are severely deprived. This has to be taken proper care of in the development planning, programme and resource allocation. Otherwise, benefits of development in other indicators such as health, education, nutrition, etc may not bring any lasting benefits.

References

- BBS (2011) *Household Income and Expenditure Survey-2010* (Preliminary Report). Bangladesh Bureau of Statistics. Ministry of Planning, Government of Bangladesh
- Bezemer, D., and Headey, D., (2008) *Agriculture, Development and Urban Bias*. World Development 36(8): 1342-1364. DOI:10.1016/j.worlddev.2007.07.001
- Cali, M., (2009) *Urbanisation, inequality and economic growth: evidence from Indian states and towns*. Background note for the World Development Report 2009.
- Ferré, C., Ferreira, FHG. and Lanjouw, P. (2010) *Is There a Metropolitan Bias? The Inverse Relationship between Poverty and City Size in Selected Developing Countries*. Policy research working paper (5508). The World Bank.
- Fleischer, A., et al., (2010) Population Dynamics in Bangladesh: a case study on the causes and effects of demographic change in Bangladesh. GTZ. Bangladesh.
- Garland, AM., Massoumi, M. and Ruble, BA. (eds.) (2007) *Global Urban Poverty: Setting the Agenda*. Woodrow Wilson International Center for Scholars, Washington, D.C.
- Grübler, A. and David, F. eds. (2013). *Energizing Sustainable Cities: Assessing Urban Energy*. Abingdon, United Kingdom: Routledge.
- Olinto, P., et al., (2013) *The State of the Poor: Where are the poor, where is extreme poverty harder to end, and what is the current profile of the world's poor?* Economic Premise. Poverty Reduction and Economic Management Network. The World Bank.
- Ooi, GL and Phua, KH (2007) *Urbanisation and Slum Formation*. Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol. 84, No. 1. doi:10.1007/s11524-007-9167-5
- Opel, A. (2005) *Bound for the City: A Study of Rural to Urban Labour Migration in Afghanistan*. Working paper. Afghanistan Research and Evaluation Unit. Kabul, Afghanistan.
- Opel, A., (2013) Climate change and water scarcity: implications for the urban poor in Bangladesh. Paper to the International Workshop – Living in Low-income Urban Settlement in an Era of Climate Change: processes, practices, policies and politics. 9-10 September 2013, Brooks World Poverty Institute, University of Manchester, UK
- Sahu, KK., (2013) *Urbanisation and Growth Linkage in China*. IOSR Journal of Humanities and Social Sciences (IOSR-JHSS) Vol 8. Issue 6.
- Satterthwaite, D. and Tacoli, C. (2003) *The urban part of rural development: the role of small and intermediate urban centres in rural and regional development and poverty reduction*. International Institute for Environment and Development (IIED). London, UK.
- UN (2013a) *Sustainable Development Challenges: World Economic and Social Survey 2013*. Department of Economic and Social Affairs. United Nations publication (No. E.13.II.C.1). United Nations.
- UN (2013b) *The Millennium Development Goals Report 2013*. United Nations. Geneva.
- UN- Habitat (2010) *The State of Asian Cities 2010/11*. United Nations Human Settlements Programme. Japan.
- UNDATA (2014) <http://data.un.org/Data.aspx?d=MDG&f=seriesRowID%3A710> (data accessed on February 06, 2014 at 16.15)
- UN-Habitat (2013a) *State of the World's Cities 2012/2013*. Routledge.
- UN-Habitat (2013b) *Addressing Urban Poverty, Inequality, and Vulnerability in a Warming World*. Asia-Pacific Issues Brief Series on Urbanization and Climate Change No. 1.
- UN-Water (2014) *Factsheets on Water and Urbanisation* (accessed from www.unwater.org at 10.15 am/ 23 January 2014).
- WHO and UN-habitat (2010) *Hidden cities: unmasking and overcoming health inequities in urban settings*. World Health Organization and United Nations Human Settlements Programme. Switzerland.
-

Contact details

Aftab Opel
 WaterAid, House 97/B, Road 25, Block A, Banani,
 Dhaka 1213, Bangladesh
 Tel: +88 01730701218
 Fax: +88029882577
 Email: aftab.opel@wateraid.org
www.wateraid.org/bangladesh
