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The *Social Science and Policy Bulletin* is published quarterly by the Mushtaq Ahmed Gurmani School of Humanities and Social Sciences at LUMS. It provides a forum for debate on economic and socio-political issues pertaining to the formulation and execution of public policy as well as its impact. The Bulletin aims to disseminate high quality research and policy-oriented work being done by social scientists. The editors of the Bulletin welcome short essays, either analytical or quantitative, that are relevant as well as intellectually stimulating.

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Editors' Note

Urbanization and economic development seem to occur in tandem. While it is unclear whether urbanization is a consequence or a cause of development, it has most certainly been the backdrop for economic development for almost all nations. In particular, the structural transformation of economies as they move from more rural and agricultural based activities to more urban and manufacturing/services centric endeavors has been highlighted in helping lift individuals out of poverty: China, East Asia and Latin America that have relatively high rates of urbanization have seen a larger proportion of their population lifted out of extreme poverty while South Asia and Sub-Saharan Africa that in comparison have lower levels of urbanization have significantly higher levels of poverty. In this regard there is also evidence to suggest that migrants who transition to large cities or even nonfarm secondary or small towns exit poverty. The evidence however, is mixed, and the link between the pace of urbanization and the evolution of inequality and poverty needs to be explored further.

In recent years South Asia has seen a rapid rise in its urbanization levels. However the nature of this urbanization has varied from one country to the other, and even across regions within the same country. Thus, urbanization in the region has been characterized by mega-cities as well as clusters of several cities as larger cities have fed into and helped surrounding villages grow into small towns and eventually urban centers in their own right. While this rapid urbanization has presented new opportunities for collaboration and economic innovation, and has especially led to rapid growth of the informal and services sectors in these economies, it has also presented several key challenges especially in areas of spatial and

infrastructure planning, housing development as well as services delivery. With relatively weak urban planning departments in most countries in the region that are unable to adequately execute key development plans, we typically find that the infrastructure and housing schemes in the larger cities in South Asian cannot keep pace with the rising population. Hence, there has been an explosion in shanty towns within the mega cities, as well as high levels of environmental degradation. What we see then is that if the region is continue to take advantage of the innovation and economic opportunities that cities typically offer then it must focus on the key aspects of urban planning or the quality of life of its city inhabitants will continue to deteriorate.

This issue of the SSPB is the first of two special issues that highlight the opportunities and especially the challenges of urbanization. The first article in this issue written by Umer Akhlaq Malik begins by giving an overview of the nature of urbanization in South Asia and then goes on to discuss some key challenges. The second article by Nazam Maqbool highlights the contribution of various cities to their respective country's economic growth as well as the factors that allow cities to make such a contribution. The author then goes on to discuss the dynamics that allow cities to be pro-poor and concludes with recommendations on how to make cities more inclusive. The final article is a special piece on Karachi by Amina Khan. The author begins by recounting Karachi's specific characteristics that have allowed it to be a driving factor in Pakistan's economic growth, and then goes on to specify the challenges faced by the mega-city. She ends with laying out some recommendations on planning and enhancing the city's livability.

The urbanization process and its implication on Human Development in South Asia

By Umer Akhlaq Malik



Abstract: *The process of urbanization in South Asia has been one of contrasting realities — while urbanization provided an opportunity for higher economic growth, better employment prospects resulting in higher incomes, and improved standards of living, the reality has been that urban centers have typically seen pockets of extreme poverty and deprivation for many of their urban residents. Much of this is related to how the process of urbanization has evolved in South Asia. This policy paper analyzes the process of urbanization in the region, highlighting several challenges that have inhibited the positive results of urbanization for development. The paper will also present policy options that the region needs to consider in order to translate the process of urbanization into positive human development outcomes.*

Urbanization and the human development nexus

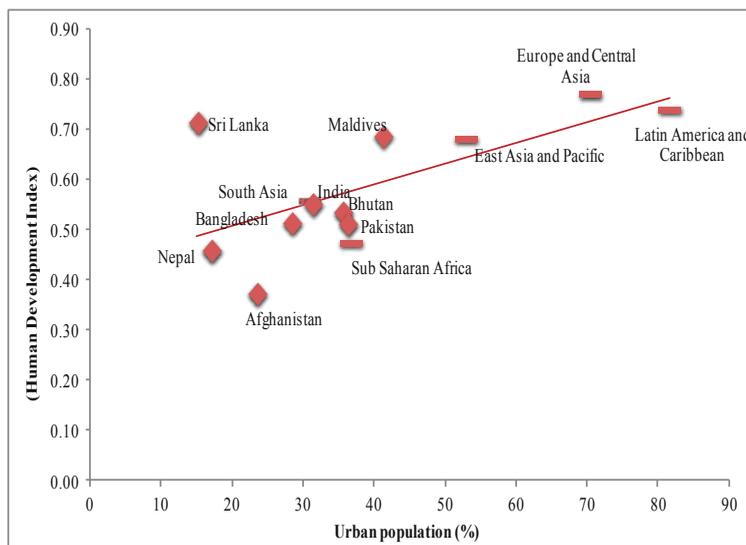
The relationship between urbanization and human development is not direct with the former offering both opportunities and challenges for the latter. Urbanization has the potential to augment economic activity, provide employment opportunities and enhance access to basic services. However, it can also turn cities into places of deprivation, inequality and exclusion. This paper examines urbanization's impact on human development outcomes. We

will show that it is largely dependent on how the urbanization process is managed.

Increasing levels of urbanization are generally associated with a higher level of human development. For example, as indicated in figure 1, the regions Europe and Central Asia, and Latin America and Caribbean have higher levels of urbanization and high human development Index (HDI value) compared to South Asia and Sub-Saharan Africa, which have low level of urbanization and medium ranging HDI values. Yet a closer look reveals that the relationship is not straightforward: Sub-Saharan Africa has a higher level of urbanization (36.7 per cent) compared to South Asia's 30.9 per cent, but its human development performance of 0.48 is lower than South Asia's HDI of 0.56. Within South Asia some outliers are prominent. As indicated in figure 1, Sri Lanka, despite having a low degree of urbanization has outperformed other countries in achieving better human development outcomes. Similarly, Pakistan and Bangladesh have the same human development index (HDI) value with different levels of urbanization.

Given the considerable literature highlighting the positive impact of urbanization on economic opportunity, availability of modern services and the overall quality of life, why do we see a non-linear relationship between urbanization levels and HDI? The answer lies in the nature of the urbanization process and the characteristics of the urban centers.

Figure 1 Urbanization and human development



Sources: UNPD 2014 and UNDP 2013.

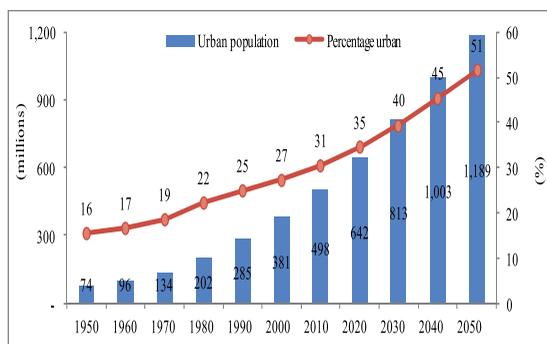
Characteristics of urbanization in South

Asia Rapid pace of urbanization: South Asia is urbanizing at a very rapid rate. Over the past six decades, South Asia’s urban population has risen from 73 million in 1950 to 511 million in 2011 (figure 2). In terms of percentages, the percentage of total population residing in urban areas has increased from 15.6 per cent in 1950 to 30.9 per cent in 2011. During the next four decades, the urban population of South Asia is expected to more

than double, from 511 million to 1.19 billion. By that time the region is expected to have more than half the population residing in urban areas.

The growth rate of the urban population for South Asia is higher compared to that of the world. According to the United Nations Population Division, the annual rate of change of urban population in the world in 2010 was around 2.39 per cent compared to 3.05 per cent for South Asia.¹ According to their projections, the level of

Figure 2 Urban population and level of urbanization in South Asia, 1950-2050



Source: UNPD 2014.

urbanization would increase in South Asia over the next four decades, and the region alone would contribute one-fourth of the increase in the world’s urban population—690 million of the expected 2.6 billion.

