





## Rising through Cities in Ghana

Ghana Urbanization Review Overview Report











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April 2015







 $\ \odot$  2014 The International Bank for Reconstruction and Development / The World Bank 1818 H Street NW

Washington DC 20433 Telephone: 202-473-1000

Internet: www.worldbank.org

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## **Ghana's urban transformation**

Rapid urbanization

...and structural transformation

Have generated rapid economic growth

...and helped reduce poverty

But have not led to increased manufacturing

...and have led to stresses in service provision

3.5x increase in urban population, 1984–2014

**21** percentage point decrease in agricultural employment share, 1992–2010

**5.7%** annual GDP growth, 1984–2013

**20** percentage point decrease in Accra's poverty incidence, 1991–2012

**5.8%** employment in manufacturing, and falling

**22.5** percentage point decline in access to piped water in Accra, 2000–2010

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### Foreword

#### **Summary**

Rapid urbanization in Ghana over the past three decades has coincided with rapid GDP growth. This has helped to create jobs, increase human capital, decrease poverty, and expand opportunities and improve living conditions for millions of Ghanaians. Ghana's urban transformation has been momentous, but it is not unique: a similar process has characterized other countries at similar levels of development. Ghana's key challenge now is to ensure that urbanization continues to complement growth through improvements in productivity and inclusion, rather than detracting from these goals. Many rising problems are related to efficiency and inclusion: these include slums, lack of basic services, underdeveloped manufacturing, and insufficient transport infrastructure.

The Ghana Urbanization Review (GUR) and its accompanying reports provide an analysis of Ghana's rising urbanization challenges and a framework to successfully overcome these challenges. With Ghana's specific urban challenges and strengths in mind, the GUR focuses on four priority areas: (i) integrated land planning for effective urban development; (ii) strategic infrastructure development and improved regulation of the transport sector to enhance connectivity of urban areas to markets; (iii) consolidating the gains made over the last 20 years of decentralization by deepening fiscal decentralization and exploring innovative ways for financing urban development; and (iv) institutional coordination and harmonization to facilitate land, transport, and finance planning and connectivity. These four areas are key drivers that will enable the attainment of a successful urban system in Ghana.

#### **Policy Recommendations**

Land markets. To meet the challenges of urbanization, Ghana requires stronger land use management and planning in municipal and metropolitan areas. Urban and land use planning are negatively affected by an inflexible land ownership system. Successful planning can be achieved by valuing land to create effective markets and facilitate the transferability and bankability of land assets; and coordinating land development with infrastructure and affordable housing. In particular, Ghana should strengthen and clarify property rights through land market formalization; make land use regulations and administrative procedures more market friendly; and coordinate land market reforms with increased provision of affordable housing.

*Urban connectivity.* Transport improvements are required to connect markets, boost factor mobility, and help modernize Ghana's urban economies. Strong connectivity enhances the competitiveness of an economy and generates a business environment conducive to firm

growth and development. Quality infrastructure efficiently connects firms to their customers and suppliers, and enables the use of modern production technologies. Yet the provision of transport infrastructure in Ghana has generally been undertaken as a result of development rather than in anticipation of it, resulting in piecemeal infrastructure provision that is inadequate to meet effective demand. Policy makers should consider options for guiding and managing transport investment in a more coordinated manner and making cities more mobile and competitive through forward-looking and transformative infrastructure investments. In particular, Ghana's authorities should increase intermodal coordination in intercity connectivity; develop high capacity public transport systems in large metropolitan areas to improve intracity connectivity; and prioritize high-return transport infrastructure.

Financing. Improved land use planning and transport connectivity require new sources of finance, as current investment in the urban sector and existing revenues fall far short of needs. The efficiency of the urban system and of urban service delivery is largely influenced by the provision of adequate financing. Providing universal basic services, increasing the availability of affordable housing, and expanding transport infrastructure are expensive; yet they are expensive investments that pay off. To improve financing capacity, Ghana should improve metropolitan and municipal revenues; rationalize the intergovernmental fiscal framework, including ongoing decentralization reforms; and develop new urban financing mechanisms.

Institutional coordination. Underlying Ghana's urban land market friction, poor transport connectivity, and insufficient financing is weak institutional capacity and coordination. Land use planning is negatively affected by political and institutional constraints related to coordination and Metropolitan, Municipal and District Assemblies (MMDA) capacity, including an unresponsive legislative framework, undue political interference, acute human resource shortages, and inadequate financial resources. Connecting cities and regions requires interjurisdiction coordination, yet the laws, regulations, institutions, decision-making, and financing mechanisms affecting the transport sector in Ghana remain uncoordinated. And rationalizing the intergovernmental fiscal framework requires greater intergovernmental institutional coordination as much as it requires more formal allocation rules. Building institutional strength through human capital development is essential to confronting these challenges. In addition, Ghana should improve interjurisdictional coordination, complete decentralization reforms, and further develop public-private partnerships (PPPs).

## Acknowledgments

This report (as well as the Ghana UR Phase 1 report and Phase 2 reports on Interjurisdictional Coordination and Municipal Financing) benefitted from inputs from a large set of stakeholders and urban experts in Ghana without who the report could not have been completed. The team would like to extend its gratitude to all the key stakeholders involved, including: staff and leadership of the Ministry of Local Government and Rural Development (particularly Sylvanus Adzornu, head of the Urban Development Unit and his team) for the strong and consistent support in providing strategic and technical guidance, overseeing the process of completing the reports, and ensuring timely mobilization of key stakeholders. Furthermore, the team wishes to extend its gratitude to The Ministry of Finance (in particular Mr Joseph Antwi, Head of the Fiscal Decentralization Unit and his team), Ministry of Highways and Transport, Ministry of Water Resources, Works and Housing, the staff and leadership of the RCCs of Greater Accra Region, Ashanti, Northern Region, and Western Region, the metropolitan assemblies of Accra, Kumasi, Sekondi Takoradi, Tamale and of the municipality of Ho, representatives from civil society (including Cities Alliance, Slum Dwellers), the Land Commission, Volta River Authority, UN Habitat, AFD, and many others.

The support and information provided by Ghana Statistical Service was extraordinary and the team expresses its sincere gratitude.

The Technical Review Committee played a key role in providing quality assurance, guidance and suggestions in the entire development of the reports. Thanks to C.N.K Boateng (former Director, NDPC), Acquah Harrison (former Director UN Habitat), Dr Ohene Sarfoh (Consultant), Kwabena Afar (Director, MoF), Franck Tackel (Consultant), Dr Mensa Bonsu (Lecturer, Kwame Nkrumah University of Science and Technology, Kumasi), Dr A. Inkum (Lecturer, Development of Planning, East Legon University), and Mohammad Al Hansaan (Senior Town and Country Planning Officer).

The team further extends its gratitude to key experts involved in the drafting and development of the report, including Professor George Owusu and Professor Paul Yankson, from East Legon University, Gabriel Ayiglo (finance consultant) and Kwasi Oppoku (management consultant).

This report was prepared by a core team co-led by Jonas Parby (TTL) and Hyoung Gun Wang (co-TTL), which included Smile Kwawukume, and benefitted immensely from inputs from several core colleagues, including Somik Lall (Lead Urban Economist, UDRUR), Santiago Herrera (Senior Country Economist), Waqar Haider (Sector Leader AFSDN), John Richardson (Senior Transport Specialist, AFTTR), Kavita Sethi (Senior Transport Economist, AFTTR), Mehnaz Sarfavian (Senior Economist, AFTFW), Martin Onyach Olyaa Sen Urban Specialist, AFTU1), Keith Garrett (AFTFW), Hardwick Tchale (Senior Agriculture Economist, AFTA1), Kafu Tsikata (Seniro Communications Officer), and many others. Charlotte Hayfron and Roderick Babijes provided timely and comprehensive administrative support to the team

throughout the process. The team also benefitted from support and guidance from Alexander Bakalaian (Sector Manger AFTU2), Sameh Wahba (Practice Manager, GSURR) and Yusupha Crookes (Country Director, Ghana).

The report received generous funding from the Multi Donor Trust Fund for Sustainable Urban Development and from the Swiss Economic Secretariat and the team acknowledges the strong support provided by SECO, not least through the Brigitte Cuendet, head of SECO in Accra.

## Acronyms and Abbreviations

CSL Customary Land Secretariat

DACF District Assemblies' Common Fund

DDF District Development Facility

DVLA Driver, Vehicle Licensing Authority

FAR Floor area ratio

GDP gross domestic product

GIS geographic information system
GLSS Ghana Living Standards Survey

GoG Government of Ghana

GPRTU Ghana Private Roads Transport Union

GUR Ghana Urbanization Review ICOR Incremental capital-output ratio

IEC Information, education and communication

IGFF Intergovernmental Fiscal FrameworkJDPA Joint Development Planning AreaJDPB Joint Development Planning Boards

LAP Land Administration Project LPI Logistics Performance Index

LTRSS Land Tenure Regularization Database

LUPMP Land Use Planning and Management Project

MLGRD Ministry of Local Government and Rural Development

MMDA Metropolitan, Municipal, and District Assemblies

MMT Metro Mass Transport

NDPC National Development Planning Commission

NUPF National Urban Policy Framework

PPP public-private partnership
RCC Regional Coordinating Councils
SDF Spatial Development Framework

SSA Sub-Saharan Africa

SSNIT Social Security and Investment Trust

UDG Urban Development Grant
WDI Word Development Indicators

[Ghana's] increasingly youthful and urbanized population presents great opportunities if we harness and handle it properly, or it could pose grave danger if we do not plan properly for it.

President Mahama, remarks at the 4th EU-Africa Summit Working Session on "Work And Prosperity," April 2, 2014

No country in the industrial age has ever achieved significant economic growth without urbanization. Hence, as Ghana is urbanizing rapidly, it is critical to find ways to surmount challenges associated with urbanization and devise strategies with accompanying investments that could leverage the benefits of urban development and management.

Deputy Minister of Local Government and Rural Development Baba Jamal (MP), speaking at the Consultative Workshop for the Ghana Urbanization Review, June 3, 2014

Africa is the continent that has the fastest rates of an urbanizing population and is in need of speedy interventions to promote sustained urban development.... Meanwhile urbanization progressed without any effective framework to strategically guide the development and management of our cities. African urban evolution has been without the impetus of industrialization, which fired cities of Europe, the Americas and Asia into technological advancement and rapid economic growth.

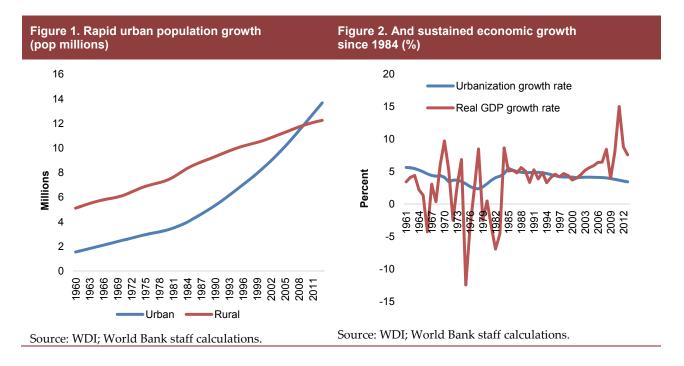
President Mahama, remarks at the 7th Session of the World Urban Forum, Medellin, Colombia, April 7, 2014

### 1. Ghana's Successful Urbanization

Rapid urbanization in Ghana over the past three decades has coincided with rapid GDP growth, helping create jobs, increase human capital, decrease poverty, and expand opportunities and improve living conditions for millions of Ghanaians. Ghana's urban transformation has been momentous, but it is not unique: a similar process has characterized other countries at similar levels of development. Moving forward, Ghana's key challenge is to ensure that urbanization continues to complement growth through improvements in productivity and inclusion, rather than detracting from these goals, and, in President Mahama's words, creating a "grave danger." The Ghana Urbanization Review and its accompanying reports provide an analysis of Ghana's rising urbanization challenges and a framework to successfully overcome these challenges.

#### Complementary Urbanization and Growth

Ghana has experienced rapid urbanization since the mid-1980s. As Ghana's total population more than doubled between 1984 and 2013, urban population growth outpaced rural population growth (Figure 1), growing 4.4 percent annually, and the urbanization rate rose from 31 percent to 51 percent. Over this period, Ghana's urban population more than tripled, rising from under 4 million to nearly 14 million people.



In recent decades, all regions of the country have experienced steady urbanization. In 2000, Ghana remained a country of a few limited metropolitan areas and many small towns. Since then, all city types have dramatically increased in number, and Ghana has experienced faster urban population growth in its smaller cities than its larger ones. The number of medium (20,000–50,000 people) and large medium (50,000–100,000) sized towns has quadrupled and tripled, respectively. In 2000, there were only nine towns with population between 50,000 and 100,000; by 2010 the number had quadruped to 36. While Accra has grown considerably, its urban primacy has diminished: its 24.4 percent share of the total urban population in 1984 declined to 16.6 percent by 2010, representing more balanced urban growth that has moved from Accra alone to Accra plus Kumasi, port cities, and smaller cities.

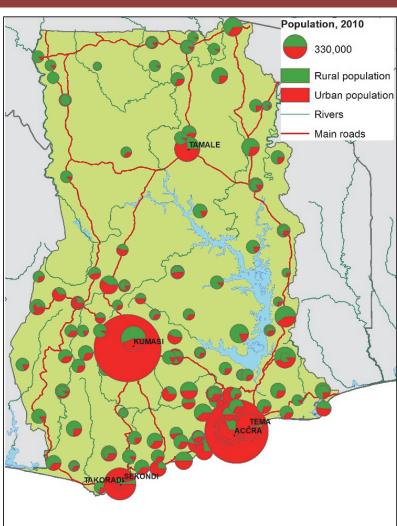


Figure 3. Location of Ghana's cities

Source: 2010 Population and Housing Census.

Table 1. Distribution of populations across the urban hierarchy

_	Total urba	Approal group to rote (9/)			
City class	2000 2010		Annual growth rate (%) 2000–10		
Accra	1,658,937	2,076,546	2.2		
Kumasi	1,170,270	2,035,064	5.5		
Sekondi/Takoradi	369,166	583,545	4.6		
Tamale	197,178	274,022	3.3		
Tema	447,472	633,011	3.5		
Class 6	554,805	752,583	3.0		
Class 7	473,445	727,676	4.3		
Others	3,401,619	5,462,782	4.7		
Total	8,272,892	12,545,229	4.2		

Source: GUR Phase I.

Rapid urbanization has coincided with stable and rapid economic growth. The period from the mid-1980s to the present marks a major departure from the preceding decades of political instability and economic mismanagement, putting Ghana on the path of consistent economic growth. From 1961 to 1983, GDP growth averaged 0.9 percent annually, from 1984 to 2013 it averaged 5.7 percent annually, and from 2005 to 2013 GDP growth averaged 7.8 percent (Figure 2). Since 1984, annual real GDP growth has not fallen below 3.3 percent, an impressive achievement in a volatile global economy.

