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African urban futures

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Summary

Africa's future is urban, as cities and towns will increasingly shape how people live on the continent. By 2030 Africa will host six of the world's 41 megacities. The urban transition has the potential to accelerate economic and social development, but the structural hurdles are huge. Africa's urban population boom is happening in a context of slow structural transformation, poverty, inequality and urban violence. For Africa to seize the opportunity to build sustainable urban futures for its population, urban governance needs to improve. Megacities are central to national economic performance and should be at the forefront of any governance agenda.

AFRICA'S FUTURE IS urban. Cities and towns will increasingly shape the lives of people living on the continent. The current speed of Africa's urbanisation is unprecedented in history. For some it is the 'single most important transformation' that is happening on the continent. Since the mid-1990s Africa's urban population has almost doubled in size, and in less than 20 years from now one out of every two people in Africa is likely to live in an urban area. But can Africa's urban development keep pace with such rapid and dramatic population increases?

Sustainable urban development is now at the top of the global and African development agendas, such as the United Nations (UN) Sustainable Development Goals (SDGs)² the African Union (AU) Agenda 2063³ and UN-Habitat's African Urban Agenda.⁴ This promises new impetus for much-needed urban investment, and national policy agendas increasingly acknowledge the potential of cities for positive change. Multilateral organisations, the private sector as well as communities are important stakeholders in urban development initiatives.

Africa's urbanisation comes with great transformative potential, but the structural hurdles are equally huge. Historically, cities tend to be engines of economic growth,

innovation and productivity. Yet in Africa urbanisation is happening in a context of slow structural transformation, pervasive urban poverty and inequalities that compromise sustainable urban futures.

Most of Africa's urban residents live in informal settlements or slums, lack access to basic services, face precarious employment conditions and are vulnerable to various forms of urban violence. Global climate and environmental changes, and pressure from water, food and energy insecurities, compound the challenges for human development and the complexities of contemporary urban governance on the continent.⁵

In Africa urbanisation is happening in a context of slow structural transformation and pervasive urban poverty that compromise sustainable urban futures

To ensure that urbanisation translates into sustainable human development outcomes, Africa needs far better urban planning and innovative solutions that are tailored to its diverse urban realities.

This paper frames the future of Africa's urban transition. It looks at continental and regional long-term futures, ⁶ the drivers of urbanisation and the relationship between urbanisation and economic development. It identifies the continent's current and emerging megacities and forecasts likely population numbers for Cairo, Lagos, Kinshasa, Johannesburg, Luanda and Dar es Salaam over the coming decades.

The paper then discusses key urban challenges for these cities and respective countries, with a focus on exclusion, inequality and urban violence, and points to potential pathways to more sustainable urban futures for Africa. The majority of Africa's urban population do not live in a megacity but in smaller cities and towns. Yet most of Africa's largest cities are home to a significant share of the national population. They are likely to absorb most of the additional urban residents in the future⁷ and are key to the performance of national economies.⁸

International Futures (IFs) is large-scale, long-term, highly integrated modelling software housed at the Frederick S. Pardee Center for International Futures at the Josef Korbel School of International Studies at the University of Denver. The IFs model forecasts hundreds of variables for 186 countries to the year 2100 using more than 3 600 historical series and sophisticated algorithms based on insights found in academic literature and the project's own statistical analysis. The IFs software consists of 11 main modules: population, economics, energy, agriculture, infrastructure, health, education, socio-political, international political, technology and the environment. Each module is tightly connected with the other modules, creating dynamic relationships among variables across the entire system.⁹

BY 2050 CLOSE TO

70%

OF HUMANITY IS EXPECTED TO LIVE IN CITIES AND TOWNS

Africa's urban transition

General trends

Currently, more than half of the world's population lives in urban areas, ¹⁰ generating approximately 80% of global gross domestic product (GDP). ¹¹ By 2050 close to 70% of humanity is expected to live in cities and towns. Most urban growth is happening and will continue to happen in the less developed regions of the world, i.e. Asia and Africa. By 2050 over half of the world's urban population is expected to live in Asia and over one-fifth in Africa, ¹² and Africa's urban population is likely to have almost tripled compared to current levels.