Growth of mega-cities is a dominant feature of urbanization: Around 40 per cent of the urban population in South Asia is residing in large cities with a population of over one million. This is significantly higher for Bangladesh and Pakistan where a majority of urban population is living in large cities. This concentration has gone up systematically over the decades: in 1990, 32 per cent of South Asia’s population was residing in large cities; in 2010 this has gone up to 40 percent.² According to the estimates of the Population Division of the UN, these trends will continue in the future. The urban population of South Asia will be increasingly concentrated in large cities, especially in the mega-cities with at least 10 million inhabitants.

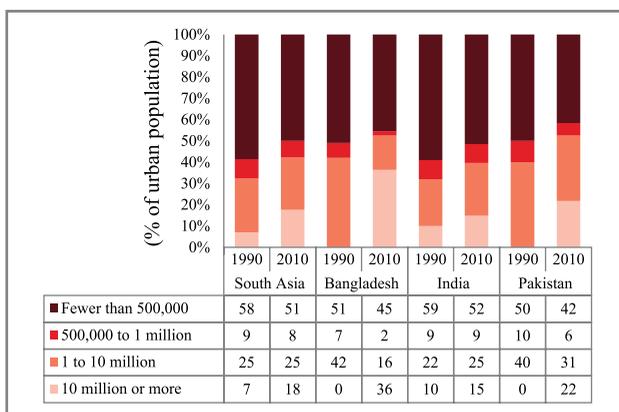
In contrast to the growing concentration of the population in mega-cities, the proportion of the population in small and medium sized cities

has decreased. Over the last two decades, it has decreased from 58 per cent to 50 per cent across South Asia. In Pakistan, the percentage of the population living in small and medium sized cities has gone down by 8 percentage points, in India by 7 percentage points and in Bangladesh by 6 percentage points (figure 3).

Mega-cities in South Asia are thriving in numbers. Five of the twenty-three mega-cities of the world are located in the region and by 2015, two other South Asian cities, Bangalore and Chennai will join the ranks of mega-cities. The mega-cities of South Asia are experiencing very high population growth rates. Dhaka, Karachi, Delhi and Mumbai have growth rates in excess of 2 per cent per year—amongst the highest in the world (table 1). According to the estimates of the UN in 2025, Delhi (32.9 million inhabitants), Mumbai (26.6), Dhaka (22.9) and Karachi (20.2) will be four of the 10 cities worldwide, each with a population of over 20 million.³

High population density: South Asian cities have a very high population density. According to an independent analysis, out of the 20 densest cities in

Figure 3 Proportion of urban population living in different classifications of cities, 1990-2010



Sources: UNPD 2014 and MHHDC 2014 *Statistical Profile of Urbanization in South Asia*.

Table 1 Population of mega-cities in South Asia, 1970-2025

	Population (million)				Annual rate of change (%)
	1970	1990	2011	2025	2011-2025
Delhi	3.5	9.7	22.7	32.9	2.67
Mumbai	5.8	12.4	19.7	26.6	2.12
Dhaka	1.4	6.6	15.4	22.9	2.84
Kolkata	6.9	10.9	14.4	18.7	1.87
Karachi	3.1	7.1	13.9	20.2	2.68

Sources: UNPD 2014.

the world, sixteen are in Asia—six of them in South Asia.⁴ Dhaka, Mumbai, Kolkata, Karachi and Delhi are among the densest cities of the world. High density cities demand better public services, like improved transportation to facilitate commuting, efficient land markets for improved land use and better access to infrastructure like roads, water and sanitation and housing facilities.

Rural to urban migration is a major source of urban growth: Besides a natural increase in the urban population, rural to urban migration is a main factor behind urban growth in South Asia, Hence adding to the population pressures of the already burdened urban economies. In Bangladesh migration contributed around 40 per cent to urban growth.⁵ In India, rural to urban migration accounts for 21 per cent⁶, and in Pakistan its contribution is around 20 per cent⁷. Migration is mostly concentrated in large cities. In some large cities like Dhaka, the share of migration is around 70 per cent.⁸ In Pakistan, 25 per cent of all migrants have settled in 3 of the country's largest cities: Karachi, Lahore and Rawalpindi. Karachi alone has accommodated 13 per cent of total migrants.⁹ In India, Delhi, Mumbai, Gujarat and Kolkata are prominent destinations for migrants from rural areas.

The combination of a rapid pace of urbanization, the

dominance of mega-cities in the urban landscape, the high population density in urban areas, and the constant stream of migrants from rural to urban centers has meant that the management of the urban process has been especially challenging in South Asia. When we factor in the relatively weak urban planning departments in the South Asian economies it is unsurprising that South Asia's city development has been unable to keep pace and its infrastructure has been crumbling under the high demands of its burgeoning population.

Outcomes of the urbanization process

Urbanization in South Asia faces significant challenges. Key amongst these are the problems of large scale poverty and an increase in the number of slums. While a large proportion of the population in each country still remains below the poverty line, recent work suggests that "Poverty is urbanizing in South Asia as the proportion of urban poor to the number of total poor has increased over time."¹⁰ While the inability of formal sector, higher-paying jobs to grow at the same pace as the increase in urban population is a major factor contributing to the rise in poverty, the absence of proper housing and associated basic amenities has also contributed to the poor living conditions of major swathes of the urban poor.

Slums account for around 35 per cent of the urban population in South Asia.¹¹ The size of the slum population is an indicator of extreme inequality in South Asian cities. Unfortunately, cities which are centres of growth in South Asia ironically have the largest slums. In Mumbai, seven million people, around 60 per cent of its population, live in 3,000 slums across the city.¹² Similarly in Delhi, one in every two people is a slum dweller.¹³ Similar is the situation in Karachi, Dhaka and Colombo. These overcrowded slums face acute problems of sanitation and safe drinking water, impacting health of the slum dwellers.

Finally, inadequate infrastructure, shortage of water and power, poor solid waste disposal systems and unsatisfactory drainage and sewerage systems are also prominent features of South Asian cities.

As discussed above, most of the problems discussed here are derived from the characteristics of the urbanization process in the region. All the major cities in South Asia are facing inadequate access to basic social services. Mumbai and Delhi in India, Karachi in Pakistan, Dhaka in Bangladesh, and Kathmandu in Nepal are facing challenges to provide basic human welfare facilities like healthcare, education, roads and transportation, electricity, and water and sanitation facilities for a large segment of the population.

According to the *Mumbai Human Development Report 2009*, the increasing population of the city has limited access to basic human welfare facilities; For example, only 44 per cent of households in Mumbai have access to proper sanitation facilities population.¹⁴ Water shortfall in Mumbai is estimated to be around 100 million litres per day, and there are significant concerns with regard to water quality. Similarly in the Kathmandu Valley in Nepal there are problems with regard to accessing

basic services. Water supply is the most prominent problem as only 20 per cent of the population receives piped water supply. Electricity shortage results in power cuts of around 16 hours per day from winter until spring. Also a large proportion of solid waste is dumped along the river banks of Bagmati and Bishnumati Rivers resulting in environmental degradation.¹⁵ The situation in Karachi, Delhi, and Dhaka is not much different.

Thus, we see that in all these cities improvements in public services have not kept pace with increased urbanization.

Policy options to address urbanization challenges

Urbanization in itself is not the panacea that would guarantee better human development outcomes. Rather, it requires planning to ensure that the process is channelled towards enhancing social and human development. Policy makers in South Asia need to address the fundamental issues relating to physical infrastructure and access to basic services while at the same time managing the pace of urbanization.

Some policy recommendations include:

Focus on the growth of small and medium sized cities: Small and medium sized cities have the potential to act as centres for economic growth. Lying at the confluence of rural and urban economies, they provide markets for both rural products and urban services. If properly developed they can link rural areas to the global economy. In addition, focusing on small and medium sized cities will also help to mitigate the negative aspects of urbanization in the mega-cities. High population densities, inadequate housing, rising inequality in terms of access to basic services can all be tackled

by developing small and medium sized cities and providing adequate infrastructure and services.

Develop urban corridors and enhance road connectivity to ensure spatial distribution of urbanization: Linking mega-cities through transportation routes would help spread urbanization to small and medium sized towns. Urban corridors would help to increase urbanization with a diffused spatial development and without putting pressure on any one city. They carry economic benefits by stimulating business, industrial and real estate development in interlinking towns and cities.