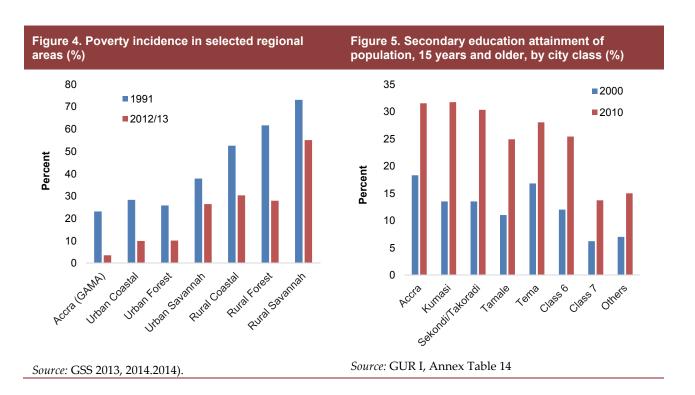
The rapid urbanization and economic growth that have characterized Ghana in recent decades have been complementary processes. The recovery of the national economy from 1984 onwards and perceived improvements in urban economic opportunities have made cities attractive to migrants. Mass urban migration took place without generating excessive unemployment, implying that migrants moved for jobs rather than "benefits shopping." Even with rapid influx of urban migrants, the urban unemployment rate fell 1.5 percentage points over 2000–10. Major cities, many of which witnessed even faster migration, saw greater declines in urban unemployment, including a 7.3 percentage point decline in urban unemployment in Kumasi, Ghana's fastest-growing large city.

Urban migration has led to a reallocation of labor to jobs with higher marginal productivity, increasing growth and efficiency, and unleashing the potential benefits of agglomeration, specialization, and economies of scale. Migration has enabled a structural transformation away from subsistence agriculture that has boosted Ghana's economy. During the urban transformation process, employment in industry and services grew from 38 to 59 percent between 1992 and 2010. This reallocation of labor accounted for more than one tenth of all of Ghana's GDP growth over this period, a share similar to that in China over 1980–2010, and an even greater share in more recent years (see below for methodology). As more people and more firms located in dense urban areas, economies of scale and network effects enhanced productivity even further.

### Urbanization Has Helped Reduce Poverty and Develop Human Capital

Urbanization has been an important factor in Ghana's successful efforts to reduce poverty. Rapid economic growth has resulted in a reduction in poverty in both rural and urban areas (Figure 4), with the total poverty incidence dropping below 25 percent in 2013 and below 11 percent in urban areas. Urban areas have witnessed poverty reduction as a consequence of job creation and economic growth. Rural areas, though not experiencing as great a reduction in poverty, have benefitted from out-migration of surplus labor, remittances from urban areas, and higher food prices.

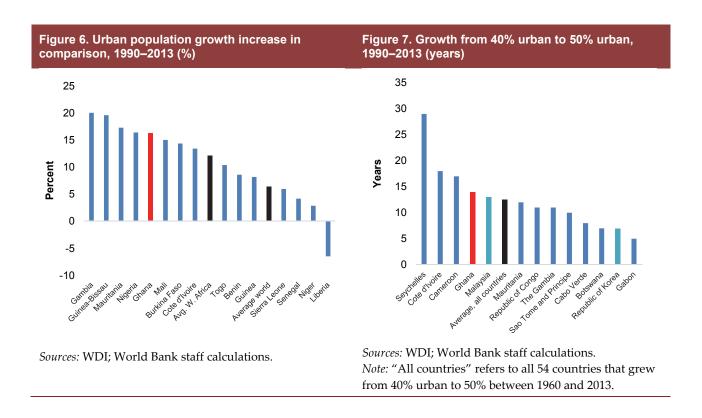
Urbanization has also enabled higher quality education to reach a larger proportion of the population. Larger urban areas have an advantage over small towns and rural areas in providing increased access to secondary and tertiary educational institutions, as higher-quality teaching and supporting services are easier to provide in large cities relative to less densely populated areas. Ghana's urban centers have continued to improve their human capital, roughly doubling and tripling the shares of the population with secondary and tertiary education respectively over 2000–10 (from 9.3 percent to 19.3 percent and from 2.3 percent to 7.6 percent, respectively). The two regions with Ghana's largest cities, Ashanti (Kumasi) and Greater Accra, experienced the highest improvement in secondary education attainment.



Along with poverty reduction and increases in human capital levels, quality of life has improved as a result of greater access to urban services. Access to electricity has improved across all city size groups in both urban and rural areas. The proportion of households using electricity for lighting increased from around 30 percent in small towns (class 7 and others) to almost 70 percent between 2000 and 2010. In Accra, 86–92 percent of households in peri-urban areas had access to electricity by 2010, compared to 60–75 percent in 2000. Similarly, Ghana's urban areas have significantly better access to solid and liquid waste disposal, toilet facilities, and piped water than do rural areas.

# 2. Ghana's Urbanization Successes Are Not Unique

Ghana has urbanized rapidly over the past 20 years. Ghana's urbanization has outpaced the West African average and has been considerably faster than the global average over this period (Figure 6).



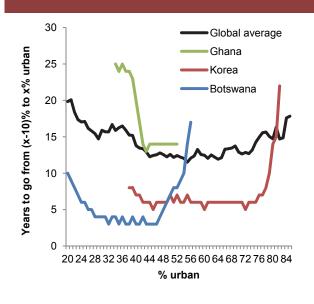
Yet Ghana's urbanization experience has been average for the country's level of development.

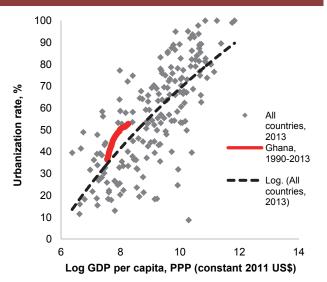
Ghana's urban evolution and spatial development patterns are similar to those of comparable countries in early to intermediate stages of urbanization. Ghana took 14 years (1995–2009) to transition from 40 percent urban to 50 percent urban. Since 1960, 54 countries have made the same transition, averaging 12.6 years to do so, and fast-growing countries such as the Republic of Korea and China only took 7 years to make this transition, twice as fast as Ghana (Figure 7). Ghana's 20 percentage point increase in urbanization between 1982 and 2012 was half the 40+ percentage point increases in the urbanization rate over similar 30-year periods in Botswana and Korea during periods of rapid development.

Figure 8 puts Ghana in global comparison. The chart presents the average number of years that it takes countries to increase their urbanization rates by 10 percentage points to the level of urbanization presented on the horizontal axis. As represented by the black line, countries tend to urbanize fastest between 40 and 70 percent urban, and they are particularly fast in the years preceding 50–55 percent urban. Ghana has progressed more slowly at all levels of urbanization than the global average.

Figure 8. Urban population growth in comparison

Figure 9. Strong relationship between income levels and urbanization levels





Sources: WDI; World Bank staff calculations. *Note:* Global average includes all countries between 1960 and 2013. Trimmed to sample with at least 20 countries per x.

Sources: WDI; World Bank staff calculations.

## **Urbanization Is a Source of Dynamism that Can Lead to Enhanced Productivity**

The strong relationship between development levels and urbanization is not a coincidence. Indeed, no country in the industrial age has achieved significant economic growth without urbanization, and there exists a strong correlation between per capita income and urbanization (Figure 9). While Ghana is slightly more urbanized than this average relationship would suggest given its income level, it has generally adhered closely to the predicted pattern.

**Urbanization complements economic growth and can help unleash greater sources of productivity.** The strong correlation between urbanization and growth is not accidental. If planned and managed well, the movement of population into cities and towns facilitates the socioeconomic development of a country. Urbanization facilitates economic development through cultural innovation, social transformation, and political change of urban centers. There is a close association between urbanization and industrialization due to economies of scale, agglomeration economies, and structural transformation and reallocation of labor resulting from migration.

As the experience of Ghana has shown, urbanization can also improve livelihoods, reduce poverty, and generate greater social inclusion and lower spatial inequality. Urbanization provides opportunities for greater access to social services due to relatively lower costs and greater proximity as a result of concentrated urban populations as compared to dispersed rural communities. Urbanization that removes surplus workers from rural areas and generates both remittances and more geographic balance can help lead to regional income convergence over time, though in the short term disparities often increase (World Bank 2009).

Successful urbanization can also boost rural development. Cities have the potential to extend the benefits of urbanization beyond their administrative boundaries. By connecting cities to the rest of the national territory, urbanization can help advance rural and lagging areas. Urbanization can aid agricultural and rural development by providing a ready market for local food production and enabling farmers to adapt their operations to higher-value or specialty crops, such as fruits and vegetables. For example, following India's economic liberalization in the early 1990s, a growing link was forged between urban development and reduced rural poverty through higher demand for rural products and increased options for rural nonfarm diversification.

#### Yet Urbanization Is Not a Panacea: It Must Be Done Well

However, as President Mahama notes in the quote at the beginning of this Overview, urbanization does not always have positive effects and can instead lead to "grave dangers." The experience of other countries highlights barriers to a successful urbanization path that spurs economic growth and improves social inclusion. Many problems associated with rapid urbanization arise naturally from dynamic economic forces when the supply of services, infrastructure, and jobs cannot keep up with growing demand, leading to inequality, slums, and declining productivity.

# 3. Challenges to Efficient and Inclusive Urbanization in Ghana

## Ghana Currently Faces Many of the Challenges Often Associated with Rapid Urbanization

Often rapid population shifts from rural to urban centers are associated with uncontrolled lateral expansion of urban centers, resulting in slums when the provision of housing and basic services is inadequate. Such physical outward expansion of cities is at times characterized by low densities, separated land uses, underserviced, infrastructure-deficient communities, increased congestion, high levels of pollution, loss of farmland, high-cost duplicative infrastructure, and limited employment accessibility (Wasserman 2008; Angel et al. 2011). When the supply of services cannot meet the growing urban demand for services, and when urban economies do not sufficiently generate job opportunities, slums develop, with declining health outcomes, growing poverty, and increased levels of insecurity.

These and other challenges will emerge if urbanization continues apace without changes to current policies and institutional structures. Box 1 provides a daunting list of urbanization challenges identified by the Ghanaian government. Many of these challenges are interrelated and connected to common themes.

#### Box 1. Urbanization challenges confronting Ghana

#### **Productivity**

- A weak urban economy
- Overconcentration of growth and development in a few cities
- Land use disorder and unplanned urban expansion
- Weak rural-urban linkages
- Inadequate urban investment and financing
- Weak urban transportation planning and traffic management

#### Inclusion

- Increasing urban insecurity
- Urban poverty, slums, and squatter settlements
- Increasing environmental deterioration
- Inadequate urban infrastructure and services

#### **Institutions**

- Weak urban governance and institutional coordination
- Weak information, education, and communication (IEC) strategy
- Limited data and information on urban centers
- Delimitation of urban areas of jurisdiction, and lack of integrated planning across jurisdictional boundaries

Source: GoG/MLGRD (2012): 15-19.

By focusing on common themes and confronting them proactively, Ghana's urbanization challenges are surmountable. In particular, Ghanaian authorities need to *generate new sources of productivity* to create more efficient urban economies and *create livable and inclusive cities* that provide more equal access to housing, services, and opportunity for all citizens.

#### **Inefficiency: Generating New Sources of Productivity**

Countries that have developed new sources of efficiency and productivity have successfully confronted the challenges posed by rapid urbanization and grown into highly urbanized middle- and high-income countries. The experience of lower middle-income countries demonstrates that while capital contributions to growth tend to increase during transitions to upper-middle and high-income levels, increases in productivity become an even more important source of continued growth (Figure 10). New technology and more efficient uses of current capital and labor become more important than increasing the number of workers or capital per worker (see Box 2). Ghana is still a lower middle-income country, and decreasing returns to capital have not yet set in (Udry and Anagol 2006). As seen in Figure 11, Ghana's capital-output ratio has remained steady (and fairly low) at around 1.5 since the early 2000s, while the incremental capital-output ratio (ICOR), a measure of the efficiency of investment, has

fallen. Yet increases in capital alone will not provide sufficient sources of growth for Ghana moving forward; without increases in productivity, returns to capital will decline.

#### Box 2. Note on sources of growth and terminology

Economic growth can come from two basic sources: *extensively* through increases in the factors of production, including capital and labor; and *intensively* through improvements in the efficiency with which these factors of production are used. For example, adding an additional plow can increase agricultural output on the extensive (capital increasing) margin, as can adding another farmer. On the intensive margin, improving the efficiency of the same plow through new technology results in greater growth without an increase in either capital or labor. Most growth models, particularly the neoclassical Solow-Swan growth model, highlight the diminishing returns to capital accumulation over the long term; at a certain point, as population growth slows, giving farmers more plows will no longer boost growth. At this point, growth can only come from increases in the efficiency with which factor inputs are used.

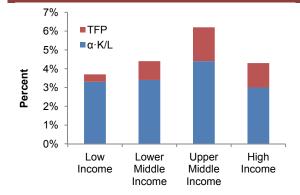
At early stages of development, increases in productivity can come from the reallocation of workers (capital) from industries with lower marginal products of labor (capital) to industries with higher marginal products of labor (capital). Most frequently, surplus labor in agriculture can move to industry and services employment and increase productivity without commensurate changes in total capital or labor. This reallocation effect is often captured in "total factor productivity" as the residual part of growth that cannot be explained by factor accumulation, but it can also be looked at separately.

*Incremental capital output ratio* (ICOR) is a rough measure of the efficiency of investment, calculated as investment divided by increase in GDP.

Marginal product of labor is the change in output resulting from employing an added unit of labor.

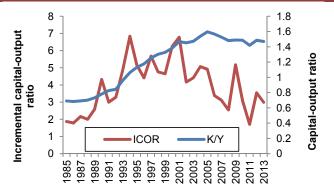
Total factor productivity (TFP) is the portion of output not explained by the amount of inputs (labor (L) and capital (K)) used in production, determined by how efficiently and intensely inputs are used in production.

Figure 10. Average contributions to growth, by income level (%)



*Source*: Bulman, Eden, and Nguyen 2014. *Note*: TFP refers to total factor productivity.  $\alpha$ K/L is the contribution of capital (K) per worker (L) scaled by the capital share of income ( $\alpha$ ).

Figure 11. Decreasing returns to investment have not set in

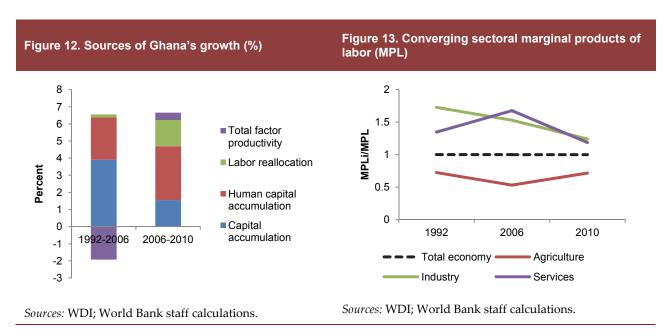


Sources: WDI; World Bank staff calculations. Note: ICOR refers to the incremental capital output ratio, calculated as investment divided by GDP growth; K/Y refers to ratio of the capital stock (K) to GDP (Y), known as the capital-output ratio.