In 2016 the continent has had the world's fastest annual average urban population growth rate¹³ at approximately 3.9%. Historical evidence shows that as levels of urbanisation increase, urban population growth rates slow down. Yet by 2040 Africa's urban population is still expected to grow at an average annual rate of almost 3%, while in 2050 this is likely to have dropped to 2.4%.¹⁴

By 2050 over 70% of West Africans are likely to live in urban areas – on par with the expected global situation in 2050

As Figure 1 shows, by 2035 half of Africa's people are likely to reside in towns and cities – matching the current global situation. Today, approximately 488 million Africans live in cities, and in 2050 it could be close to 1.4 billion people or 58% of the continent's population. Rapid and sustained urban population growth is bound to be a challenge to the provision of land, finance, infrastructure and other critical services, not least because of the massive backlogs that exist already.

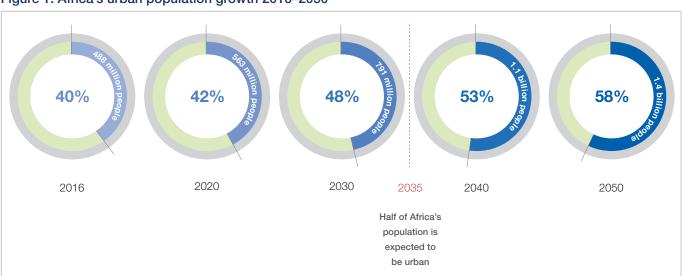


Figure 1: Africa's urban population growth 2016–2050

Source: United Nations World Urbanization Prospects, IFs version 7.22.

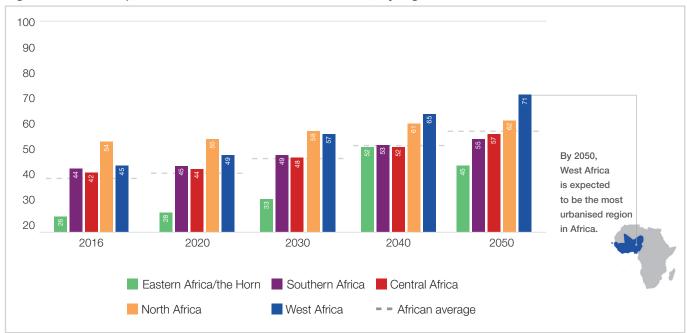


Figure 2: Africa's expected levels of urbanisation 2016-2050, by region

Source: United Nations World Urbanization Prospects, IFs version 7.22.

The current and expected level of urbanisation of Africa's regions differs considerably, as illustrated in Figure 2. Higher levels of urbanisation tend to go with lower urban population growth rates. Currently, North Africa is Africa's most urbanised region, showing the lowest annual average population growth rates. West Africa, the continent's second most urbanised region, has much higher urban population growth rates (4.5% in 2016 and forecasted 2.5% in 2050) and is set to overtake North Africa by 2032 as the continent's most urbanised region. By 2050 over 70% of West Africans are likely to live in urban areas – on par with the expected global situation in 2050. Central and Southern Africa are forecast to cross the 50% urban population threshold by around 2034, with Central Africa leading the transition, while Eastern Africa/the Horn is the only region in which the majority of the population is likely to still live in rural areas by 2050.

At the same time, Eastern Africa/the Horn has the highest current and forecasted annual average urban population growth rate (4.5% in 2016 and 3% in 2050). In the longer term, urban population growth rates are set to decline for all of Africa's regions, but it remains uncertain how fast this will happen.