Increase incentives to reduce migration: Focusing on rural development to increasing employment opportunities in rural areas and to enhance the provision of services like education, health, electricity and water and sanitation services are effective means to control rural to urban migration. India to some extent has progressed by launching the National Rural Employment Guarantee Scheme and has achieved positive outcomes. Such projects should be up-scaled and initiated in other countries.

This policy brief is drawn on the findings of Human Development in South Asia 2014: Urbanization: Challenges and Opportunities. The author, UmerAkblaq Malik, is a senior research fellow at MahbulHaq Centre.

References

- ADB (Asian Development Bank). 2007. *Key Indicators for Asia and the Pacific 2007*. Manila: ADB.
- Bhagat, R. B., and S. Mohanty. 2009. *Emerging Patterns of Urbanization and the Contribution of Migration in Urban Growth in India*. *Asian Population Studies* 5(1): 5-20.
- City Mayors. 2007. *The Largest Cities in the World by Land Area, Population and Density*. <http://www.citymayors.com/statistics/largest-cities-density-125.html> (accessed January 2014).
- Govt. of NCT of Delhi (Government of National Capital Territory of Delhi). 2013. *Delhi Human Development Report 2013: Improving Lives, Promoting Inclusion*. New Delhi: Academic Foundation and Institute of Human Development.
- Hasan, A., and M. Raza. 2009. *Migration and Small Towns in Pakistan*. International Institute of Environment and Development (IIED) Working Paper 15. London: IIED. <http://pubs.iied.org/pdfs/10570IIED.pdf> (accessed January 2014).
- Islam, N. 1999. *Urbanization Migration and Development in Bangladesh: Recent Trends and Emerging Issues*. Centre for Policy Dialogue (CPD) and United Nations Population Fund (UNFPA) Paper 1. http://www.cpd.org.bd/pub_attach/unfpa1.pdf (accessed January 2014).
- Municipal Corporation of Greater Mumbai. 2010. *Mumbai Human Development Report 2009*. New Delhi: Oxford University Press.
- Muzzini, E., and G., Aparicio. 2013. *Urban Growth and Spatial Transition in Nepal: An Initial Assessment*. Washington, D.C.: World Bank. http://elibrary.worldbank.org/docserver/download/9780821396599.pdf?expires=1376308184&id=id&accname=ic_cid-76010362&checksum=BA2B508CED35FA405B5F23EBC3740AAA (accessed August 2013).
- Ravallion.M., S.Chen and P. Sangraula.

2007. New Evidence on the Urbanization of Global Poverty. Background Paper for the *WorldDevelopmentReport2008*. Washington, D.C.: World Bank.
http://siteresources.worldbank.org/INTWDR2008/Resources/2795087-1191427986785/RavallionMETAl_UrbanizationOfGlobalPoverty.pdf (accessed January 2014).

UNDP (United Nations Development Programme). 2013. *Human Development Report 2013: The Rise of the South: Human Progress in a Diverse World*. New York: UNDP.

UN-Habitat (United Nations Human Settlements Programme). 2012. *State of the World's Cities 2012/2013: Prosperity of Cities*. Nairobi: UN-Habitat.

UNPD (United Nations Population Division). 2014. World Urbanization Prospects Database: The 2011 Revision. <http://www.un.org/esa/population/> (accessed February 2014).

Notes:

¹ UNPD 2014.

² UNPD 2014.

³ UNPD 2014.

⁴ City Mayors 2007.

⁵ Islam 1999.

⁶ Bhagat and Mohanty 2009

⁷ Hasan and Raza 2009

⁸ Islam 1999

⁹ Hasan and Raza 2009 ¹⁰ Ravallion et al. 2007.

¹¹ UN-Habitat 2012

¹² Municipal Corporation of Greater Mumbai 2009

¹³ Govt. of NCT of Delhi 2013.

¹⁴ Municipal corporation of Greater Mumbai 2010.

¹⁵ Muzzini and Aparicio 2013

Role of Urbanization for Inclusive and Pro-poor growth in South Asia: Implications for Pakistan*

By Nazam Maqbool



Abstract: *The role of urbanization is crucial for economic growth, employment creation and poverty alleviation. South Asian cities account for three-fourths of the region's GDP. The share of workers has increased in the higher productivity urban-based industrial and services sectors. However, 8 out of every 10 people are employed in the informal sector in non-agricultural activities. Cities also provide an opportunity to develop rural areas by providing job opportunity and markets for rural population. The paper suggests ways and policy options to make the cities inclusive and pro-poor.*

Urbanization has emerged as a key contributor to economic growth for South Asia, with three-fourths of economic growth being generated in the cities. This paper discusses the implications of urbanization for economic growth, employment creation and poverty alleviation. In particular, it discusses the following questions:

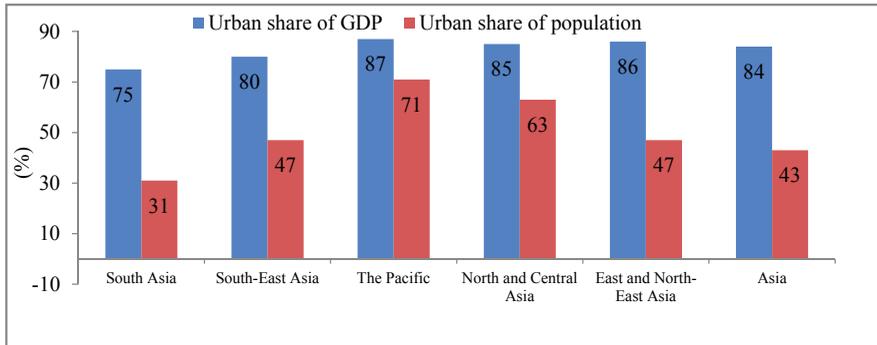
- A. How do cities contribute to economic growth?
- B. What are the main factors that either promote or restrain economic growth in cities?
- C. Is the urban-led growth process inclusive and pro-poor?
- D. What are the policy implications to make South Asian cities more inclusive to ensure benefits

for all?

A. The contribution of cities to economic growth

South Asia is the second fastest growing economic region of the world, with most of the economic growth taking place in urban areas. South Asia's cities not only have a higher share in GDP than population, but their share in economic output is also increasing over time. The reason is the presence of growth sectors, manufacturing and services, in the cities. These sectors benefit from economies of scale in markets for inputs, outputs and labour. For example:

- In 2011, South Asia was the second fastest growing region (6.5 per cent) of the world, only after East Asia (8.2 per cent).¹ The share of the agricultural sector in GDP decreased from 34.5 to 18.0 per cent between 1980 and 2012. The contribution of the services sector in GDP increased from 41.3 to 56.3 per cent, while the share of the industrial sector increased marginally from 24.1 to 25.8 per cent during this time.²
- With about one-third of total population, urban areas contribute over three-fourths of region's total GDP (see figure 1). GDP share of urban economies is over 80 per cent in Bangladesh and Sri Lanka, over 75 per cent in India and Pakistan, and between 60 to 70 per cent in Nepal and Afghanistan.
- Between 2007 and 2025, the share of 229 selected cities of India, Pakistan, Bangladesh, Afghanistan and Sri Lanka in the region's total

Figure 1 Shares of urban areas in GDP and population in Asia, 2008

Sources: UNPD 2014 and MHHDC 2014 *Statistical Profile of Urbanization in South Asia*.

GDP and population is projected to increase from 31 to 40 per cent and 18 to 22 per cent, respectively.³

- Mumbai with 2 per cent of India's population accounts for 6.3 per cent of the country's GDP. The corresponding values are 9.2 and 18.5 per cent for Karachi, 8.7 and 34.5 per cent for Dhaka, 3.0 and 10.6 per cent for Chittagong, and 10.3 and 82.0 per cent for Kabul.⁴
- By 2030 urban India will create 70 per cent of all new jobs in the country and these jobs will be twice as productive as equivalent jobs in the rural sector.⁵

B. Factors that promote economic growth in cities

1) Investment

Cities with a favourable investment environment are more likely to contribute to economic growth. The concentration of investment has been in and around major cities of the region such as Dhaka, Chittagong, Karachi, Lahore, Faisalabad, Bangalore, Mumbai, Colombo, etc. Overall, in South Asia the ratio of gross fixed capital formation and foreign direct investment as a percentage of GDP is one

of the lowest in Pakistan and the highest in India. The failure of Pakistan is attributed to inadequate infrastructure, corruption, and poor law and order. In Pakistan, the top five constraints for urban formal sector firms are: electricity, corruption, theft, crime and disorder, and access to finance.⁶

2) Infrastructure

Improved infrastructure in cities contributes to economic growth. According to Pakistan's Task Force Report on Urban Development, inadequate infrastructure has reduced urban GDP by 10 to 15 per cent with higher impact on small and medium enterprises.⁷ South Asia has invested only 3.5 to 4 per cent of GDP annually in infrastructure compared to 8 to 10 per cent in Vietnam during 2000-05, and 14.4 per cent of GDP in China in 2006.⁸ In Pakistan, the biggest infrastructural gaps are in energy, transport and water and sanitation, with severe implications for urban environment in terms of water and air pollution.