Much of Ghana's productivity growth has been facilitated by urbanization as workers have moved out of agriculture into more productive economic sectors, but productivity gains based on labor reallocation are not a sustainable source of long-term growth. Total factor productivity growth in Ghana was actually negative between 1992 and 2006, as increases in investment, human capital, and employment drove growth (Figure 12). Between 2006 and 2010, with lower relative levels of investment, Ghana maintained more rapid growth rates as a result of labor accumulation and human capital increases (47 percent of total growth) as well as labor reallocation out of agriculture (23 percent of total growth).<sup>1</sup>

Both human capital accumulation and labor reallocation have diminishing returns and are unsustainable sources of growth. Labor reallocation is a form of productivity growth, as workers move from sectors with lower marginal products of labor to sectors with higher marginal products; but as marginal products converge, reallocation disappears as a source of further growth. Already, the gaps between sectoral marginal products that drive labor reallocation effects are converging in Ghana (Figure 13). Nor can Ghana rely on continued increases in the labor force, despite the current youthful population and demographic dividend.

As Ghana seeks out new sources of productivity growth, the greatest challenges it faces are the lack of a vibrant industrial sector and the lack of efficiency associated with uncoordinated spatial expansion, both within and across cities. Managed correctly, urbanization can help overcome these challenges.

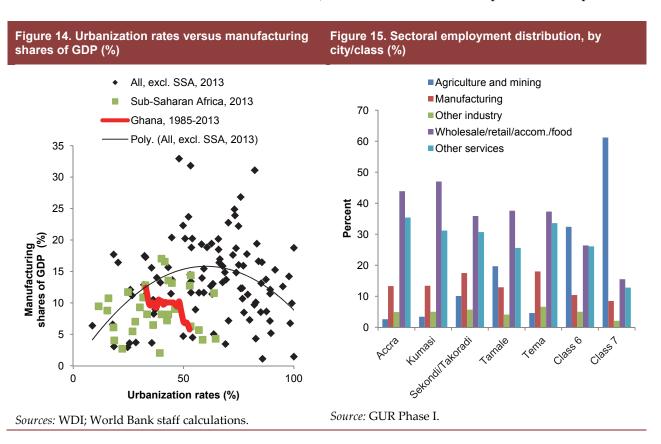


#### Underdeveloped industrial sector

Global experience shows that the manufacturing sector is the engine of growth for large to medium-size cities with good access to markets, yet Ghana's cities have failed to develop robust industrial sectors. They have instead become services-based "consumption cities"

(Jedwab 2013). Globally, as countries urbanize, their manufacturing sectors tend to grow as a share of GDP until urbanization reaches 60 percent, with manufacturing as a share of GDP peaking at over 15 percent on average (Figure 14). In Ghana, however, manufacturing has declined as a share of GDP to just 5.8 percent, well below global as well as Sub-Saharan Africa averages given Ghana's urbanization and income levels.

Ghana lacks a vibrant industrial sector, with most urban jobs concentrated in low value-added informal services. Primary sectors (agriculture, forestry, and fishing) continue to generate most employment. Although the national share of primary sector employment fell from 52.3 percent in 2000 to 41.6 percent in 2010, this declining share reflected a push into nontraded urban services rather than industry. Manufacturing employment witnessed a slight reduction from 11.1 percent in 2000 to 10.8 percent in 2010, while commerce (wholesale and retail) employment increased from 14.5 percent to 18.9 percent. Hospitality (hotels, accommodation, restaurants, and food services) almost doubled from 2.9 percent to 5.5 percent.



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retail) employment increased from 14.5 percent to 18.9 percent. Hospitality (hotels, accommodation, restaurants, and food services) almost doubled from 2.9 percent to 5.5 percent.

The industrial sector is still dominated by informal and small-scale household enterprises, stunting its further development. In previous decades, Ghana had witnessed a collapse of many industrial establishments as a result of structural adjustment policies and competition from globalization (Yankson 2006). The bulk of the manufacturing industry in Ghana is now made up of small-scale establishments, often engaging less than 10 workers and typically comprising proprietors and their nonpaid family employees, as well as a few paid employees. Within Ghana's urban areas, the informal economy is the main source of employment for the majority of residents. About 70 percent of Accra's workers—and up to 85 percent in other large cities—are engaged in the private informal economy in small enterprises often organized around the household, but these informal enterprises are often not productive. Their lagging productivity is partly because of a lack of enabling regulations in the urban areas in which they operate, which add to the cost of doing business and push them into informality.

Ghana as a whole has limited manufacturing capacity. A, few industrial centers are emerging rapidly in large port cities, yet the overall industrial sector is dispersed across urban areas without meaningful concentration and specialization. The local shares of manufacturing employment in Accra and Kumasi are around 13 percent, only a little above the national average (11 percent) and small towns (9 percent) (Figure 15). Yet major port cities, including Sekondi-Takoradi and Tema, have relatively high specialization in manufacturing (around 18 percent of local employment) and have had higher manufacturing growth in recent years. Sekondi-Takoradi experienced the highest manufacturing employment growth rate (4.2 percent) followed by Tema (3.3 percent), Tamale (1.7 percent), and Kumasi (1.7 percent).

**Manufacturing activities are moving away from Accra city center and the Greater Accra Region.** Over half of the manufacturing employment in Accra and its surrounding areas is located in the city proper. However in the decade from 2000 to 2010, there was no manufacturing employment growth within Accra city proper. Suburban areas showed higher manufacturing employment growth: 4.5 percent per year in neighboring districts about 10 kilometers away from the city proper and another 3.3 percent in neighboring districts about 20 kilometers away.

The concentration of manufacturing activities is not confined within administratively defined urban boundaries, and the same should be true for urban policies more broadly. International evidence shows that spatial economic linkages and the benefits of agglomeration economies go beyond administrative boundaries. In many cases, rural villages in the vicinity of large cities, usually within a 50-kilometer radius, have strong manufacturing activity. Generally, industrial concentration in large metropolitan cities is more dominant for medium- to high-tech manufacturing industries. These industries benefit more from information and technology spillovers from international markets and large metropolitan cities serve as a gateway to external markets. Ghana also follows this spatial development pattern (see GUR Phase I). The spatial distribution of manufacturing both internationally and in Ghana suggests that urban and

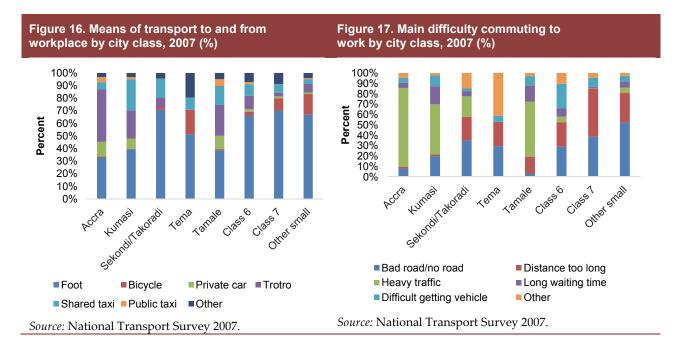
infrastructure policies need to focus more on emerging industrial centers, both in non-core regions of Accra and in growing port cities, to sustain and expand their development potential.

#### Uncoordinated spatial expansion and limited connectivity

Ghana's rapid urbanization has been accompanied by unplanned spatial expansion of metropolitan areas, and limited connectivity both within and across Ghana's cities has presented challenges to economic efficiency. Good economic geography matters for urban development, and Ghana's stunted industrial development highlights the need to pursue spatially sensitive policies. Local unplanned urbanization has reduced efficiency. Transport costs for goods are relatively high (in 2014, Ghana ranked 100 out of 160 survey countries in the Logistics Performance Index, slightly better than the average for Sub-Saharan Africa), and a lack of connectivity prevents Ghana's cities from reaping the gains of agglomeration, specialization, and economies of scale. These emerging problems call for new solutions for effective management and coordination in large urban agglomerations.

Ghana's spatial/connectivity challenges are a phenomenon within and across agglomerations, as large cities have grown beyond their jurisdictional boundaries into adjoining districts and economically interlinked fringe areas. Between 2000 and 2010, people moved out of Accra to surrounding municipalities and districts, where land is available more cheaply for housing and other urban uses. The highest population growth rates occurred in neighboring districts about 10 kilometers away from the city proper, and declined outside of that radius. The population of Greater Accra Metropolitan Area increased by 50 percent in 15 years (1985–2000), but the urban extent (physical built-up areas) of the city increased by 160 percent. Thus, Accra city proper gained less population relative to its surrounding municipalities and districts where land is available for housing and other urban uses at comparatively lower cost.

As a consequence and cause of urbanization and spatial expansion, daily and regular commuting between town and countryside is a now regular feature of mobility in Ghana, particularly in large metropolitan areas. High-capacity mass transport is virtually nonexistent, even in Accra, where only 0.3 percent of commuters use public buses. This implies that urban residents have to either rely on expensive private cars, which are often unaffordable and add to road congestion, or resort to informal solutions. A relatively small proportion of households commute to work using private cars, about 3 percent nationally. Even so, between 2000 and 2010, Ghana registered 24,000 private cars annually, a number that is likely to increase (GoG/NRSC 2013), which has led to traffic in major cities and increased environmental costs. However, outside of Accra, the most common means of commuting to work across all cities is walking; nationally, 60 percent of workers commute on foot, followed by bicycle (12 percent) and shared informal mini-buses called "trotro" (12 percent) (National Transport Survey 2007²). In Accra, though, only 11 percent of commuters walk and 70 rely on trotro.



Urban spatial expansion leads to heightened transportation costs, higher commuting times, and decreased agglomeration effects. Much suburban development occurs without adequate services and infrastructure, which has serious implications for metropolitan growth and management and ultimately for national development (Yankson 2006). As Accra's population has moved to peri-urban areas, travel distance and travel times have increased, with average commute times over one hour as of 2007 (Table 2). These trends have been confirmed in the National Transport Survey 2012, where the number of people walking to work in Accra is still high, and where quality of roads and inaccessibility of work place are still quoted as major constraints. Yet even in Accra, short commuting distances highlight the barriers to commuting toward the city center. In other cities, lack of public transport, unaffordability of private cars, and poor road quality lead workers to walk to work. In Ghana, such commuting behavior instead leads to smaller employment pockets that prevent the full manifestation of dense urban agglomeration and attendant economic growth.

Table 2. Commuting characteristics by distance from Accra, 2007 (kilometers)						
	Distance from Accra (km)					
Commuting characteristic	0	11	20	28	37	Total
Av. travel dist. between home and work (km)	5.1	6.1	4.6	6.0	7.0	5.2
Av. transport costs to commute for work (GH¢)	2.3	3.9	5.1	4.9	5.7	3.4
Av. travel time for work (minutes)	63.7	76.4	71.0	75.6	59.1	68.2
Av. speed to commute for work (km/hour)	4.8	4.8	3.8	4.7	7.1	4.6
Pop. working from home (%)	32.6	30.3	29.7	15.8	23.1	30.8

Source: National Transport Survey 2007.

*Note*: Av. = average; GH¢ = Ghanaian cedis; km = kilometers; Pop. = population.

Ghana's spatial coordination is severely limited by insufficient and deteriorating transport infrastructure across cities and regions. Ghana's transport infrastructure is heavily dominated by roads and has deteriorated rapidly without proper maintenance. Due to neglect and lack of consistency of priorities by successive governments after independence, the transport infrastructure developed during the colonial period has not been significantly expanded and in some cases has deteriorated or collapsed, as is the case in the railway sector.

Ghana's interurban transportation system is heavily dominated by road transport, yet the existing road network remains insufficient although in recent years it has been drastically improved. Investments are required to improve accessibility between rural areas and towns, but as of now, almost two thirds of the rural population lives within two kilometers of an all-season passable road. However, in some parts of northern Ghana, residents are more than 10 kilometers from the nearest road, and it takes farmers an average of over two hours to reach the nearest city with a population of over 100,000. The recently established (2002) Metro Mass Transport (MMT) system, which operates both intercity and intra-urban routes, is struggling to survive, and as of 2007 only had 400 buses (51 percent) countrywide in operable condition out of a total of 779 buses. The inability of the MMT to operate at full capacity compounds the challenges of intra- and intercity movements in Ghana.

Ghana's rail network has deteriorated significantly and is largely limited to southern Ghana, what is sometimes described as the "railway triangle," linking Accra, Kumasi, and Sekondi-Takoradi. With a rail track length of 1,300 kilometers (GoG/NDPC 2010), the present operational coverage of the railway is very limited. The eastern and central lines are not functional, and the western line is only partially operational—rendering the country's railway network ineffective. As such, volumes of freight and passenger traffic have declined drastically over the years and rail freight for all commodities has declined from 1998 to 2011. From a peak of just over 2.5 million passengers in 2004, the volume of rail passenger traffic has declined to about 1.2 million in 2011.

#### **Inequality: Creating Livable and Inclusive Cities**

Uncoordinated expansion of cities and the underdevelopment of job-creating manufacturing have contributed to unequal development and noninclusive urbanization. Despite efforts to improve urban infrastructure, rapid migration and urban population growth have caused demand for urban services and infrastructure to outstrip supply, leading to unplanned urban expansion and the creation of slums. As cities have grown in both population and area, they have been less successful at providing basic services and affordable housing to local residents.

International experience suggests that convergence of basic living standards is a precondition for broader income convergence across regions and urban-rural areas. As a country's average income starts increasing, social disparities increase as well. Then, as countries start to develop, they initially focus on basic services, such as water, electricity, sanitation, health, and education. As they move toward higher development levels, access to basic services

converges. Disparities between urban and rural areas persist and only start declining when countries reach upper middle-income levels (World Bank 2009). At early stages of urbanization, countries should focus on achieving universal access to services—that is, a flat social landscape—rather than on regional convergence of incomes across the national territory.

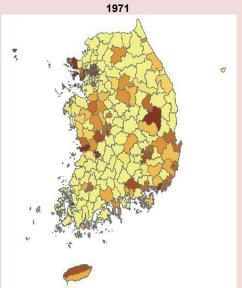
Livable and inclusive cities are necessary not only from an equity standpoint, but also in order to maximize urban efficiency. Equality of service provision across cities and regions minimizes "benefits shopping," where citizens migrate to gain access to better services rather than job possibilities. This prevents matching employees with productive jobs, while also leading to excessive stress on urban service providers.

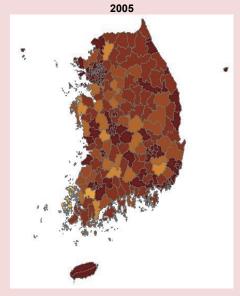
#### Box 3. Moving toward universal access

The United States and the Republic of Korea are examples of countries that have moved from uneven social landscapes toward more even access to basic services. The movement toward flatter social landscapes has been coupled with the movement toward more uneven income distribution. In the 1960s, economic activity was more or less evenly distributed within these countries. Today, economic activity is concentrated in just a few locations, but access to basic services is evenly distributed throughout the countries' geographical boundaries.

#### Reducing the disparity of access to basic services: Korea's experience

Figure B3.1. Fraction of population with access to piped water (percent)



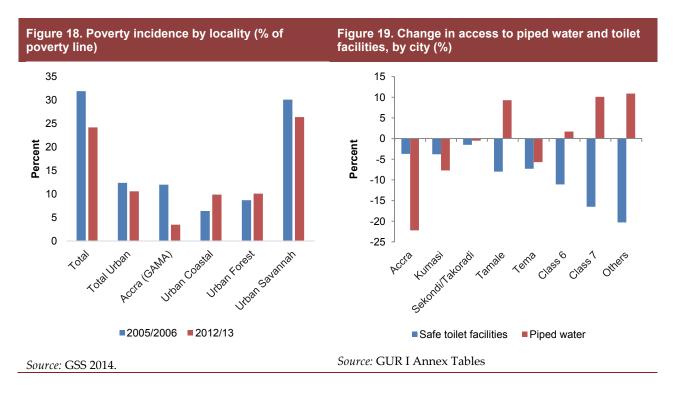


Source: World Bank 2011a.

#### Limited and unequal access to basic urban services

Ghana's poverty reduction achievements have faltered in several urban areas in recent years. Although both total poverty and urban poverty have fallen significantly in the past two decades, poverty rates have increased in the past eight years in urban areas in coastal and forest regions (Figure 18). These cities are struggling to generate formal employment opportunities for rapidly growing urban migrant populations.

Within Ghana's major cities, recent years have witnessed a worrying trend toward diminished relative access to basic services (as a share of urban population). As urban areas have greater service provision than rural areas, Ghana's rapid urbanization has resulted in a greater overall share of the population with access to basic services. Within urban areas, however, resident demand and population growth has outpaced service supply, leading to a lower share of the urban population with access to piped water, sanitation, and toilet facilities.



The proportion of residents in large metropolitan areas with access to piped water experienced a downward trend within the decade of 2000 to 2010.<sup>3</sup> Accra was the worst off with a decline of -22.2 percentage points in the share of the population with access to piped water, followed by Kumasi (-7.7 percentage points) and Tema (-5.7 percentage points). In Accra, the proportion of households with access to piped water dropped from 91 percent in 2000 to 69 percent in 2010, reflecting insufficient investment in emerging population centers. This deficit was covered by the purchase of bottled water and plastic water "sachets" (28.6 percent in 2010), but the costs of water from these small-scale sources are typically 5–7 times higher than piped water. The case of Kumasi is similar to that of Accra in terms of access to pipe-borne water.

Almost 83 percent of residents within Kumasi city had access to piped water in 2000, but this level of access was reduced to 75.1 percent by 2010.

The decline in overall access to piped water in metropolitan areas is due to a combination of factors. These include system losses, lack of effective and sufficient maintenance, and insufficient investments in the water sector to meet demand in the context of urban expansion and increases of the service lines. For example, the deteriorating water supply in Accra, Kumasi, and Tema metropolitan areas may be due to the inability of Ghana Water Company Ltd. to meet demand for treated water, and the general lack of success in sustaining partnership arrangements with the private sector.

Lack of an effective and stable provision of water negatively affects city competitiveness, increases the cost of doing business, and disrupts growth opportunities for core sectors in the economy (including agribusiness). As a result of rapid urban spatial expansion in large metropolitan areas, networked services have difficulties meeting demand and aligning delivery of services with other networked services (such as sanitation) Such rapid urban expansion increases costs for the consumer and puts extra requirements and pressure on Ghana's water utilities to deliver.

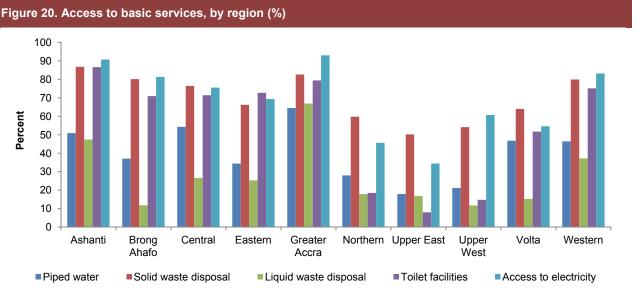
An increasing number of urban residents across all city classes do not have access to any toilet facilities, including private facilities, public toilets, pit latrines. Between 2000 and 2010, there was an increase in the proportion of households without any toilet facility in all city size groups. The worst decline was witnessed in smaller urban centers, followed by smaller municipalities (class 7) and larger municipalities (class 6). Among the metropolitan areas, Tamale (–8.0 percentage points) and Tema (–7.3 percentage points) experienced the worst declines, whereas Sekondi-Takoradi (–1.5 percentage points) experienced only a modest deterioration in access to safe toilets. In both Accra and Kumasi, the deterioration of toilet facilities was more dominant in neighboring suburban and peri-urban areas than in the city center, suggesting the substantial scale of the sanitation challenge faced by municipal and district assemblies in growing metropolitan areas.

Improvements in solid waste disposal and sewerage are still limited and most peri-urban areas do not have access to waste disposal services. Throughout Ghana, the majority of households use public dumps to dispose of household solid waste. In 2010, 37.7 percent of households disposed of their solid waste in open spaces at public dumps and about one-quarter (23.8 percent) disposed of their solid waste in public containers. Smaller proportions of households either have their solid waste collected (14.4 percent) or burned (10.7 percent). From 2000 to 2010, disposal of waste in public dumps declined in Greater Accra by 17.3 percentage points and Ashanti region by 1.5 percentage points, but overall, public waste dumping increased in other regions. The highest percentage point increases were recorded in Upper West region (28.4 percentage points), Upper East region (25.9 percentage points), and Northern region (23.2 percentage points). Dumping of waste elsewhere decreased in all the regions, with the highest percentage point decrease recorded in the Upper East region (40.6 percentage points), Upper West (29.7 percentage points), and Northern (28.9 percentage points).

Access to sewerage remains very limited, though. Most households dispose of liquid waste directly in drainages, and in smaller towns, most liquid waste is simply disposed of outside. Even in the most advanced areas, such as Accra and Tema, little more than 10 percent of households discharged their liquid waste through the sewage system. There is a clear correlation between types of liquid waste disposal and distance from Accra and Kumasi city centers. While access to liquid waste disposal services improved closer to the city centers, a large majority of households in peri-urban areas do not have adequate liquid waste disposal infrastructure.

Solid waste disposal and sewerage remains a major challenge in cities and urban centers, increasing health risks and environmental damages, indirectly increasing health care costs due to diseases related to poor waste disposal and associated sanitary challenges. While progress has been made in waste collection in general, it is clear that this has not translated into improved environmental conditions. This is especially the case in low-income areas in cities such as Kumasi and Accra, where communal disposal containers are constantly overflowing as a result of delay or absence of institutionalized collection mechanisms.

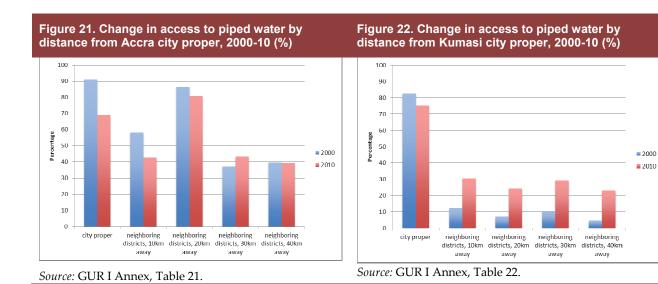
Even in areas of infrastructure and service provision that have seen more general success, regional and intercity inequality have increased. For instance, access to electricity improved across all urban centers in both urban and rural areas, but regional disparities in access to basic services, in particular between the southern and northern regions remain, increasing the risk for disparity in development along North to South patterns (Figure 20).

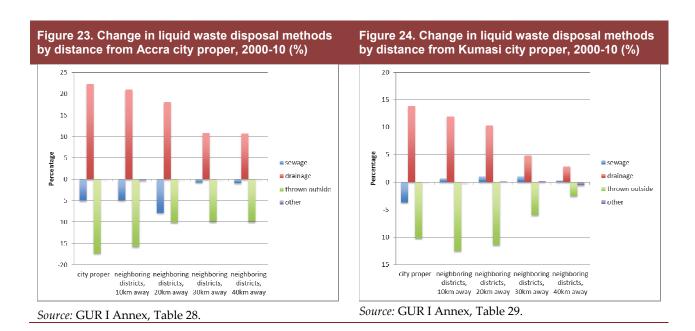


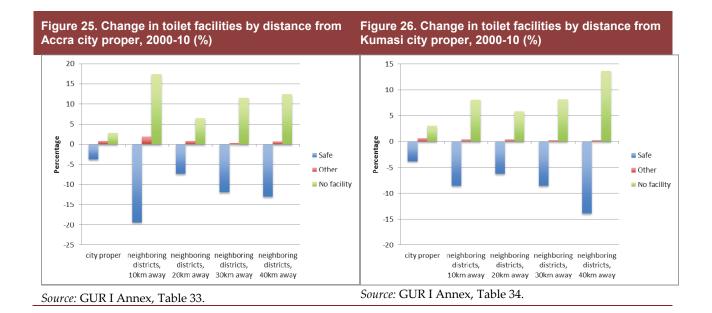
Source: GUR I, Annex Tables 20, 26, 28, 32, 36.

*Note*: Solid waste disposal refers to waste collected or brought to a public dump. Liquid waste disposal refers to either sewage or drains.

Unplanned urban expansion negatively impacts intracity inequality in service provision, with infrastructure quality declining outside of city centers. As shown for Accra and Kumasi in Figures 21–26, access to piped water, waste disposal, and toilet facilities all decrease in relation to distance from city centers. This reflects rapid population growth in peri-urban areas that has outpaced the capacity of authorities to supply basic infrastructure.







### A growing housing deficit: quality, location, and security

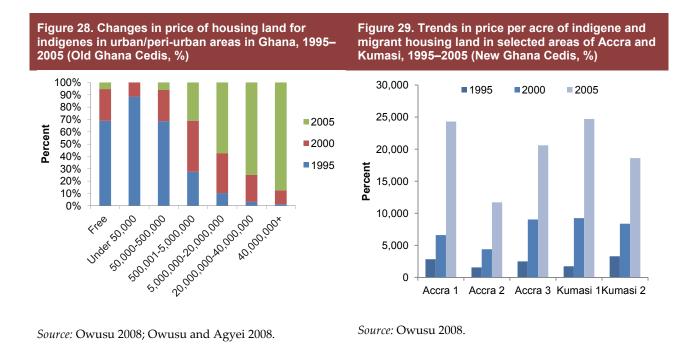
Ghana's urban housing deficit is wide and growing. Urban housing in Ghana is informal, overcrowded, and predominantly rental or rent-free without any financial collateral. About 90 percent of housing in urban Ghana is built without local authority control; almost 60 percent of households occupy single rooms, and only 25 percent of households own their housing (UN-Habitat 2012). Households on average spend less than 10 percent of their disposable income on housing, but 35 percent of households can only afford housing for US\$6,000 or less. Estimates indicate that on average, the cheapest housing price is around US\$3,700 (compared to a GDP per capita around US\$1,600). The deficit in the Ghanaian urban housing sector becomes even more critical when housing is broadly defined as not only comprising the physical shelter but also related services and infrastructure as well as the inputs for its production (GoG/MWRWH 2009; ISSER 2013).

Rapid urbanization and urban growth has triggered a situation whereby the supply of housing lags behind effective demand, especially in large metropolitan areas. The annual housing stock is growing, but at a relatively slower rate compared to the rate of growth of the total population. Estimates indicate that Ghana's housing gap is around 70,000 to 120,000 units per year (NDPC 2005; ISSER 2013). By 2020, Ghana requires a total of 2 million new dwellings (that is, 5.7 million rooms), or about 600,000 new units per year). The highest demand for new housing is in Kumasi and Accra. The housing deficit situation in Accra in 2010 was 72 percent of the total deficit for the Greater Accra region while the deficit for Kumasi was 72 percent of the total for the Ashanti region. The inability of the existing housing delivery system (supply) to meet effective demand results in a situation where many urbanite Ghanaians are forced to live in slums or areas of poor housing conditions characterized by overcrowding and low-quality or absent basic services, such as in-house water supply, toilets, and bathrooms (ISSER 2013).

Evidence confirms that formal housing is unaffordable (UN-Habitat 2011. Figure 27 below depicts an affordability pyramid for Ghana based on a locally calibrated maximum house-to-income ratio of 3, which means that 85 percent of households are unable to access housing that costs above GH¢72,000. For reference, the cheapest newly built house from a formal developer in Ghana costs US\$25,000 (UN-Habitat 2011). When starting from the price of formal housing aimed at particular income ranges (column 5), it is evident that only the top 20–25 percent of urban households can afford anything available, even with housing payments at one third of income. Rental levels at the current rent-to-household income ratio of 10 percent or less are also very low, showing 50 percent capable of paying GH¢300 or less per month and 35 percent requiring accommodation with rents of GH¢10 or less.

Figure 27: Housing affordability pyramid for Ghana							
Income range	Income GHC/month	Percentage of all households	Maximum affordability HC:Y = 3	Housing cost aimed at the thresholds <sup>4</sup>	Monthly maximum rent levels affordable at R:Y of 10%		
Very High	>4,000	5%	180,000	476,000 & 204,000	500 +		
High	3,001-4,000	10%	144,000	163,200	400		
Mid-high	2,001-3,000	50%	108,000	95,200	300		
Middle	1,001-2,000	of households can afford housing costing between	72,000	Up to 54,000	200		
Moderate	501-1,000	GH¢12,001 and GHC72,000	36,000		100		
Low	101-500		18,000		50		
income	51-100	35%	12,000		10		
No wage income	0-50	of households can afford housing costing GHC12,000 or less					

The access to affordable land has declined dramatically in larger urban areas in the last 20 years. The results of a nation-wide research project on land tenure and land policy demonstrate that the proportion of indigenes and migrants in urban and peri-urban areas with access to free or relatively affordable land for housing drastically declined between 1995 and 2005, and the share of respondents paying a lower bracket price for their land plots fell from around 37 percent to 3 percent (Figure 28). Land prices have increased across the board; for sampling sites in Kumasi and Accra, land prices increased by between 460 percent and 1,300 percent from 1995 to 2005 (Figure 29).



Housing remains critical as it is directly linked to practically all aspects of urban living. Many of the challenges of urban living are associated with the quality, location, and security of housing. For many urban dwellers, especially the poor, a house in a habitable neighborhood is a vital starting point that allows individuals to tap into opportunities offered by the city—jobs, income, infrastructure, services, and amenities. In other words, a decent house serves as not only a home but also a source of safety and security. It is a venue for employment creation, developing and strengthening social relations and networks, and accessing urban basic services (UNFPA 2007).