3) Competitiveness

In the globalization era competition between countries, which mainly occurs between cities, has become dramatically intense. Mega-cities of South Asia like Mumbai, Kolkata, Karachi,

Lahore, Colombo and Dhaka are struggling in competitiveness rankings. According to the Global Urban Competitiveness Report 2011, only four South Asian cities are in the top 300 globally competitive cities, while 16 cities are in the top 400 cities.⁹ According to the Economist Intelligence Unit, by 2025 Mumbai and Delhi are expected to improve their competitiveness positions significantly while some cities in Pakistan, Bangladesh, Sri Lanka and in India will be deteriorated further.¹⁰ The main determinants for poor competitiveness of South Asian cities are: inadequate planning, financing and development; weak business environment; poor collaboration among business units; and low labour productivity.

4) Globalization

Exports of goods and services have become a significant source of income and employment in cities of South Asia. The cities which have specialized in certain products have benefitted from globalization. They are hosting a significant part of corporate activities in finance, production and trade. Bangalore and Hyderabad as hubs for information technology (IT) and software services, Dhaka as ready-made garment (RMG) production centre, and Sialkot as hub for sports and surgical instruments are good examples. Several countries in the region are in the process of forming export processing zones (EPZs) in cities to benefit from globalization. Recently, the Government of Pakistan has planned to set up an EPZ in Faisalabad by offering a number of incentives to investors ranging from tax exemptions to reduction in import duties.

5) City clusters

Industrial and services clusters have become important drivers of economic growth,

employment creation and poverty reduction. The main determinants of city clusters are topography, skilled labour, climate, transportation and technological facilities. Such clusters have grown and serve as business hubs in several South Asian countries. Sialkot and Wazirabad in Pakistan as producers of surgical instruments and cutlery; and Ludhiana, Tiruppur, Agra and Palar Valley in India as producers of woolen knitwear, cotton knitwear, footwear and leather tanning are a few examples. In India, 14 clusters of cities are projected to account for 17 per cent of country's population and 40 per cent of country's GDP by 2030.¹¹

6) Skilled labour

The success of IT and software sector in Bangalore and RMG sector in Dhaka is the result of two factors: presence of highly educated and skilled people and innovative entrepreneurs in India, and substantial public and private sector investment in Bangladesh. However, skilled individuals are very few in most cities. This deficiency, along with inadequate employment creation and mismatch between skills and jobs, has constrained economic growth in cities. In Pakistan and Sri Lanka, up to one-third of employed people are found to be either under- or over-qualified for the work they do.¹² More than one-third of the labour force in the region lacks any education at all. In Pakistan, 42 per cent of the labour force is illiterate, while 19 per cent have primary education, 32 per cent have secondary education and 7 per cent have tertiary education.¹³

C. Role of urbanization for inclusive and pro-poor growth

1) Impact on employment creation

- *Role of cities in increasing labour force in*

Table 1 GDP, employment and labour productivity (annual) growth in South Asia, 1992-2011

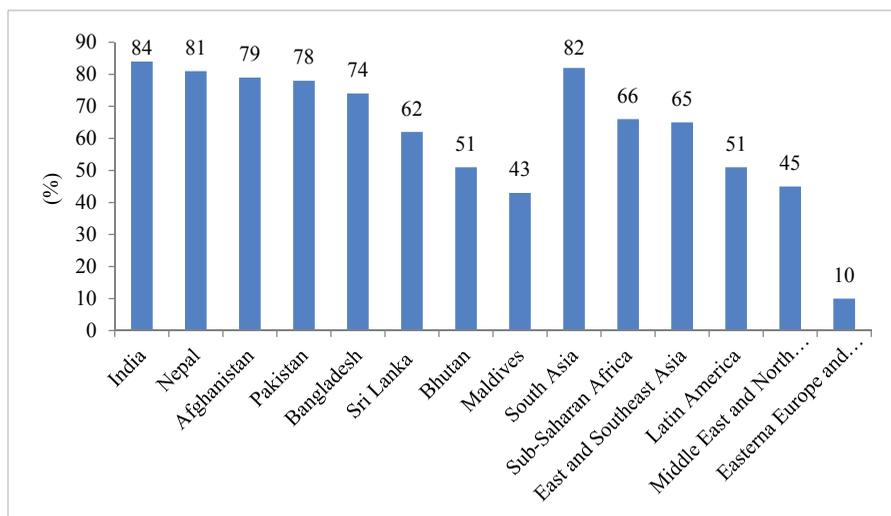
	1992-96	1997-2001	2002-06	2007-11
GDP (%)	6.2	5.2	8.3	6.6
Employment (%)	2.3	2.2	2.3	1.1
Labour productivity (%)	3.1	1.9	3.6	3.7
Employment to population ratio (average)	58.7	57.7	58.0	55.8

Sources: World Bank 2013a, UN-ESCAP 2013 and MHHDC staff computations.

South Asia: In South Asia, the labour force will increase by 12 to 14 million per annum during the next two decades (between 2010 and 2030), accounting for about 40 per cent of the total new entrants to the global working age population.¹⁴ There is a need to create jobs for these people. This requires not only a higher and sustained economic growth but also to link economic growth with employment creation. The role of cities is crucial for this. Cities can provide an opportunity to increase economic growth and create employment opportunities. As the agricultural sector in the region already contains surplus labour, urban-based industry and services sectors have to create employment opportunities for urban residents as well as for rural migrants. The provision of relevant skills and the linkage of economic growth with employment creation is vital for this.

- *Job creation in South Asia:* Between 2002-06 and 2007-11, GDP grew at an annual rate of 8.3 and 6.6 per cent while employment increased by only 2.3 and 1.1 per cent compared to about 3.6 and 3.7 per cent increase in labour productivity. Overall, GDP growth and labour productivity growth have been higher in 2000s compared to 1990s, while employment growth has been lower. A decrease in employment to population also shows job-less growth (see table 1).

- *Informal sector employment in urban areas:* Employment growth has taken place almost exclusively in the informal sector in urban areas which is characterized by the lack of legal and social protection. In developing countries, about 85 per cent of all new employment opportunities are created in the informal sector. The trend is similar in South Asia where 8 out of every 10 people are employed in the informal sector in non-agricultural activities, ranging between 74 per cent in Bangladesh to 84 per cent in India (see figure 2)
- *Women's employment:* Female labour force participation rate as a percentage of male is one of the lowest in South Asia (40 per cent in 2011).¹⁵ However, in absolute terms women's participation in labour force has increased over the last few decades. The demand for female workers has increased due to urbanization and globalization of markets and production systems that have created employment opportunities for women. The evidence can be seen from the growing garment sector in Bangladesh to call centres in India. However, women are working under exploitative conditions. In South Asia, 83 percent of women's non-agricultural employment is informal varying from 85 per cent in India and 76 per cent in Pakistan to 56 per cent in Sri Lanka.¹⁶

Figure 2 Share of informal employment in non-agricultural/urban employment, 2004-10

Sources: WIEGO (forthcoming) and World Bank 2012a.

2) Role for rural development

Urbanization provides an opportunity for rural development by providing jobs and markets for rural population.