How Ghana tackles its housing development problems will become critical for growth of urban areas in the coming decades. Development policy will affect whether unplanned urban expansion will continue and create further inefficiencies in mobility and service delivery, or whether cities can find sustainable ways to accommodate an increasing population through effective spatial planning. To address its housing deficit, which will have side effects on urban form, Ghana must urgently seek ways to reduce construction costs, address land market constraints, and make efforts to improve and enforce spatial planning and zoning.

# 4. A Framework for Efficient and Inclusive Urbanization

The Ghana Urbanization Review (GUR) applies an analytical lens to assist Ghana's National Urban Policy Framework (NUPF) in determining action priorities and investment sequencing. Ghana's first-ever NUPF, which aimed to guide the country's urban development, was formulated without a clearly defined strategic policy plan. Poor planning resulted in uncoordinated project-based interventions that could not comprehensively tackle the challenges in Ghana's urban sector. The GUR further strengthens efforts toward achieving NUPF objectives, as it provides a framework for prioritization and phasing of key actions and reforms based on evidence-driven analysis. The discussion above of the major urban challenges facing Ghana highlights the need for a framework to enhance urban efficiency while also making urbanization more inclusive.

With Ghana's specific urban challenges and strengths in mind, the GUR focuses on four priority areas: (i) integrated land use planning for effective urban development; (ii) strategic infrastructure development and improved regulation of the transport sector to enhance connectivity of urban areas to markets; (iii) consolidating the gains made over the last 20 years of decentralization by deepening fiscal decentralization and exploring innovative ways for financing urban development; and (iv) institutional coordination and harmonization to facilitate land, transport, and finance planning and connectivity. These four areas are key drivers that will enable the attainment of a successful urban system in Ghana. Their relationship to Ghana's urban efficiency and inclusion challenges are shown in Table 3.

Challenge Factor	Efficiency	Inclusion
Land market friction	Impedes new business development and construction; prevents agglomeration economies	Leads to unaffordable housing and weak land rights
Poor transport connectivity	Prevents workers, firms, and materials from locating to most efficient locations; prevents agglomeration effects	Weakens capacity for distribution of basic urban services
Insufficient financing	Prevents the efficient development of connective infrastructure	Inhibits the provision of basic urban services
Weak institutions	Impedes coordination and sufficient financing	Leads to overlap and repetition in the administration of service provision

### **Generate Efficient Land Markets**

To meet the challenges of urbanization, Ghana requires stronger land use management and planning in municipal and metropolitan areas. Urban and land use planning are negatively affected by an inflexible land ownership system. Successful planning can be achieved by valuing land to create effective markets and facilitate the transferability and bankability of land assets, and coordinating land development with infrastructure and affordable housing. In particular, Ghana should strengthen and clarify property rights through land market formalization, make land use regulations and administrative procedures more market friendly, and coordinate land market reforms with increased provision of affordable housing.

### Formalize land markets and enforce property rights

Meeting the need for sustainable urban and housing development requires fostering an effective land market under the authority of land use planners. Many challenges to Ghana's inclusive and productive urbanization arise as a consequence of informal land markets with weak individual property rights. Ghana's urban land is in short supply. It is traded informally and through traditional authorities, or expensively through the formal system. This leads to displacement and uncontrolled settlements on the urban fringes, as land becomes unaffordable for the large majority. Low-income groups' access to land for housing in urban and peri-urban areas, especially in metropolitan areas, is very limited. Land management problems can be alleviated through the establishment of equitable MMDA appraisal systems, developing fair land adjudication procedures, and negotiating and collaborating with traditional authorities in land zoning and urban planning.

Balanced management of the customary land tenure system with specific actions to reform land markets will allow the efficient valuation of land, the formal sale of customary lands, and the use of land as collateral. Currently, the land market in Ghana is, in effect, two markets, traditional and modern, operating side by side. An estimated 80 percent of land in Ghana, across both rural and urban areas, is under the control of customary authorities with chiefs responsible for allocating land in the interest of their subjects. Ineffective coordination, communication, and harmonization between customary landholders and public planning agencies has allowed chiefs and others dispose of land for purposes not zoned for by planners. Due to the transaction costs and time required to acquire and obtain land in the formal land market, 90 percent of all urban housing is developed through the informal land market (UN-Habitat 2012).

Registering and valuing land effectively will help to unify Ghana's traditional and modern land markets and enhance secure property rights. Ghana's customary tenure regimes vary between regions; only a very small proportion of land is registered and boundaries of different interests in land have not been mapped to any great degree. Even where land is registered, there may be considerable uncertainties about other potential claims to it, depending on the registration regime. Under the Land Administration Project (LAP) currently underway, Customary Land Secretariats (CSLs) are being established across the country. CSLs help traditional areas administering lands through proper record keeping, avoiding multiple sales of land, and reducing and eliminating boundary disputes among land owners within and between traditional areas.

#### **Box 4. The Land Administration Project**

The Land Administration Project (LAP) was instituted by the government of Ghana in 2003 to improve governance systems for land. The Land Use Planning and Management Project (LUPMP) is a component of LAP that was instituted in 2007 to introduce new systems for land use planning. Six Metropolitan, Municipal and District Assemblies (MMDAs) were selected for the LAP Phase 1 pilot project. The pilot project included preparation of a Spatial Development Framework (SDF), the Spatial Planning Bill (which is expected to be presented to the cabinet before the end of 2014), and preparation of Structure Plans. The SDF is a long-term (10 to 15 years) statutory framework to guide development or redevelopment of settlements and surrounding areas. The operation of SDF would help change the face of spatial planning in Ghana. However, its success hinges largely on how the issues of land administration, tenure, and access are addressed, and to what extend the enabling environment (including local governments) are facilitated and strengthened to manage, supervise, and enforce spatial planning.

Systematic and transparent land valuation will help Ghana's cities develop by making land use more efficient. To estimate land values, developed countries use property attributes and market transaction data. But developing countries cannot do this without basic institutions, land records, and ancillary data on potential income and the cost of land development inputs. Furthermore, these data must be current and reliable, both for professional appraisers and for the general public. For this reason, in the 1970s, Korea promoted the development of a cadre of qualified private property appraisers (in place of the local government officials who had assessed market values and asset replacement costs for previous land acquisitions). As a result of the Basic Land Prices system that Korea established in 1972, appraisals became transparent and information on land values became widely accessible. Another useful precedent is Bogotá, the capital of Colombia, which recently updated its land inventory (Box 5).

Two ongoing initiatives will help provide new momentum to Ghana's land reforms: a new land use bill and a series of Spatial Development Frameworks for the national, regional and district levels of the country. The land use and spatial planning bill has been presented to Parliament soon for passage by the Ministry of Environment, Science, Technology, and Innovation. The bill seeks to harmonize all laws on land use and spatial planning to ensure effective planning and management of human settlements including their resource areas. Under the new Land Use and Planning Law planning at all levels is expected to be well integrated, comprising both socioeconomic and spatial aspects. In addition, a National Spatial Development Framework (NSDF) has been prepared in line with a revised spatial planning model. The NSDF is currently being processed for presidential approval and it its implementation will commence soon afterwards. The revised spatial planning model is in three tiers, comprising the Spatial Development Framework (SDF), Urban Structure Plans, and Local (subdivision) Plans. This model ensures that there is a chain of conformity from the national, regional, subregional and district levels. This approach also ensures that the national development vision, policies, and objectives are reflected in development decisions on the ground. The implementation of these bills will require that the necessary institutional and

human resource capacity is in place along with strong political support, and, lastly, that sufficient financial resources are provided for effective implementation. The latter are especially important as many spatial development plans have failed due to implementation and coordination failures. It will be critical that, when passed, these bills are expeditiously implemented by the key stakeholders involved.

### Make land use regulations more market-friendly

Local land use regulations should be revised to constrain unplanned urban expansion. In addition to land market formalization and the development of clear property rights, Ghana's efficient urban land use is constrained by inefficient regulations. The management of urban areas is based on the Town and Country Planning Ordinance (Cap 84), passed in 1945, is centered on planning schemes that prescribed large minimum plot sizes and incentivized low-rise buildings with large, open spaces. These rules lead to inefficient land use, low-density development, speculative open spaces in built areas, and a constant search for land in fringe areas (Owusu 2013). Such regulations should be revised to allow more dense urban development.

#### Box 5. Updating the cadaster in Bogotá, Colombia

A pioneer in land valuation, Bogotá updated its cadastral database over 2008–10 by revaluing its 2.1 million urban properties. The update yielded a 30 percent increase in property tax revenues and US\$171 million in new revenue for fiscal 2009 and fiscal 2010. It was achieved by improving human resource management, introducing information technology, working to mitigate property tax increases, engaging stakeholders and career civil servants, reviewing the project's results in a public and transparent manner, and adopting technical innovations to improve assessments.

Technological innovations helped. Spatial information from geographic information systems (GIS), such as a property's distance from key sites and amenities, was incorporated into the statistical techniques for estimating property values. Given a shortage of market information, initial price estimates were collected from expert appraisers who combined market, cost, and income valuation approaches. Today these data are available for research under confidentiality agreements. They are also shared throughout the government to improve planning across agencies and sectors.

Because the cadastral values had long lagged behind actual market values, the property tax base was expected to increase sharply after the update. To maintain progressive property taxes and prevent excessive resistance by property owners—while nevertheless retaining the assumption that property values are strongly correlated with ability to pay—the city capped the property tax by law, limiting a property's tax increase proportionally to the logarithm of its value (with differentiated ceilings for residential and nonresidential uses). This step partially separated tax increases from property values and helped property owners accept rising taxes.

Source: Ruiz and Vallejo 2010.

Streamlining administrative procedures to improve the operation of competitive markets can reduce housing costs and informality. Land availability, particularly for the poor, is impaired by land scarcity as well as by a system of acquiring and developing land that makes it legally inaccessible and expensive. The process of acquiring a land title in Ghana requires five procedures, takes 46 days (as against 57 days on average in the region) and typically costs 1.2 percent of the property value (World Bank 2014). While not terrible in an international perspective, it would be better to have a flat fee that covers the administrative service to reduce the perverse incentive for people to understate the sale price. Moreover, the land acquisition process is particularly slow outside of Accra and Kumasi, where the Land Commission does not have weaker administrative representation. An obvious effect of the trend of limited access to land is the displacement of urban poor households to rapidly expanding slum and squatter settlements in environmentally fragile flood plains and hazard zones not fit for human settlement in and around Accra. More and more people are being forced into informality, whether as a sheer survival strategy or because their living environments are defined by unregulated, nonserviced, urban settlements and slums.

Further, a critical structural impediment to housing and land development in general is the high cost and complicated process for acquiring a construction permit. On the World Bank Group's 2014 Doing Business Index, Ghana scores high on several indicators and overall ranks 70th in the world, and 4th in Sub-Saharan Africa. However, construction permits cost almost US\$1,700, typically up to 2 percent of the property value; and, on average, it takes 201 days and 13 procedures to acquire a permit. This strongly affects the construction sector as whole, and the housing sector in particular. In the case of both land and construction permits, streamlined procedures will improve efficiency.

### Coordinate land market reforms with increased provision of affordable housing

To address its housing deficit, which will have side effects on urban form, Ghana must coordinate land market reforms with improved infrastructure and increased provision of affordable housing. By 2020, Ghana requires a total of 2 million new dwellings. Furthermore, rapid economic growth will create greater demand for a diversity of housing forms to match the changing household structures. Land market reforms will help reduce unplanned urban expansion and will help to make housing more affordable and accessible, but these reforms must be coordinated with public provision of affordable housing and infrastructure that reaches low-income neighborhoods in the urban periphery. Enhancing coordination and management of land use in urban areas is critical for Ghana to create an urban form that can facilitate efficient land use, update and enforce regulations, attract and retain business and investments, and accommodate the 2 million new housing units required over the next decade.

#### Box 6. Rwanda's Land Reform: moving from informal land tenure to formal tenure security

Prior the development of the National Land Policy in 2004 and the enactment of the Organic Land Law in 2005, determining the use and management of land in Rwanda, there was a juxtaposition of customary tenure and statutory tenure. Most rural land in Rwanda was accessed through inheritance and leasing through customary tenure arrangements and most urban land was accessed through purchase and leasing through statutory tenure arrangements. Within a period of 9 years, the Government passed key laws and reforms to the institutional framework for land governance, established a land and tenure database covering all land in the country, and enabled registration, land titling. By 2013, all land in Rwanda was registered and titled.

The following actions were undertaken:

**Legal and institutional framework development:** refinement of land policy, the development of secondary legislation and developing land management organizations at central and district levels (the Land Centre and Office of the Registrar of Land Titles, Land Commissions at central and district levels, District Land Offices, Land Committees at decentralized levels)

**Development of a national system and program for land tenure regularization:** *to* systematically bring land to first registration and to allow all citizens equal access to the new systems

Development of low cost, effective and simplified land administration system at national and decentralized levels and operational guidelines: to secure land rights and promote investment through regulated land transactions

**Development of a national land use master plan:** for land planning and development control to ensure rational use of land and effective development as well as environment protection

**Development of digital based Land Information System, and land tenure registration:** For the sustainability of this land registration, a Land Administration Information System was developed that facilitate land data maintenance and flexibility to accommodate new changes (parcel updates, personal and land rights information) and land transactions, contributing to ease doing business

By the end of 2012, all estimated 10.3 million parcels were already demarcated, adjudicated and digitized (100 percent), 10.3 million parcels entered in Land Tenure Regularization Database (LTRSS) with 8.3 million with full information, 7 million leasehold titles approved, 7 million leasehold titles printed for distribution, and 4 million leasehold Titles collected by owners. Only 11,840 disputes were registered countrywide.

Source: Rurawanga 2013.

### Box 7. Lessons from Vietnam on affordable housing and reduction of slums

As a lower-income and rapidly urbanizing country, why does Vietnam have so few slums? Vietnam has a permissive, accepting, and sometimes proactive regulatory approach toward customary and affordable housing development. This approach, coupled with the innovative small-scale private housing construction and rental sector, has resulted in a very low incidence of slums in Vietnamese cities. This is particularly striking when compared with cities in countries that have even higher urban incomes (such as Brazil, India, Indonesia, and the Philippines). More specifically, the following features have proven to be very successful:

- The tolerance of small plot sizes, thereby letting people trade off location for floor space (in many cases floor space as small as 25 square meters).
- A permissive attitude toward the floor area ratio (FAR) increases, which has enabled an increase in the supply of floor space without the need for more land.
- The incorporation and densification of peri-urban villages into the urban fabric.
- Investment in primary/trunk infrastructure near these urbanizing villages (with communities then investing in incremental improvements within the village).
- The dynamism of the efficient and entrepreneurial low-cost, self-help, and small contractor construction sector.