- *Jobs for rural migrants:* Urban areas provide employment opportunities to rural residents who either migrate on a permanent basis or commute on a daily basis. This mobility enhances the welfare of migrants' families. For instance, in Pakistan, in 2001 average income of working men and women improved by 1.8 and 2.4 times after migration to cities. The ratio of female to male earnings also increased from 62 to 85 percent.¹⁷ Such earnings have links with rural livelihoods.
- *Providing markets:* Urban areas act as markets for products produced in rural farm and non-farm sectors. The resulting rural prosperity promotes urban markets in machinery, technology, banking, fertilizers, pesticides, etc. In different urban centres of Pakistan,

urban areas have benefited rural residents not only by providing employment opportunities, but also by providing markets for the sale of their food products. For instance, Lahore and its surrounding districts; twin cities of Islamabad and Rawalpindi and their nearby cities of Jhelum, Chakwal and Attock; and Sialkot, Gujrat and Gujranwala are examples of this. The presence of highly developed urban centres also provides great opportunity for the development of non-farm sector in rural areas which absorbs surplus labour from the farm sector and decreases rural to urban migration. In South Asia, the contribution of rural non-farm activities to rural household income ranges from about a third in Nepal and Pakistan to about two-fifths in India to more than half in Sri Lanka and Bangladesh.

However, a note of caution is necessary here. Demand for land in the surrounding areas of cities has increased in the region to build residential areas, industrial clusters, transport corridors and for waste disposal. Such trends are not

only reducing farm land but also affecting crop production. In Lahore, between 1972 and 2010 about 3,016 hectares of vast agricultural areas on the fringes of the city were converted for urban use annually.¹⁸ If the present land use policy and norms are not modified, the remaining total cultivated area of 52,332 hectares will be exhausted by 2030. Such trends have negative consequences for food production. For example, in Lahore the production of crops decreased significantly between 1986-87 and 2007-08 due to reduced arable land.

D. Policy recommendations to make the cities inclusive and pro-poor

Well-managed urbanization has immense potential for not only enhancing national economic growth but also making the growth process more inclusive and equitable. South Asia has to consider urbanization as an opportunity to address issues of poverty, inequality, deprivation and underdevelopment. An approach based on Dr. Mahbub ul Haq's philosophy of human development will facilitate economic growth, reduce income inequality as well as balance rural-urban development.

Following are some policy recommendations:

1. There is a need to link economic growth with job creation by boosting investment in labour-intensive sectors, encouraging small and medium enterprises and increasing social sector spending on health and education, as is exemplified from the success stories of East Asia and Bangladesh.
2. Urban development policy must recognize the role of the urban informal sector towards incorporating it in the formal growth process in a substantial way. This requires the

formation of well-designed and well-targeted programmes that can help informal sector workers to improve their income and working conditions. In this context, the access of the poor to land, credit and basic social services is crucial.

3. Improve the quality of education starting from basic education to higher education and technical and vocational education and in-service training. Most importantly, link education with employment creation opportunities to address issues of mismatch of skills to jobs.
4. Improve the competitiveness of urban-based industrial and services sectors by enhancing their technological competitiveness and innovation skills and guide them about global export and import opportunities. Address issues of energy, law and order, infrastructure, finance, and corruption to attract domestic and foreign investment.
5. Ensure balanced rural and urban development based on balanced budgetary allocations for the provision of basic public services, and strong linkages between urban-based industrial and services sectors and rural farm and non-farm activities, as can be learned from the success of Chengdu city in China.
6. Most importantly, the region needs to increase public investment in infrastructure for energy, water and sanitation, solid waste, transport, housing, and information and communications technology (ICT) services to ensure equity and environmental sustainability.

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References

Ahmed, S., and E. Ghani. 2008. Making Regional Cooperation Work for South Asia's Poor. Policy Research Working Paper No. 4736. Washington, D.C.: World Bank.

Arif, G. M., and S. Hamid. 2009. Urbanization, City Growth and Quality of Life in Pakistan. *European Journal of Social Sciences* 10(2).

Choe, K., and B. Roberts. 2011. *Competitive Cities in the 21st Century: Cluster-base Local Economic Development*. Mandaluyong City: Asian Development Bank.

EIU (Economist Intelligence Unit). 2013. *Hotspots 2025: Benchmarking the Future Competitiveness of Cities*. London: EIU.

GOP (Government of Pakistan). 2011. *Task Force Report on Urban Development*. Islamabad: Ministry for Planning, Development and Reform.

MGI (McKinsey Global Institute). 2010. *India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth*. New Delhi: MGI.

_____. 2011. *Urban World: Mapping the Economic Power of Cities*. Washington, D.C.: MGI.

MHHDC (Mahbub ul Haq Human Development Centre). 2014. *Human Development in South Asia 2014: Urbanization: Challenges and Opportunities*. Lahore: MHHDC.

Ni, P., and P. K. Kresl. 2012. *The Global Urban*

Competitiveness Report 2011. Cheltenham, United Kingdom: Edward Elgar Publishing Limited.

UN-ESCAP (United Nations-Economic and Social Commission for Asia and the Pacific). 2013. *Economic and Social Survey of Asia and the Pacific 2013: Forward Looking Policies for Inclusive and Sustainable Development*. Bangkok: UN-ESCAP.

UN-Habitat (United Nations Human Settlements Programme). 2009. *State of the World's Cities 2008/2009: Harmonious Cities*. Nairobi: UN-Habitat.

_____. 2010. *The State of Asian Cities 2010/11*. Fukuoka: UN-Habitat.

_____. 2011. *The Economic Role of Cities*. Nairobi: UN-Habitat.

_____. 2012. *State of the World's Cities 2012/2013: Prosperity of Cities*. Nairobi: UN-Habitat.

WIEGO (Women in Informal Employment: Globalizing and Organizing). (Forthcoming). *Statistics on the Informal Economy: Definitions, Regional Estimates and Challenges*. WIEGO Working Paper. <http://wiego.org/informal-economy/statistical-picture> (accessed January 2014).

World Bank. 2012a. *More and Better Jobs in South Asia*. Washington, D.C.: World Bank.

_____. 2012b. *World Development Report 2013: Jobs*. Washington, D.C.: World Bank.

_____. 2013a. Enterprise Surveys. <http://www.enterprisesurveys.org/> (accessed December 2013).

_____. 2013b. *Planning, Connecting and*

Financing Cities: Now—Priorities for City Leaders.
Washington, D.C.: World Bank.

_____. 2013c. World Development Indicators Database. <http://databank.worldbank.org> (accessed January 2013).

Zaman, K. U., and A. A. Baloch. 2011. Urbanization of Arable Land in Lahore City in Pakistan: A Case-Study. *Canadian Social Science* 7(4): 58-66.

Notes

¹ UN-ESCAP 2013 and World Bank 2013c.

² World Bank 2013c.

³ MGI 2011.

⁴ UN-Habitat 2011.

⁵ MGI 2010.

⁶ World Bank 2013a.

⁷ GOP 2011.

⁸ Ahmed and Ghani 2008 and UN-Habitat 2012.

⁹ Ni and Kresl 2012.

¹⁰ EIU 2013.

¹¹ UN-Habitat 2011.

¹² World Bank 2012b.

¹³ World Bank 2012a.

¹⁴ Ibid.

¹⁵ World Bank 2013b.

¹⁶ UN-Habitat 2009 and WIEGO (forthcoming).

¹⁷ Arif and Hamid 2009.

¹⁸ Zaman and Baloch 2011.

The Rise of Karachi as a Mega-City: Issues and Challenges

By Amina Khan



Abstract: *The dualities of urban development are sharply felt in the mega-cities of South Asia and especially in Karachi. As the city expands, the opportunities and amenities available to its residents are constrained by several factors affecting its social, geographical, infrastructural and environmental dynamics. Given this scenario, the policy paper aims to provide concrete steps for ensuring a sustainable and inclusive urban future for the people of Karachi.*

Context

Five of South Asia's mega-cities, Delhi, Mumbai, Kolkata, Dhaka and Karachi, have become the focal point for diverse forms of economic, social and political interaction. Their combined population is 15 per cent of the region's total urban population.¹

Each of these cities performs a vital function with regard to trade, investment, employment, growth and innovation while simultaneously bearing the cost of this function. Not only do these cities face acute challenges in terms of densification, overburdened and dilapidated infrastructure, poor urban service provision and a growing slum population, they also pose significant threats to urban life—traffic congestion, environmental pollution, polarization of communities and rampant poverty and violence.

Unplanned and chaotic urban development is central to understanding such dichotomies. Karachi in many respects exposes the underlying link between a city's social, economic and governance arrangements and how they undermine the quality of urban life.