By and large, Vietnamese cities have managed to enable a pluralistic supply of housing to meet the needs of different segments. Much of the demand for housing in Vietnam, especially for low-income groups, has been met in the following ways:

- Small contractors constructing traditional townhouses where land is available within the city or in its immediate periphery.
- Government-facilitated densification through the extension of the road network to integrate former villages close to the city.
- The incremental upgrading and maintenance of the existing housing stock by individuals (including the increase in FAR by vertical extension), and the upgrading of infrastructure and services by the government.

Source: World Bank 2011b.

### **Increase Intercity and Intracity Connectivity**

Transport improvements are required to connect markets, boost factor mobility, and help modernize Ghana's urban economies. Strong connectivity enhances the competitiveness of an economy and generates a business environment conducive to firm growth and development. Quality infrastructure efficiently connects firms to their customers and suppliers, and enables the use of modern production technologies. Yet the provision of transport infrastructure in Ghana has generally been undertaken as a result of development rather than in anticipation of it, resulting in piecemeal infrastructure provision that is inadequate to meet effective demand. Policy makers should consider options for guiding and managing transport investment in a more coordinated manner and making cities more mobile and competitive through forward-looking and transformative infrastructure investments. In particular, Ghana's authorities should

increase intermodal coordination in intercity connectivity, develop high-capacity public transport systems in large metropolitan areas to improve intracity connectivity, and prioritize high-return transport infrastructure, as well as strengthening governance and planning system for urban transport.

### Increase intermodal coordination in intercity connectivity

Ghana's transportation system is heavily dominated by road transport. The road sector receives 99 percent of total investment in the transport sector (including statutory funds received through the Road Fund) (GoG/MoT 2008). This situation has resulted in the underdevelopment of other modes of transport and consequently excessive reliance on road transport. Available data indicates that both maritime traffic as well as passenger and goods traffic by rail has declined (GoG/NDPC 2008). With a rail track length of 1,300 kilometers (GoG/NDPC 2010), the present operational coverage of the railway is very limited. Volumes of freight and passenger traffic have declined significantly in the past decade. From a peak of just over 2.5 million passengers in 2004, the volume of rail passenger traffic has declined to about 1.2 million in 2011. Yet as distances increase, freight transportation costs tend to be lower than road transportation costs (McKinsey 2010).

Ghana's transport infrastructure requires greater intermodal coordination between road, rail, marine, and air networks. There is virtually no interface between rail, road, air, and port traffic. This is due to the weak transport infrastructure across all modes, as well as limited vertical and horizontal institutional collaboration. The laws, regulations, institutions, decision-making, and financing mechanisms affecting the transport sector in Ghana remain uncoordinated, which often creates significant barriers to performance improvement and restricts opportunities for exploring the benefits of intermodal coordination (GoG/MoT 2008). In urban centers, especially large metropolitan areas where there is intense and high-volume movement of people and goods, the virtual absence of intermodal transport system accounts for severe traffic congestion and delays in movement across space. This increases the costs of doing business and reduces the competitiveness of Ghanaian cities.

Ghana's authorities should concentrate on specific city and regional needs in prioritizing cross-city infrastructure investment. Different urban centers tend to specialize in different industrial subsectors, and different regions have different advantages and disadvantages in terms of transportation modes.

Port development and rail linkages should focus on Tema and Takoradi. Ghana's two ports in the southern coastal cities of Tema and Takoradi play a key role for national and regional trade and export of commodities. Yet deterioration of the railway network has been most detrimental in the Western region, due to the high level of export of resources and minerals through the port of Takoradi. A number of investment projects have been and still are being implemented, such as the container terminal project, aimed at modernizing the two ports to enable them to be more effective and efficient operations. While past efforts or interventions to improve port

performance have focused to a large extent on the Tema, the discovery and production of oil in the Western region have led to the need to expand and improve the Takoradi as well.

**Inland water transport is underdeveloped.** Although Ghana has large inland bodies of water, they remain undeveloped for waterway transport of passengers and cargo. The exception is Volta Lake, which is the only major inland body of water used for transportation and regulated by the Government. This route handles cargo ranging between 50,000 to 80,000 metric tons annually. Transport on the lake is critical to the survival of many small towns and serves many other riparian communities, some of which are difficult to access by road (Amekor 2008). Other inland water routes should also be developed.

Rapidly expanding air transportation offers growth potential for Accra and other large towns in Ghana. Ghana's aviation industry has witnessed significant growth in the last two decades. The industry now provides valuable air transport services between cities in Ghana and links the country to the West African subregion and the rest of the world (GSS 2008). The current government medium-term development policy framework calls for the improvement of aviation infrastructure through the expansion and modernization of airports in order to enable Ghana's international and domestic airports to meet increase demand of flights. Plans have been proposed to upgrade the Tamale domestic airport to an international terminal (GSS 2008). This plan should be moved forward, as the development of Tamale as an international airport would increase employment opportunities and the overall growth of the city. However, the development of Tamale international airport should be undertaken within the context of sustaining and progressively improving the Kotoka International Airport to improve Accra's status as a West African hub and gateway, helping lead to growth in exports and tourism.

### Develop high-capacity public transport systems in large metropolitan areas

Ghana's intra-urban transport priorities differ by city size. There is a need to improve transportation across city classes and regions to enhance the connectivity and competitiveness of Ghanaian cities. While the efficiency of large urban areas is significantly reduced by traffic congestion, small towns and rural areas are challenged by limited road networks of poor quality. The extensive use of bicycles and public transport suggest the need for strategic investments in these modes of road transport.

Urban transport in large metropolitan areas lacks high-capacity public transport systems, even in Accra. This implies that urban residents have to either rely on expensive private cars, which are often unaffordable and add to road congestion, or resort to informal solutions. As a result, a large share of urban residents walks to work, limiting the scale and efficiency of economic activities. This leads to weak urban economies and lack of production specialization and economies of scale.

In smaller urban areas, development of roads is the greatest intra-urban transport challenge, but large metropolitan areas already struggle from traffic congestion and thus require high-capacity public transport systems. In the second tier cities of Sekondi-Takoradi and Tema, bad

roads are regarded as the main transportation difficulty. In small and medium-sized towns as well as in the northern parts of the country, the main transportation challenges are bad roads and long distances between home and workplace. Yet in major metropolitan areas, traffic congestion is the most visible challenge, particularly during the morning and evening rush. The urban revolution in Ghana coincides with rising incomes and vehicle use, most notably among the middle and upper classes, similar to the trend in other emerging economies. Without investments in alternative transport modes, traffic jams and congestion will become increasingly problematic, resulting in higher efficiency and environmental costs. The only feasible solution is the expansion of high-capacity public transport system in large cities.

Figure 30. Road space required by 50 people riding cars (left), motorcycles (center), and a bus (right), city of Muenster, Germany



Source: City of Muenster Planning Office, in GTZ (2005).

### Prioritize high-return transport infrastructure

Ghana requires significantly more infrastructure investment to improve intra- and intercity connectivity. Improving data and valuation of existing transport networks and costs will identify the projects with the highest overall returns, and managing coordination failures will help ensure that projects are implemented efficiently and effectively.

Valuation of transport infrastructure is essential for prioritizing high-return investments. A lack of transport connectivity imposes high, tangible costs on the economy. According to Ghana's National Transport Policy, national targets for growth and poverty reduction rely heavily on an effective transportation system, as citizens rely on transport to access markets, jobs, and educational and health centers (GoG/MoT 2008). In addition, industry and business

rely on transport to access raw materials and to get their products to the market. In urban centers, especially large metropolitan areas where there is intense and high-volume movement of people and goods, the virtual absence of intermodal transport systems causes severe traffic congestion and delays movement across space, increases. Congestion and delays increase the costs of doing business and reduce the competitiveness of Ghanaian cities (see above).

Part of the explanation for a lack of concentration on high-return infrastructure investments is a lack of data on current transport supply and demand conditions. Greater efforts should be made to improve the availability and accuracy of these data. Data is insufficient to ascertain the level of funds disbursed, relative to its investment needs. The Logistics Performance Index helps to quantify performance in trade logistics (see Box 8). Internal assessments and systematic data collection are necessary.

# Box 8. The Logistics Performance Index: an international scorecard to measure the performance of a country's trade logistics

The World Bank's Logistics Performance Index (LPI) is intended to help countries identify the challenges and opportunities they face in their trade logistics and what they can do to improve their performance. The LPI 2014 allows for comparisons across 160 countries.

Ghana's LPI (2.63) is ranked at 100 in 2014 (out of 160 survey countries). It performed slightly better than lower middle-income countries (2.59) and Sub-Saharan Africa (2.46). However, there is significant room to improve in comparison with other countries, such as South Africa (ranked at 34), Vietnam (48), and India (54).

LPI is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers), providing feedback on the logistics "friendliness" of the countries in which they operate and those with which they trade. It consists of both qualitative and quantitative measures: (1) Efficiency of the clearance process, (2) Quality of trade and transport related infrastructure, (3) Ease of arranging competitively priced shipments, (4) Competence and quality of logistics services, (4) Ability to track and trace consignments, and (6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

Table B8.1: Logistics performance index scores for Ghana and comparator countries, 2014

Country	Year	LPI Rank	LPI Score	Customs	Infrastructure	Internal shipments	Logistics competence	Tracking and tracing	Timeliness
Ghana	2014	100	2.63	2.22	2.67	2.73	2.37	2.90	2.86
South Africa	2014	34	3.43	3.11	3.20	3.45	3.62	3.30	3.88
Vietnam	2014	48	3.15	2.81	3.11	3.22	3.09	3.19	3.49
India	2014	54	3.08	2.72	2.88	3.20	3.03	3.11	3.51
LMIC	2014		2.59	2.40	2.38	2.62	2.56	2.64	2.91
SSA	2014		2.46	2.27	2.27	2.49	2.41	2.48	2.84

Source: World Bank Logistics Performance Index.

*Note:* LMIC = Lower middle-income countries, SSA = Sub-Saharan Africa.

Additionally, as Ghana motorizes and continues to develop, increased recognition of environmental costs will become increasingly important. Currently, vehicle ownership is low, at only 8–10 cars per 1,000 people. But ownership is increasing by 10 percent annually, and will continue to increase as Ghana gets wealthier. The increase in vehicles has detrimental environmental and health consequences. Air pollution in Accra is almost twice the regional average in Africa, and even higher than the average level of pollution in Chinese cities, and this despite a relatively low motorization rate. The emission of pollutants from transport activities has a wide range of environmental consequences, including atmospheric emissions that affect air quality, contamination of surface and groundwater through accidental and nominal runoff from transport pollutants such as oil spills, as well as noise pollution. Environmental consequences require strong policy attention and failure to evaluate these costs leads to underprovision of essential transport infrastructure.

In addition to correctly valuing the costs and benefits of transport infrastructure investment, Ghana should better leverage its investments through the use of existing systems and private partnerships. Both intracity and intercity road transport is largely provided by the small and medium-sized companies under the Ghana Private Roads Transport Union (GPRTU). Movement of bus services between cities is largely unscheduled depending on the availability of passengers and vehicles. Nevertheless, the informal private operators provide an invaluable service in an environment where the public sector is virtually absent. In recent years, a number of private bus companies servicing Accra, Kumasi, and other major urban centers have emerged. Public investments should leverage these existing private systems.

Traffic planning and management has not yet been given adequate attention in Ghana, and will require attention of government. There is no traffic management unit in any of the major urban areas, nor in the central Department of Urban Roads, and few people have qualification and experience in this domain. Neither the data necessary for traffic planning and management nor the tools (basic traffic engineering or adequate modeling, for example) are available for that. While some the master plans include traffic management, there is no detailed traffic plan scheme, and cities are affected by the lack of functioning traffic lights and intersection management.

### **Improve Financing and Fiscal Mechanisms**

Improved land use planning and transport connectivity require new sources of finance, as current investment in the urban sector and existing revenues fall far short of needs. The efficiency of the urban system and of urban service delivery is largely influenced by the provision of adequate financing. Providing universal basic services, increasing the availability of affordable housing, and expanding transport infrastructure are expensive; yet they are expensive investments that pay off. To improve financing capacity, Ghana should improve metropolitan and municipal revenues, rationalize the intergovernmental fiscal framework, including ongoing decentralization reforms, and explore development of new urban financing mechanisms.

### Improve metropolitan and municipal revenues

Revenue mobilization and its management constitute one of the core problem areas in decentralized local government administration in Ghana. Local authorities are under pressure to mobilize their own resources to meet the cost of implementing development objectives and service delivery. Most of the problems facing the MMDAs are caused by inadequate financial resources in the face of the numerous functions that they are supposed to perform. In many districts, actual revenue collection falls short of estimated or budgeted revenue. Overall revenues collected at the MMDA level remain of marginal volume; they about 0.18 percent and 0.17 percent to GDP for 2011 and 2012 respectively, despite the fact that Ghana is now officially a lower-middle income economy. A greater proportion of the MMDA's internally generated revenue is derived from fees, fines, and licenses, particularly market tolls and licenses and property taxes. Collection of property taxes in all the districts has proved to be the most difficult and ineffective means of revenue mobilization, despite the fact that this is assumed to be the most valuable instrument for resource mobilization. Overall, MMDAs are thus dependent on transfers and grants from central government and donors for the capital and operational financing. It is estimated that, on average, 80-95 percent of MMDA budgets is financed by transfers and grants.

Revenue generation is still dominated by the large urban centers, but due to the financing principles of the transfer system, the commensurate investment needs of cities are not met. The budgets of the five key urban areas—Accra (AMA), Kumasi, Sekondi-Takoradi, Tema, and Tamale—make up no more than 15 percent of total local revenues although their share of the total population is 21 percent. The five key cities represent 44 percent of the total of current internally generated revenues, but only 10 percent of the grants. Average revenue per capita remains feeble at around GH¢7 per capita, less than US\$3. This is marginal in comparison to the infrastructure needs.

An analysis of the internally generated revenue of MMDAs from 2009 to 2012 revealed that performance is uneven across MMDAs and across revenue types. The collection of property taxes, a key source of revenue for urban assemblies, is uneven across MMDAs. The analysis of sampled MMDAs for 2009–12 reveals a downward trend in the contribution of land revenues to total internally generated revenues. The management of land held under customary tenures ("stool lands") is affected by undefined boundaries; poor record-keeping of sales/lease/transfer transactions, which often results in multiple sales; and chieftaincy disputes that invariably affect the security of tenure of purchasers and for land.

Ghanaian cities have potential for expanding their own source revenues by exploiting their existing assets more effectively. Reports have pointed to the fact that Ghana's current asset management regime and the way it is managed at the MMDA level does not provide for effective utilization of assets as part of consolidation of city fiscal capacity (see, for example, MoF 2013). This is an area that can be used directly to improve the fiscal stance of cities and enhance their opportunity to become creditworthy. A new initiative for enhanced asset management policies and practices under the Local Government Capacity Support Project

(supported by the World Bank) is underway to address this gap—for example, by providing technical support to MMDAs to undertake regular and systematic valuations of their key assets. This initiative may assist in further enhancing the utilization of this potential.

Improving municipal finances requires enhanced valuation and documentation of existing assets to generate new sources of local revenue. For example, property taxation can and should become an important source of revenue given the rapidly increasing land and property values in Ghana's cities. The overall collection rate of property taxes is low due to (i) outdated inventory and valuation of properties (in many MMDAs, 35-45 percent of properties are not on the official valuation lists produced by the Lands Valuation Division); (ii) complete lack of, or poor quality of, land and property cadaster and database; (iii) difficulties in tax collection (a minimum of 30 percent of bills is not collected annually despite the fact that some revenue collection is outsources to private sector); and (iv) current legislation that makes the depreciated replacement cost of properties the basis of assessing the property rate in Ghana, thus rendering it impossible for the MMDAs to derive the benefits of land value increments, which are often the result of MMDAs' actions. Property valuations are in most cases largely outdated (in some cases unchanged for 15-20 years), rendering the estimated values applied for taxation purposes much lower than the actual property values. Regular valuations are not undertaken due to the combination of (i) relative high costs of undertaking regular valuation compared to the budget envelope of most MMDAs; and (ii) institutional bottlenecks and capacity constraints (the result of engaging with the national entity responsible for valuation, the Land Valuation Board). The government has recently announced a new street-addressing initiative that may help update property classification and assessed values.

MMDAs are increasingly experimenting with new institutional models for revenue collection to increase efficiency. Recent studies indicate that more than half of the MMDAs are currently using different types of outsourcing and public-private partnerships (PPPs) to enhance revenue collection. Given the relative limited capacity at the MMDA level, the outcomes of these arrangements have been mixed, but there is evidence that the collection rate can increase over time using a clear and specific contract framework with clear sanction mechanisms and incentives. Further exploration is important.

Valuation of urban services will help to price these services and enable cost recovery. With regard to financing of core urban networked infrastructure, such as electricity and water and sanitation, the ongoing reforms of utilities is expected to introduce efficiencies in the provision of services. They may also require an increase in prices to ensure real cost recovery, thus leading to increased costs to households and firms even if services become more reliable and stable. However, the expansion of networked services in poor areas may lead to a decrease in relative prices, for instance for water service. Expanding financing of service delivery especially solid waste management and sanitation will be critical for managing the large scale challenges associated with a rapid urbanization and years of underinvestment in these sectors.

### Rationalize the intergovernmental fiscal framework

Ghana's Intergovernmental Fiscal Framework (IGFF) provides substantial resources to local governments, but is negatively affected by negative effects deriving from the allocation formulae, recurrent deductions of transfers, unpredictability and delays in transfers, affecting service delivery, public financial management, and capacity at the MMDA level. Fundamental reforms to the intergovernmental fiscal framework are critical to address unpredictable and untimely allocations and transfers, and to increase financing in per capita terms for cities and towns. The intergovernmental fiscal framework in its current implementation provides substantial financing for MMDAs, but urban local governments are negatively affected by (i) increased deductions at the center of the District Assemblies Common Fund (DACF) and the use of earmarks to national priority programs (up to 50 percent or more of total DACF) that are not necessarily spatially targeted to individual MMDAs, (ii) unpredictable and untimely allocations and transfers; while the government has committed to transferring 7.5 percent of total local revenue to the District Assemblies' Common Fund (DACF) since 2011, it has not been able to accomplish this, and (iii) allocation formulas that result in limited financing in per capita terms for cities and towns. While Ghana's six Metropolitan Assemblies account for 22 percent of the population, they receive only 11 percent of transfers, that is, less than half of the transfer received by district assemblies in rural areas. Although they have higher own-sources revenue incomes, assemblies have still less overall revenue available at their disposal than their rural counterparts (around GH¢19 per capita versus GH¢28 for rural districts). In order to address these challenges, government should adopt and closely supervise the implementation of the new IGFF of Ghana with specific timelines for the individual sets of reforms identified in the IGFF Action Plan, including the reforms to the DACF, and review of expenditure and revenue assignments.

MMDA investments are generally fragmented and spread across many sectors, not consolidated into large-scale programs, in part as a result of the limited funding available. MMDAs account for a very low share of Ghana's economy. In 2012, MMDAs, with total annual revenue of GH¢622 million (US\$207 million), represented (i) less than 1 percent of GDP; (ii) only 3 percent of the government budget and, (iii) 14 percent of total public investment (government + MMDAs). In this context of limited funds, enhanced coordination between large-scale investments financed by central government agencies in cities and the MMA becomes critical for effective use of resources. The central government should make projections for future investment needs of their cities and how it intends to finance these. This could include spatial mapping of -large-scale urban projects in critical sectors (such as roads, water, and sanitation) to enhance effective planning and management of overall resources.

Ghana's fiscal transfer system remains skewed against urban agglomerations. MMDA finances are characterized by a high share of transfers (80 percent of revenues) and a significant share of investment expenditures (64 percent of total expenditures). It is reasonable to ask if such inverse shares are having a negative incidence on the level of services. The imbalance which results in an excess of investment will also generate future additional operating and maintenance expenditures. Municipalities in Ghana allocate almost all IGF on recurrent

expenditures, emphasizing the relative dependency on central grants and transfers for development purposes. Kumasi, Tamala, Sekondi-Takoradi, and Ho spend on average 88 percent of their IGF on recurrent expenditures from 2005 to 2009, and similar trends were observed in analysis of the five metropolitan assemblies financing in 2012. Metropolitan assemblies receive less than half of the transfer received by district assemblies in rural areas, and although they have higher own sources revenue incomes, they have still less overall revenue available at their disposal than their rural counterparts. The formula criteria for DACF consistently result in a relatively disproportionate level of allocation toward rural versus urban assemblies, primarily because 40-50 percent of the total amount is being allocated in equal shares to all MMDAs, regardless of population size (for example, Accra receives 1.7 percent of the DACF while it hosts almost 8 percent of the Ghana's population) since the equity element of the formula is weighted higher (the formula considers service pressure, revenue collection, service pressure (population density) and equity factors). In going forward, it will be of critical importance for government to consider mechanisms to address the large financing gaps for urban areas through changes in the IGFF. Such mechanisms should balance equity and regional development needs with support for cities and towns in meeting the increased financing needs resulting from service demands from the expanding urban population.

In addition to coordinating intergovernmental transfers, MMDAs also have to improve coordination of local expenditures. Capital expenditures typically amount to between 60–90 percent of MMDA total expenditures—with large variations between cities and rural areas. While capital budgets overall are large, analysis of expenditure data indicates that most MMDA investment projects are relatively small and fragmented, and focused on education and health sectors with a minor share invested in trunk infrastructure such as roads and sanitation (20-50,000 US\$).. The fragmentation of capital expenditures relates to the points made earlier about lack of coordination of investments and expenditures in municipalities, and it creates potential inefficacies, including in terms of economies of scale of investments.

The District Development Facility and Urban Development Grant as Performance-Based Grants have demonstrated positive results, but require additional efforts to maintain their efficacy and sustainability. The District Development Facility (DDF)—established in 2008—provides additional financial resources as a performance based grant system to Ghana's MMDAs to augment the funding gap between expenditure needs of the MMDAs and their respective revenue assignments. Similar to DDF, the Urban Development Grant (UDG) is an annual performance-based grant extended to the 46 MMAs, focusing on improving the management and local service delivery capabilities of urban assemblies with particular emphasis on Public Financial Management in five key areas of budgeting, accounting and auditing, revenue management, asset management, and social accountability.

Both grant systems have demonstrated the effectiveness of an incentive-based system focusing on strengthening the institutional and management capacity of MMDAs along core functions and improvements in the management of their activities. The benefits from the roll out of the DDF and UDG include (i) improved financial management and timely reporting, (ii) improved revenue collection, and (iii) strengthened linkages between planning and budgeting.

Furthermore, the overall number of MMDAs accessing the grants (including the performance share of the DDF) and the average score has increased over time, in some cases with large changes, indicating improved performance of the MMDAs.

In going forward, there is a need to address the systemic challenges that confront the DDF and UDG and also ensure the long term sustainability of these systems within the overall architecture of the intergovernmental fiscal framework. This includes (i) the need to synchronize the assessment process, allocation, and disbursement with the budgeting process, and streamline disbursement procedures, and (ii) ensure the long-term sustainability of the performance grant systems through the necessary planning and preparation for any changes in development partner support and ensure automatic inclusion of the annual contribution in the government budget.

### Generate new mechanisms for urban financing

The current financial situation of most MMDAs in combination with the existing legal framework does not, in the short term, provide a conducive framework for borrowing, and does not enhance opportunities for cities to establish credit ratings. From the three sources available to fund capital expenditures (saving, grants, and loans) the District Assemblies (DAs) rely on only two: grants and savings, but the latter only for a few DAs and only as a marginal source of funding. Most DAs are not mature enough to borrow due to a number of factors: (i) savings are very weak or inexistent, (ii) the fiscal system (rates and licenses) generates somewhat limited revenues, and (iii) transfers from the central government are not current resources due to the recurring delays. On top of this, unless DAs receive approval from the Ministry of Local Government and Rural Development (MLGRD), they are only allowed to borrow GH¢20 million Old Ghana (US\$2,200) from the private markets. This situation explains the delays and bunching in capital expenditures whereby MMDAs have to wait before they can raise the total amount for investments. Therefore, as a first step to advance alternatives for municipal financing, Ghana must pass the proposed Local Government Finance Bill, which has been in the draft stage since 2008. The Bill seeks to amend portions of the Local Government Act 462 and especially to address the limitations placed on MMDAs' borrowing capacities. When eventually passed, it should provide modalities for and also deepen MMDAs' access to private sector capital for increased investments in infrastructural development and the efficient delivery of services. In addition to discussions on MMDAs revenue sources, the Bill also makes concessions for MMDAs borrowing. In the medium term, these may be options that Ghana can pursue. But further clarification is required on the level of MMDAs' overall autonomy with regards to the setting of revenue bases and rates, borrowing authority and capacity, and MMDAs' ability to incorporate these into the larger framework of fiscal decentralization and decentralized financial management systems. Note that passing of legislation on municipal financing should be synchronized with the passing Draft Consolidated Local Government Bill, which includes a clause to introduce flexibility to the low ceiling for borrowing. The synchronization and harmonization of the bills are critical to ensure a clear and unified legislation municipal financing, given that the two bills are still going through discussions and possible reviews.

Recent regulations guiding Public-Private Partnerships could potentially expand the options available for municipal financing, but requires additional technical assistance and regulatory clarification to take off. With the introduction of the new PPP Policy in 2011, Ghana has expanded options for establishing alternative mechanism for financing infrastructure. This could potentially open options in the future for municipalities to expand capital for infrastructure financing. Already, a number of collaborative mechanisms are in place involving the private sector in management and delivery of urban services as highlighted in Table 4 below. However, key constraints still persist with regard to the actual delivery of new PPPs at the MMDA level, as discussed in the subsequent section. Furthermore, to consolidate the application of PPPs, government should pass the Draft Ghana Public Private Partnership Bill (2013), which will put in place the legal framework for the implementation of the National Policy on PPPs adopted in June 2011. The bill when passed is expected to facilitate the development and implementation of PPP projects in Ghana. It will accelerate the delivery of public infrastructure and related services through partnership arrangements between the public and private sectors; establish institutional structures for the regulation of PPP arrangements; provide the general principles for the identification, structuring, procurement, award, implementation, and management of PPPs; and provide for related matters. Specific measures for MMDA management of PPPs will need to be considered.

Table 4. Types and examples of joint ventures between central government/Das and the private sector					
Type of project	Location	Private sector	Type of joint venture		
Landfill	STMA	STMA/Tullow Oil	CSR		
Takoradi Thermal Power Station	Takoradi	IFC, Taqa, SMO	Business Partnership		
Sanitation	AMA/STMA	AMA/STMA/Zoomlion	MOU		
Ghana Student Hostel	Legon, Accra	Ecobank/Legon	Business Partnership		
Parking Garage	AMA	SSNIT			
Railway	Sekondi-Takoradi	Ghana Railway Development	Business Partnership		
Markets (forthcoming)	AMA/STMA	In process	PPP		

Source: Based on information from the Ministry for Local Governments and Rural Development.

MMDAs may have only limited options to employ land as collateral for financing urban development projects. This is due to the structure of the land market, where MMDAs typically do not own land or only own limited sections of the jurisdictions. This situation can be explained by the specificities of land issues in Ghana (in some respects similar to conditions in neighboring countries). Hence, it appears the main option available is to seek increased capture of land value from a development project in order to finance other urban investments. Financing the facilities for urban development of a new neighborhood seems unlikely to be realizable, but the main dividend would then be increased property rates and licenses.

A substantial increase of IGF would require a profound qualitative change of the fiscal system in order to accelerate the amount and shares of own resources. This systemic change

would include reforming evaluation methods, simplifying fee setting, and automatic indexation. This should be a key priority for government.

Municipal bonds are potentially the simplest solution, but it could only benefit a very limited number of local governments. In contrast to other (notably Francophone) African countries, MMDAs have established relations with several banks, where they hold their accounts and some of these may be interested in lending to their local government clients, subject to various guarantees. However, given the weak financial situation of most MMDAs it is very unlikely that they will able to access the market. A maximum of two or three Metropolitan Assemblies may be able to meet conditions for municipal bonds.

Applying pension funds as a means to expand municipal financing through bonds remains a potential option, but would require establishment of an entity that could organize, regulate, and supervise the process. Among the arguments for investing in municipal bonds is the requirement that these entities hold a portfolio of bonds, and particularly those of public institutions. Thus, in order to meet these regulatory requirements, and despite the risks, some companies would be interested in municipal bonds.

Finally, to move to the next stage in municipal financing, the government needs to consider how to improve the overall budget and resource management process and its linkage with planning and service delivery (for example, through consolidation of resources, reductions of earmarks, and simplifications of rules). One option would be to establish financial forecasting methods for MMDAs as is implemented in a number of countries, and to start from the relative stability of overall financing (including share of grants, IGF, and loans).

Based on the discussion of recommendations discussed above, four priority recommendations are highlighted. First, update and renew the tax base valuation system based on a new detailed tax study. Second, simplify taxes, fees, and fines by updating annual guidelines and indices; in a second phase, develop national rules for guidelines and indices. Third, consider reforming the DACF to reflect sufficient financing of operations (to insure saving) and for capital expenditures (as per existing measures). Fourth, launch a study to prepare a comprehensive system of financing local authorities, including IGF, grants, and, in the medium- to long-term perspective, options for borrowing.

### **Enhance Institutional Strength and Coordination**

Underlying Ghana's urban land market friction, poor transport connectivity, and insufficient financing is weak institutional capacity and coordination in the urban context. Land use planning is negatively affected by political and institutional constraints related to coordination and MMDA capacity, including an unresponsive legislative framework for cross jurisdictional collaboration and land management, acute human resource shortages, and inadequate financial resources. Connecting cities and regions requires interjurisdictional coordination, yet the laws, regulations, institutions, decision-making and financing mechanisms affecting the transport

sector in Ghana remain uncoordinated. And rationalizing the intergovernmental fiscal framework requires greater intergovernmental institutional coordination as much as it requires more formal allocation rules. In order to confront these challenges, in addition to building institutional strength through human capital development, Ghana should improve interjurisdictional coordination; complete decentralization reforms, including fiscal decentralization; and further develop PPPs.