Karachi's importance in Pakistan's urban demography and economy

As the first and largest mega-city of Pakistan—a country that has the highest rate of urbanization (36.2 per cent) in South Asia following the Maldives—and as the capital of Sindh—the most urbanized province of Pakistan—Karachi plays a central role in the country's urban demography, where one in five urban dwellers reside in this city alone.²

Economic activity in Karachi is central to Pakistan's economy, representing 20 per cent of total national output and 30 per cent of total industrial output.³ Major sectors contributing to the city's gross metropolitan product include trade and commerce; manufacturing; transport—ports, airport and shipping; real estate; and construction and services.

Over the years, the sectoral focus has shifted increasingly from manufacturing towards services. The combined effects of frequent power outages, reliance on informal transactions and political instability have been detrimental for businesses in the city. Although Karachi accounts for 30 per cent of small- and medium-scale manufacturing and 40 per cent of large-scale manufacturing, the share of this sector in total metropolitan output has fallen from 37 per cent in 1985 to 18 per cent today.⁴

On the other hand, the services sector has grown steadily at 8 per cent per annum, contributing significantly to the metropolitan and national economy. The banking and financial sector and wholesale and retail trade have expanded enormously. Forty per cent of total financial activity and 50 per cent of all bank deposits are made in Karachi alone.⁵

Twenty-five per cent of national tax revenues, 40 per cent of Sindh's provincial revenues and 62 per cent of income tax collections are generated from Karachi. Ninety-five per cent of Pakistan's foreign trade also relies on the city's two Sea ports and airport.⁶

Karachi's role in Pakistan's economy as gauged through its contribution to national output, revenue collection and financial activity depends on a productive labour force, good infrastructure, stable conditions and effective mega-city administration. The scale of urban expansion however has outpaced the capacity of the city to deal with competing interests, resource deficits and ecological pressures.

Challenges facing the mega-city

There are three major challenges that need to be addressed by urban policy makers if the quality of life and economic opportunity in the city are to improve as the city continues to grow. These include:

1. The social and spatial divide
2. Shortage of key infrastructure
3. Environmental degradation

Social and spatial divide

Population

Successive phases of migration have resulted in a complex distribution of communities and have had far-ranging consequences for the city's growth. Karachi's population has increased considerably over time. Although the United Nations Population Division (UNPD) projects that this number is likely to cross 20 million in 2025, the 2011 pre-census accounts suggest that the population of Karachi has already reached this figure. Official census values have not been updated since 1998, thereby exacerbating the problems of conducting reliable assessments of urban demographic change in the city.

Urban planning

Karachi has made several attempts to plan urbanization. These include the Karachi Physical Plan of 1945; the Greater Karachi Plan, otherwise known as the Merz Rendall Vatten (MRV) Plan 1950; the Greater Karachi Resettlement Plan carried out in the late 1950s; the Karachi Master Plan 1974-85; the Karachi Development Plan 2000; and most recently, the Karachi Strategic Development Plan 2020.

Although planners have clearly identified the need for managing the size of the city, planning is at a standstill. Land, development and municipal control are divided into several federal, provincial and local level agencies. Overlapping responsibilities, conflicts of interest and poor coordination across the various development agencies and authorities have jeopardized the implementation of projects, and placed the city in the hands of an extremely powerful informal network that controls access to water, land, housing and transport.

Employment

Roughly 75 per cent of Karachi's population is employed by the informal sector, mainly in businesses, workshops, manufacturing units and transport.⁷ Informal settlements, which are home to the city's low-income groups, also contain small-scale manufacturing units, mainly for garments, leather products, carpets and textiles. Components for the light engineering and electronics industries and spare parts for machineries, cars and tractors are also produced in such locations, employing a sizeable number of residents.

Forty per cent of the people employed in Pakistan's large-scale manufacturing sector are based in Karachi. The city employs 71.6 per cent of Sindh's industrial labour force and provides 78 per cent of jobs for the province's formal private sector.⁸

Poverty

Urban poverty is stark in Karachi in that 50 per cent of the total population lives below the poverty line. More than eight per cent of the people live above the poverty line, but fall in the vulnerable category.⁹ The high incidences of poverty are recorded in low-income settlements, particularly in katchi abadis (shanty towns). Eighty-nine per cent of the people living in katchi abadis are below the poverty line. Out of these people, 54 per cent are chronically poor while 35 per cent are transitory poor. The other 11 per cent are considered vulnerable.¹⁰

Approximately 75 per cent of all households in Karachi belong to poor and low-income groups, whereas the remaining 25 per cent belong to middle and high-income groups. The average monthly income of households is PKR 15,000, varying significantly across the upper and lower income categories.¹¹

Urban poverty is a growing concern for the city's residents and administrative agencies. Typically, the urban poor consist of people that lack sufficient income, permanent jobs, tenure security and access to education, health, basic services and infrastructure. Deplorable living conditions and unhygienic environments expose the urban poor to ill health and low productivity, limiting their capacity to generate income and avail proper livelihoods. Deprived of their 'rights to the city', these underprivileged residents are stuck in a perpetual poverty trap.

Violence

In its recent history, Karachi has been flagged as a violent city both within Pakistan and abroad. Statistics on crime compiled by governments, police departments and the UN indicate that Karachi has the highest homicide rate among the world's 13 largest cities, at 12.3 per 100,000 residents.¹² Homicide is particularly common in the city's central and southern parts, where political parties and criminal gangs exercise violence with impunity. Karachi also has very high rates of street crime including phone and vehicle thefts.

Economic advancements in the city have been curtailed by conflict along ethnic and sectarian lines, however the roots of such conflict have more to do with dysfunctional urban development than simply, ethnicity and religion. The social and economic division of the city into planned and unplanned areas, the competition over resources and public services and the interplay between political parties and interest groups have tainted the city to a considerable degree. The combination of arms and drugs circulating in Karachi during the Soviet occupation of Afghanistan also bred a culture of violence.

Even though urban crises of the 1980s and 1990s have largely subsided, the city has been subjected to violence time and again. Between 2003 and 2011, more than five thousand people were exposed to brutalities in the form of terrorism, target killings and sectarian disputes.¹³ According to the Human Rights Commission of Pakistan (HRCP), 2,284 people, died in 2012 due to ethnic, sectarian and political violence; 1,725 people died due to target killings; in addition to 133 policemen and 12 paramilitary officers. More than a hundred kidnapping cases were also reported. As counter measures, law enforcement agencies conducted as high as 28,104 target operations the same year. Apart from the loss of human lives, the toll on Karachi's economy has been substantial. Revenue losses from increased crime reached PKR 33,417 billion in 2012.¹⁴

Shortage of key infrastructure

Housing

Urban settlement patterns are haphazard in Karachi with a distinct ethnic undertone. *Katchi abadis* have consolidated themselves mainly because of the government's inability to respond to the housing needs of low-income groups. Over time and through various experiments with housing schemes, it has become evident that both the state and the formal housing development sector are ill suited to provide affordable housing to the poor.

The formal sector has not only failed to meet the demand for low-income housing, but has also been responsible for manipulating and distorting land prices. More than land scarcity, distribution policies and procedures and access to housing finance are biased against low-income residents.

Five to seven per cent of the housing demand in

Karachi stems from high-income groups, fifteen to twenty per cent from middle-income groups and the bulk of it comes from low-income groups and the poor, about 75 per cent. Currently, the city faces a housing shortage of 90,000 units per year. Estimates show that by 2020, the total number of households in Karachi will reach 3.8 million. Most of these units are likely to be filled by low-income residents.¹⁵

The Karachi Strategic Development Plan (KSDP) 2020 seeks to address the housing shortage by promoting high-rise development, densification and in-fill within the metropolitan city in addition to augmenting occupancies in already developed butvacant housing schemes. Upgrading and regularizing *katchi abadis* are also components of this strategy. Upgrading will involve the provision of trunk infrastructure to improve housing conditions while regularization will facilitate land titling and ownership. The extent to which these measures will be adopted remains to be seen.