MMDAs face severe difficulties in managing spatial development, resource collection, and service delivery. The fragmentation and proliferation of districts and town councils has created a situation where larger metropolitan areas are governed across a large number of jurisdictions. Furthermore, there is not a clear regulatory and institutional framework for coordination and collaboration between MMDAs and between MMDAs and key utilities. Enhancing coordination and management of land use in urban areas is critical for Ghana to facilitate efficient land use, update and enforce regulations, and accommodate housing demand in the coming decade. Current disconnects in land use planning and service provision, insufficient staffing and resources, and coordination failures within and between agencies must be targeted directly. Such actions will help MMDAs play their designated roles managing and overseeing spatial development and planning, allow effective collaboration between the core MDAs, and incentivize and embed utilities in a clear institutional framework.

Connecting cities and regions requires jurisdictional coordination. There is virtually no interface between rail, road, air, and port traffic. This is a result of the weak transport infrastructure across all modes, as well as limited vertical and horizontal institutional collaboration. The laws, regulations, institutions, decision-making, and financing mechanisms affecting the transport sector in Ghana remain uncoordinated. This often creates significant barriers to performance improvement and restricts opportunities for exploring the benefits of intermodal coordination (GoG/MoT 2008).

Institutional, interjurisdictional, and public-private coordination can also help to improve the provision of basic services. Beyond gaps in reliability and cost recovery of services within utilities, the main obstacle to service and infrastructure improvement is the fact that Ghana's various utilities and other providers are weakly coordinated—with each other and with their local MMDAs—while often serving several jurisdictions. The providers' institutional mandates often overlap, and the MMDAs have limited capacity to manage and deliver on their mandates because of insufficient financing and human resources. Ghana's cities will be made more competitive and inclusive by speeding up the expansion of piped water to meet rising demand; expanding solid waste management and control; remedying the widespread lack of access to liquid waste disposal systems and toilet facilities; and expanding access to electricity, especially in underserved areas.

### Improve interjurisdictional coordination

Global experience demonstrates that relations between metropolitan regions and higher levels of government vary widely, with legal and institutional relations being intertwined.

Best practices for central government should be playing the role of address include policy making and standard setting for governing, support, routine review of decisions, monitoring performance, and targeted intervention to solve market and government failures. The tendency is to encourage regional and local independence in planning and service delivery by assigning relative fiscal and regulatory autonomy to metropolitan areas to promote capacity building.

Generally, national governments should provide the legal and institutional framework for metropolitan areas to develop and promote growth and other societal goals through vision setting, service provision, and internal cooperation at the metropolitan level. Global best practices for interjurisdictional coordination enable identification of benchmarks to evaluate bottlenecks in city governance system in Ghana.

To improve connectivity, Ghana needs greater interjurisdictional coordination, but institutional, legal, and administrative bottlenecks remain problematic. The accompanying Phase II Report documents that respondents in cities across Ghana recognize the benefits of coordination, particularly for improving finances, generating employment, enhancing performance, and avoiding project duplication. Similarly, lack of coordination tends to lead to project duplication and uncompleted projects.

One key institutional bottleneck is that there is no institution officially mandated or empowered to promote such interjurisdictional coordination. Currently, three institutions play various coordination roles within the assemblies, but they largely remain in advisory and supportive roles (see Table 5).

Table 5. Institutional roles in assemblies					
Institution	Role in the assemblies				
Regional Coordinating Councils (RCC)	Advisory, monitoring and evaluation				
National Development Planning Commission (NDPC)	Policy and development guidelines				
Ministry of Local Government and Rural Development (MLGRD)	Supportive, monitoring and evaluation				

Source: Ghana Urbanization Review Phase II: InterJurisdictional Coordination.

Additionally, there are no legislative instruments that mandate the assemblies to coordinate among themselves. The frequent fragmentation of assemblies increases the risk of conflict between most of the new and the parent assemblies, especially boundary disputes. Opportunities for effective interjurisdictional coordination are also hampered by the following factors: (i) no incentive (such as funding sources) for undertaking coordination and no earmarked financial support, and; (ii) insufficient legal and administrative framework on management and governance of projects in the case of change of government after general elections.

Therefore, the report recommends the following key actions to improve institutional coordination and harmonization to promote integrated planning for effective land management and urban development:

First, the passing of ongoing institutional reforms and the roll out of pending actions will be critical for to address to rapidly address gaps in urban planning and spatial and land management. Needed reforms include addressing staffing gaps, harmonizing and consolidating the legal and institutional framework, and systematically addressing the challenges associated with the bifurcated land market (formal and informal). Key critical measures include (i) establishment of fully staffed and functional Town Country Planning Departments in all metropolitan and municipal and merging town areas (and associated financing), and (ii) passing of the Land Use Bill and the new Spatial Development Framework. However, the associated gains expected from these initiatives will not take off unless guided by a clear and prioritized Action Plan, provided with the necessary political support at all levels of government, supported with the sufficient financing, and made subject to close oversight and enforcement led by the key actors at national and local level.

Second, government should address inefficiencies and improve planning and service delivery in large metropolitan areas (Accra, Kumasi, Sekondi-Takoradi and other contiguous urban areas). Actions could include leveraging existing legal provisions for interjurisdictional coordination, implementing integrated metropolitan planning system, and facilitating improved urban planning across jurisdictions, hence enabling resolution of crosscutting issues, such as waste management.<sup>7</sup> This applies particularly to Accra, Kumasi, Sekondi-Takoradi, and other contiguous urban areas, in terms of the needed for strategic planning and coordinated urban development management.

#### Box 9. Legal provisions for interjurisdictional coordination

Short-Term (12-Month) Joint Development Planning Area (JDPA) Designation: As required by law, the National Development Planning Commission, in consultation with the Minister of Local Government and Rural Development and the involved MMDAs and Regional Coordinating Councils (RCCs), should study and recommend to the President the designation of contiguous areas as JDPAs. As determined by law this designation can be done after determination of special physical or socioeconomic characteristics that necessitate a JPDA being considered a single unit for the purpose of development planning and as allowed in Act 480, Section 12.

Medium-Term (24-Month) Establishment of Joint Development Planning Boards (JDPB): Through an executive instrument after evaluation of the National Planning Commission and designation by the President, JDPAs could be established and included in the executive instrument as allowed in ACT 480, Section 13. Specific issues to be resolved in their establishment and proposed issues to be considered include: composition of the JDPB to guide the JDCA; functions of JDPB; area of authority of JDPB; and coordination with the District Planning Authorities and RCCs to provide for the effective function of JDPB.

The aim of interjurisdictional coordination be threefold: reduce fringe land requirements, reduce cost of infrastructure and services provision, and make land readily available to developers. Some specifics to be addressed through the institutional coordination for land management include solving land issues through the establishment of equitable MMDAs appraisal systems; developing fair land adjudication procedures; and negotiating and collaborating with traditional authorities in land zoning and urban planning.

The recommended actions will also serve as a tool to help design and deliver new plans for large agglomerations (such as the Greater Accra area) and would support the effective implementation of existing interjurisdictional plans. Such plans include (i) the Comprehensive Urban Development Plan for Greater Kumasi as a blueprint for the development of the Kumasi Metropolitan Assembly and its eight adjoining districts, and (ii) the Regional Development Plan for Sekondi-Takoradi Metropolitan Assembly and its six neighboring districts.

The allocation of resources to interjurisdictional schemes could support current intergovernmental transfers from the national government to create a robust system of coordination with local government. As interjurisdictional plans get formulated, their implementation should be coordinated and incentives provided for specific projects agreed by the local and national governments. Such coordination would bring together adjoining assemblies that share common problems and would benefit from pooled resources and decision making to rationalize provision of public goods and services. The proposed recommendation will also serve as a tool to help design and deliver new plans for large agglomerations (such as the Greater Accra area) and support the effective implementation of existing interjurisdictional plans.

### Complete decentralization and administrative reforms

Higher-capacity planning requires the completion of ongoing decentralization reforms to reorganize financing, establish functional mandates, and transfer human resources for service provision. Ghana has set forth an ambitious path to extend the decentralization of urban planning and service delivery management. But decentralization remains ineffective because of prevailing contradictions in the legal framework and the insufficient transfer of human resources and capital to MMDAs. Urban local governments have expanded their functional assignments, but the corresponding financing and administrative decentralization has not been completed. The result on the ground is a risk of insufficient spatial planning and infrastructure maintenance—with increased costs, coordination failures, slow response times, and incoherent spatial planning. Such failures will subject urban areas to poor service delivery, inconsistent land use, and the waste of fiscal potential.

Institutional reforms and the roll out of pending actions will be critical for addressing gaps in urban planning and spatial and land management, including staffing gaps, harmonizing and consolidating the legal and institutional framework, and systematically addressing the challenges associated with the bifurcated land market. Critical measures include: (i)

establishment of fully staffed, funded, and functional Town and Country Planning Departments in all metropolitan and municipal areas; and (ii) passage of the Land Use Bill and the new Spatial Development Framework. However, the associated gains expected from these initiatives will not take off unless guided by a clear and prioritized Action Plan. The Action Plan must receive the necessary political support at all levels of government, be supported with sufficient financing, and made subject to close oversight and enforcement led by the key actors at national and local levels.

To guide the general development of built-up areas, reduce unplanned urban expansion, and improve service delivery, the Government can consolidate and expand the MMDAs' planning and land management capacity and complete pending decentralization reforms. Possible models are the Johannesburg metro area or the design of the Seoul metro area as a global city. Effective urban land management should be linked to planning and to practical controls on development. That link is possible through improved coordination and a stricter alignment of responsibilities, functions, and oversight among the MMDAs, sector ministries, utilities, and other urban development planning agencies and actors. Already emphasized in the NUPF, such coordination should embrace all the key institutions involved in spatial planning, including the Urban Development Unit in the Ministry of Local Government and Rural Development, the Town and Country Planning Department, and the Regional Coordinating Councils.

### Further develop public-private partnerships

Currently the provision of utilities and services is governed by various institutions with little coordination. In many instances, institutional mandates overlap and the lack of MMDA capacity has constrained their coordinating role. Sanitation investments have increased but remain insufficient to meet needs; and they are still affected by insufficient coordination between actors at the national and municipal levels. The recent development in regulations guiding PPPs could potentially expand the options available for municipal financing, but will require additional technical assistance and regulatory clarification.

Yet, key constraints still persist with regard to the actual delivery of new PPPs at the MMDA level. These include: (i) limited fiscal capacity at MMDA level to secure financing of the interventions; (ii) limited technical capacity to develop, design, and manage the PPP; (iii) potentially high risks (such as payments and the bidding process), and therefore risk of lack of interest from private providers; (iv) relatively cumbersome procedures for project approval in the PPP policy framework, without specifying the role of MMDAs; and (v) limits on borrowing for MMDAs as per the current legal framework. In the coming years, it will be critical to expand the necessary technical and operational guidance to MMAs to enable them to undertake PPPs. To successfully implement PPPs, city leaders will have to consider strengthening public sector capacity, laying out the appropriate legal and sector framework, promoting rigorous planning and risk assessment through feasibility studies, ensuring transparent and competitive procurement, building strong monitoring systems, and allowing flexibility for adaptation to unpredictable events.

## 5. Conclusion

Ghana is halfway through urbanization. The first half has generated dividends in job creation, increasing human capital, reduction in poverty, and expansion of opportunities and living condition improvements for millions of Ghanaians. Ghana is one of the few countries in Africa that has been successful in harnessing these gains early on during the urbanization process. Ghana's policy makers have managed to leverage economies of scale across the urban system while keeping spatial inequalities in check.

However, to benefit even further in the second half, Ghana's policymakers need to focus on the following:

- Economic efficiency, finding new sources of productivity as productivity gains based on labor reallocation have been exhausted
- Social inclusion, where there is urgent need to enhance quality and access to basic urban services

The analytic work and consultations around the *Ghana Urbanization Review* highlight the following priorities for efficient and inclusive urbanization:

**Generate efficient land markets.** To meet the challenges of urbanization, Ghana requires stronger land use management and planning in municipal and metropolitan areas. This would need institutional reforms to formalize land markets and enforce property rights, streamline land use regulations, and coordinate land market reforms with provision of affordable housing.

**Improve connectivity within and across cities.** Transport improvements are required to connect markets, boost factor mobility, and help modernize Ghana's urban economies. This would involve increasing intermodal coordination in intercity connectivity and developing high-capacity public transport systems in large metropolitan areas.

**Improve financing and fiscal mechanisms.** To address the infrastructure gap and increase access to service in urban areas, Ghana must rationalize its intergovernmental fiscal framework, exploit the unharnessed revenue potentials in its cities, and expand the use of new models for financing.

Enhance institutions and coordination for improved service delivery and spatial management. Ghana's large cities require effective coordination to reduce fringe land requirements, reduce the cost of infrastructure and services provision, make land readily available to developers, and improve the provision of services and revenue collection.

### Notes

- <sup>1</sup> These calculations rely on a three-sector breakdown of Ghana's economy into primary, secondary, and tertiary, to enable a calculation of the cross-sector labor reallocation contribution to growth, following World Bank (1997). The "TFP" residual excludes productivity gains from labor reallocation, but it still includes the productivity gains from capital reallocation (see Box 2). Capital is calculated using a perpetual inventory method ( $K_t = (1 \delta) \cdot K_{t-1} + I_t$ ), assuming initial capital in 1982 equal to I/(g+ $\delta$ ). Labor shares across sectors are set at 0.7. Human capital is calculated based on years of schooling data from Barro and Lee (2010), following Hall and Jones (1999) and Psacharopoulos (1994).
- <sup>2</sup> The number remains largely the same in 2012. Nationwide, 64.4 percent of the workforce commuted to the workplace on foot. There has been increase in the number of people using public taxis to get to work but most urban travelers also suffer from high congestion (31 percent in Greater Accra) and poor quality of roads (50 percent) as key transportation problems.
- <sup>3</sup> Small towns, such as class 7 urban centers (10.1p points percent) and other district centers (10.9p points percent), experienced improvements in access to pipe-borne water within the decade.
- <sup>4</sup> Karley (2008: 10), adjusted for 2010 values and assuming one-third of income as housing payments.
- <sup>5</sup> GH¢ 50,000 to GH¢500,000, equivalent to US\$2 to US\$500.
- <sup>6</sup> http://www.doingbusiness.org/rankings.
- <sup>7</sup> NUPF and its Action Plan and in fulfillment of the call for adjoining districts to cooperate in planning under provisions of Act 480. A detailed proposal for this reform has been laid out in the Ghana Urbanization Review Phase 2 with focus on Interjurisdictional Coordination and Metropolitan Management.

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