Water supply

Karachi receives an inflow of 30 cubic metres/ per second from the Indus River and the Hub and Dumlottee reservoirs. However, supplies are insufficient to meet the growing demand for water. Domestic water use in the city is roughly 165 litres per person per day. In addition to the shortfall and poor tariff collection, lack of maintenance and management of the water supply system has resulted in distribution losses of roughly 35 percent.¹⁶

Water supply in Karachi is not only inadequate, but also irregular and inequitable. Only 60 per cent of households are linked to the main supply network. Households with piped water receive better supply than those without. In most places,

water is available for four hours in a day at very low pressure. Due to the lack of alternatives, several households also have to rely on vendors that supply water through commercial tankers at exorbitant prices.

Water quality is another area of concern. Filtration plants are limited in their capacity to filter water. While 60 per cent of the water supply goes through a filtration process, the remaining is disinfected through chlorination. Neither of these methods is sufficient to purify water. The measures to prevent users from receiving contaminated water are also ineffective.

Water theft also poses a significant challenge. Suppliers that obtain illegal connections to public networks extract over 113,000 cubic metres of water a day, exacerbating current shortages and causing revenue losses of USD 15 million per year.¹⁷

Wastewater and sewerage disposal

The city generates 472 millions of gallons of sewage per day. The sewerage system not only lacks citywide coverage, but also lacks treatment capacity. If optimally used, existing treatment plants can treat 32 per cent of the sewage, but only manage to treat 12 per cent. Therefore, 88 per cent of sewage in Karachi is left untreated.¹⁸

Only the central and southern parts of Karachi and roughly 40 per cent of the population are linked to the sewerage system.¹⁹ Most katchi abadis are disconnected and therefore, resort to their own mechanisms for disposal. Untreated wastewater is typically discharged into nallahs (intermittent watercourse), rivers or the Arabian Sea. This is primarily because sewage flows directly into the natural drainage system. Although government authorities have tried to divert sewage to trunk

sewers and treatment plants, they have failed to do so as it involves digging up the entire system and relaying it.

Poor maintenance of the sewerage system, dilapidated infrastructure and inadequate drainage are key impediments to managing wastewater. Open sewers and overflowing manholes are prevalent in many parts of the city, creating poor sanitary conditions and unhealthy physical environments.

Transport

Over the years, several proposals for expanding Karachi's transport network have been incorporated into the city's master plans. A number of projects have been partially implemented or abandoned midway, magnifying the city's transport deficit.

In the early 1970s, both public sector and privately owned transport companies operated an elaborate bus network with proper depots, terminals and workshops. However, an increasing demand for public transport forced the government to allow individuals to run mini-buses along specific routes. Within a short period of time, these mini-buses overtook other forms of public transport. Faced with such competition, both public and private sector transport companies had to shut down.

Although proposals to establish a mass transit system in Karachi were made as early as 1952, it is the one of the few mega-cities in the world that has not set up a metro or monorail network. The nature of public transport is neither conducive for the people using it nor does it cater to the city's needs. The current seat to passenger ratio is 1:34.²⁰

Private transport in the form of motorcycles and privately owned vehicles is predominantly used.

While low-income groups typically rely on mini-buses and rickshaws, middle and high-income groups prefer to use cars. With increasing rates of motorization, the city is witnessing unprecedented levels of traffic congestion and environmental pollution.

Environmental degradation

Karachi is confronted with severe environmental challenges. Expansion of the built-up space and increased densification has intensified pressures on public infrastructure. Large-scale construction projects related to housing, commerce and transport have altered the urban landscape.

The level of air pollution in the city exceeds the limits set by the World Health Organization (WHO) and the National Environmental Quality Standards of Pakistan. Eighty-six per cent of air pollution is attributed to emissions from fuel inefficient motor vehicles, particularly diesel-run buses with high sulphur content and two-stroke engine rickshaws.²¹ Traffic congestion is especially high in the inner city as a result of port-related activities. The increasing number of motorized vehicles on the road also poses a significant threat.

Improper waste disposal is acute in low-income settlements, particularly katchi abadis giving way to poor practices in sanitation, hygiene and public health. Streets, lanes and roadsides are regularly dumped with garbage. Only 60 per cent of solid waste is transferred to landfill sites, most of which have reached full capacity.²²

Pollutants are also present in Karachi's water supply. Pathogens found in sewage-contaminated water pipes have led to water-borne diseases and epidemics. The city's water quality standards have also fallen well below the guidelines set by the

WHO.

Moreover, the dumping of untreated sewage into the rivers and the Arabian Sea has exacerbated environmental conditions. The Lyari and Malir rivers are polluted by domestic and industrial sewage. In the absence of effluent treatment plants, industrial waste containing oil, heavy metals and toxic chemicals are discharged directly into the rivers and have affected marine life considerably.

Policy recommendations

Planned urbanization can improve outcomes for human development by providing people with the necessities and comforts of urban life. On the flip side, unplanned urbanization can pose the greatest challenge to the survival and wellbeing of urban dwellers and exclude them from sharing the benefits of development, as we have seen in the case of Karachi.

The city's future awaits an informed response from urban planners and policy makers that is in consonance with a rational and environment-friendly approach to infrastructural development. While investing in infrastructure is a costly endeavour and necessitates long-term planning, there are several concrete steps that can be taken in the immediate to short-term.

These include:

- Resource mobilization by municipal and provincial authorities to finance basic services;
- Recovery of losses emanating from water theft and timely replacement of faulty pipelines;
- Access to formal housing credit for low and middle income groups;

- Development of human capital and the expansion of individual capabilities to position Karachi as a globally competitive mega-city with substantial benefits from urban agglomeration;
- Capacity-building measures to restore people's trust in local government institutions; and
- Administrative adjustments to ensure citizen safety, all of which will improve the carrying capacity of the city.

Sustainable urban planning needs to be at the forefront of urban policymaking in Karachi, where planning documents are dynamic enough to incorporate real-time adjustments. Principles underlying these policies should entail:

- Due consideration to ecological and environmental conditions in the city and its adjoining areas in addition to the needs and requirements of low-income residents;
- Balance between the core and periphery whereby the expansion of the mega-city does not come at the cost of peripheral development;
- Social and environmental assessments at all stages to ensure effective land-use management;
- Minimal speculation over current and potential land values;
- Protection of land from encroachment and illegal occupation; and
- Adherence to zoning byelaws and building regulations that favour orderly densification of residential and commercial areas.

For a city of the size of Karachi, good urban planning

can result in real urban transformation. Balancing the negative externalities associated with a spatial concentration of people and economic activities is contingent upon effective mega-city management. More often than not, the city's problems are caused by the pattern of land-use, the violation of laws and regulations and overall urban mismanagement. To rectify these, the city's administrative apparatus can conduct annual surveys and assess both the quality of urbanization and its scale. Moreover, it can document the contribution of the informal sector, which plays a central role in the city's growth and function.

Enhancing liveability should be central to the city's urban transition strategy.

- At a social level, the city's response to urbanization should rest primarily in integrating ethnic groups to create a cohesive urban identity.
- At a political level, all the stakeholders concerned should advocate for a participatory approach to urban development.
- At an economic level, the benefits of urban prosperity should be shared equally and equitably across different income-groups.
- At an environmental level, the city's expansion should factor in ecological limits.

This policy brief is drawn on the findings of Human Development in South Asia 2014: Urbanization: Challenges and Opportunities. The author, Amina Khan, is a former Senior Research Fellow at Mabbub ul Haq Centre.

References

ADB (Asian Development Bank). 2005. Technical Assistance Report, Islamic Republic of Pakistan:

Preparing the Mega City Sustainable Development Project. Manila: ADB.

Hashim, A. 2012. Interactive: Karachi's Killing Fields. *Al-Jazeera*, September 6.

<http://www.aljazeera.com/indepth/interactive/2012/08/2012822102920951929.html> (accessed February 2014).

CDGK (City District Government Karachi). 2007. Karachi Strategic Development Plan 2020. Karachi: CDGK.

GOP (Government of Pakistan). 2003. *Poverty Reduction Strategy Paper*. Islamabad: Ministry of Finance.

Hasan, A. & M. Mohib. 2002. Urban Slums Reports: The case of Karachi in UNHSP Global Report 2003 for the Development Planning Unit, University College London, UK. London: UCL.

Hasan, A. et al. 2013. Land ownership, control and contestation in Karachi and implications for low-income housing. *Urbanization and Emerging Population Issues*, Working Paper 10. London: International Institute for Environment and Development.

HRCP (Human Rights Commission of Pakistan). 2013. State of Human Rights in 2012. Lahore: HRCP.

KWSB (Karachi Water and Sewerage Board). 2013. <http://www.kwsb.gos.pk/View.aspx?Page=32>

Khuhro, H. & A. Mooraj. 2010. Karachi: Megacity of Our Times. 2nd Edition. Karachi: Oxford University Press.

Nafees, M. 2012. Karachi: The State of Crimes. Islamabad: Centre for Research & Security Studies.

UNPD (United Nations Population Division). 2011. *World Population Prospects: The 2010 Revision and World Urbanization Prospects: The 2011 Revision*.

WWF (World Wide Fund for Nature). 2011. *Big Cities, Big Water, Big Challenges: Water in an Urbanizing World*. Berlin: WWF.

Notes

¹ UNPD 2011

² UNPD 2011

³ ADB 2005

⁴ CDGK 2007

⁵ CDGK 2007

⁶ ADB 2005 and CDGK 2007

⁷ Khuhro and Mooraj 2010.

⁸ Hasan and Mohib 2002

⁹ The poverty line is based on a calorie intake of 2,350 calories per adult per day and also includes basic non-food requirements. This equals to PKR748.6 per month per adult in fiscal year 2001 as calculated for the Poverty Reduction Strategy Paper. GOP 2003.

¹⁰ GOP 2003.

¹¹ CDGK 2007

¹² Hashim 2012

¹³ Nafees 2012

¹⁴ HRCP 2013

¹⁵ CDGK 2007

¹⁵ WWF 2011

¹⁷ WWF 2011

¹⁸ KWSB 2014

¹⁹ CDGK 2007

²⁰ CDGK 2007

²¹ CDGK 2007

²² Khuhro and Mooraj 2010

1. Summary of Key Urbanization Data

	India	Pakistan	Bangladesh	Afghanistan	Nepal	Sri Lanka	Bhutan	Maldives	South Asia (weighted average)	Developing countries
Population trends^a										
Total population, millions										
2010	1,225	173.6	148.7	31.4	30.0	20.9	0.73	0.32	1,630T	5,660T
2050	1,692	274.9	194.4	76.2	46.5	23.2	0.96	0.41	2,309T	7,994T
Urban population, millions										
2010	379	62.3	41.5	7.3	5.0	3.1	0.25	0.13	498T	2,601T
2050	875	154.0	101.4	33.1	17.1	7.0	0.55	0.27	1,189T	5,125T
Rural population, millions										
2010	846	111.3	107.2	24.1	25.0	17.7	0.47	0.19	1,132T	3,059T
2050	817	120.9	93.0	43.1	29.4	16.2	0.41	0.14	1,120T	2,869T
Urbanization and slum population										
Percentage of population living in urban areas ^a										
2010	30.9	35.9	27.9	23.2	16.7	15.0	34.8	40.0	30.6	46.0
2050	51.7	56.0	52.2	43.4	36.7	30.3	57.3	65.6	51.5	64.1
Percentage of urban population living in slum areas										
2009	29.4	46.6	61.6	...	58.1	...	...	...	34.9	32.6 ^b
Population in the largest city as a percentage of urban population										
2012	5.9	21.0	34.5	57.1	23.9	22.1	...	97.1	12	...
Housing										
Improved drinking water coverage, urban (%)										
2011	96	96	85	85	91	99	100	100	95	95
Improved sanitation coverage, urban (%)										
2011	60	72	55	46	50	83	74	97	61	74
Proportion of urban population with durable housing										
2006	81	87	46	...	72	...	...	...	78	...
Proportion of urban population with sufficient living area										
2006	63	46	68	...	74.5	...	...	...	62	...
Socioeconomic disparities and crimes										
Literacy rate, urban										
1999	62.2	50.6 ^c	62.2	...	...	...	...	...	60.9	...
Percentage of malnourished children under-5, urban										
2005-07 ^d	34.3	40.4 ^c	30.6	...	29.0	...	...	...	34.4	...
Homicide rates, per 100,000 population										
2008-11 ^d	3.5	7.8	2.7	2.4	2.8	...	1.0	1.6	3.8	...
Urban environment										
Outdoor/urban air pollution attributable, deaths, per 100,000										
2008	14	25	6	12	2	4	0	8	14	...
DALYs, per 100,000										
2004	118	207	74	58	37	44	0	59	120	...
Urban solid waste generation rate per capita (kg per person)										
1995	0.5	...	0.5	...	0.5	0.9	...	...	0.5	...
2025	0.7	...	0.6	...	0.6	1.0	...	...	0.7	...
Percentage of urban population in LECZ										
	49.9	53.6	24.7	...	...	43.1	...	2.2	37.9	54.20
Annual average economic losses from natural disasters (US\$, millions)										
2003-13	2,166	2,163	489	15	6	183	0	...	5,022T	...

Continued

	India	Pakistan	Bangladesh	Afghanistan	Nepal	Sri Lanka	Bhutan	Maldives	South Asia (weighted average)	Developing countries
Urban economy										
Sectoral share of GDP, 2010										
Agriculture	17	20 ^e	18 ^f	...	36 ^g	12	16	4 ^h	18	...
Industry	26	26 ^e	29 ^f	...	15 ^g	30	44	19 ^h	26	...
Services	57	54 ^e	54 ^f	...	49 ^g	58	40	77 ^h	56	...
Share of informal employment in non-agricultural/urban employment										
2004-10 ^d	84	78	74	79	81	62	51	43	82	...
Share of unorganized sector in GDP (%)										
2007	26	40	37	...	38	47	31	32	29	...
Population below income poverty line (%)										
Urban population below income poverty line (%)										
2005	25.7	14.9	28.4	...	...	7.9 ⁱ	...	...	24.6	...
2010	13.7 ^j	13.1 ^h	21.3	29.0 ^e	15.5	5.3	1.8 ^j	...	14.5	...
Rural population below income poverty line (%)										
2005	41.8	28.1	43.8	...	...	24.7 ⁱ	...	...	40.3	...
2010	25.7 ^j	27.0 ^h	35.2	37.5 ^e	27.4	9.4	16.7 ^j	...	26.7	...
Urban inequality (Gini coefficient)										
2000-04 ^d	0.34	0.34	0.37	...	0.43 ^j	0.42	...	...	0.35	...

Notes: a: The values shown are mid-year estimates for 2010 and projections for 2050. b: Data refer to 2010. c: Data refer to 1990. d: Data refer to recent year available. e: Data refer to 2008. f: Data refer to 2005. g: Data refer to 2001. h: Data refer to 2006. i: Data refer to 2003. j: Data refer to 2012. k: Data refer to 1998.

Sources: Row 1: UNPD 2014; Row 2: UN 2013, UN-Habitat 2012b, UNPD 2014 and MHHDC staff computations; Row 3: World Bank 2013h; Row 4: UNICEF and WHO 2013 and UN-Habitat 2013c; Row 5: UN-Habitat 2013c and UNODC 2013; Row 6: WHO 2013, UN-Habitat 2010c, CIESIN 2007 and CRED 2013; Row 7: World Bank 2012a, 2013h, WEIGO (forthcoming) and Schneider et al. 2010; Row 8: World Bank 2013h; Row 9: UN-Habitat 2009.

Highlights

South Asia is least urbanized region of the world with around 31 per cent of the population living in urban areas. However, the region is in the midst of a rapid urban transition. The Urban population of South Asia is expected to increase from 498 million in 2010 to 1,120 million by 2050. In contrast, the rural population is expected to decline from 1,132 million in 2010 to 1,120 million by 2050.

Urbanization has a positive influence on economic growth, with urban based economic sectors contributing large shares towards Gross Domestic Product (GDP). The share of services sector in GDP across South Asia is around 56 per cent in comparison to industry (26 per cent) and agriculture (18 per cent). However, in terms of economic benefits to individuals, despite a high share is the regions GDP, urban areas in South Asia are not creating sufficient high productivity jobs in the formal sector. The share of informal employments in non-agricultural and urban employment is as high as 82 per cent.

Unfortunately, the rapid growth of urbanization is not resulting in improved human development

outcomes. The proportion of population living in slums is around 35 per cent. While the proportion of population below the income poverty line has decreased between 2005 and 2010 from 24.6 per cent to 14.5 per cent, these figures mask increasing inequality in income and in access to other amenities of life.

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