In contrast to other parts of the developing world, where rural population numbers are shrinking, the number of Africans living in rural areas is set to increase in the medium and even long-term future. Nevertheless, the share of the rural population relative to the overall population will decrease because urban population growth is outpacing rural population growth. In highly urbanised countries such as Egypt or Tunisia the number of people living in rural areas is not expected to increase in the future.¹⁵



TO LIVE IN RURAL AREAS
IN AFRICA IN 2030, UP
FROM OVER

720 million

IN 2016

The early stages of the demographic transition typically go hand in hand with a 'youth bulge';¹¹⁶ an increase in the proportion of young people aged between 15 and 29 years in the total adult population.¹¹ Young people are generally more prone to migrate to urban areas.¹¹ This boosts the proportion of the working-age population in cities and potentially adds economic dynamism. At the same time it increases the pressure on cities in multiple ways, in particular on employment but also on service provision and political participation. The exclusion and marginalisation of urban youth can also increase the risk of urban violence (see below).

Absolute numbers versus levels of urbanisation

In 2016 approximately 92 million people are living in Nigeria's urban areas. No other country in Africa has more urban residents. Nigeria is followed by (in order) Egypt, South Africa, the Democratic Republic of the Congo (DRC), Algeria and Ethiopia. Nigeria is likely to remain at the top of this list out to 2050, when 308 billion people are expected to populate the country's cities and towns. By 2030 54 million residents of the DRC are forecast to live in urban areas, making the DRC the country with the second largest urban population on the continent. Ethiopia is set to have ascended to third place by 2040, while Tanzania is showing particularly fast rates of urban population growth. The country is on a path to become the fourth most populous African country in terms of urban dwellers by 2050.

Figure 3: Top 10 countries in Africa by urban population (million people), 2016–2050

Rank	2016	2020	2030	2040	2050
1	Nigeria	Nigeria	Nigeria	Nigeria	Nigeria
	92	111	171	247	327
2	Egypt	Egypt	DRC	DRC	DRC
	37	40	54	76	100
3	South Africa	South Africa	South Africa	Ethiopia	Ethiopia
	36	40	47	59	84
4	DRC	DRC	Egypt	South Africa	Tanzania
4	32	37	46	53	70
5	Algeria	Algeria	Algeria	Egypt	Egypt
	30	33	41	52	59
6	Morocco	Ethiopia	Ethiopia	Tanzania	South Africa
0	21	25	39	50	57
7	Ethiopia	Morocco	Tanzania	Algeria	Algeria
1	20	22	33	48	51
8	Tanzania	Tanzania	Morocco	Kenya	Kenya
	17	21	26	32	44
9	Ghana	Ghana	Ghana	Ghana	Angola
	15	18	25	31	42
10	Sudan	Cameroon	Kenya	Angola	Ghana
10	14	15	22	30	39

Source: United Nations World Urbanization Prospects, IFs version 7.22.

African countries are incredibly diverse in terms of levels of urbanisation, i.e. the percentage of people living in urban areas. Currently, almost 90% of Gabon's population lives in urban areas while hardly 12% of Burundians live in an urban area. In 2016 almost one in two Nigerians live in a town or a city, and by 2040 it could be three out of four. In 2016 the most urbanised countries on the continent are Gabon and Djibouti, followed by Libya, Algeria, São Tomé and Príncipe, the Republic of Congo, South Africa and Tunisia (in this order). ¹⁹ In these countries a minimum of two-thirds of the population lives in urban areas, a percentage well above the current African average of around 40% as well as today's global average of around 54%. This picture is unlikely to change much by 2050.

Drivers of Africa's urban transition

Globally, Africa remains the least urban continent. Urbanisation took off late due to sustained low levels of food surplus and high disease constraints that resulted in high mortality rates.²⁰ Over time, technological and institutional changes were introduced, access to surplus food supplies improved and life expectancy in urban areas increased while fertility rates remained high, leading to an urban population boom.²¹

Natural urban population growth – the predominance of births over deaths – is the single most important driver of Africa's rapid urban population growth. ²² On average this natural increase is estimated to account for at least 60% of urban population growth, although the numbers vary across countries. There is uncertainty about how fast fertility rates are likely to decline in Africa's urban spaces compared to the national average and compared to other world regions.

Natural urban population growth – the predominance of births over deaths – is the single most important driver of Africa's rapid urban population growth

People migrating from rural to urban areas further drive urbanisation, but in most African countries rural—urban migration accounted for less than a third of urban population growth between 2010 and 2015.²³ Again, there is significant crosscountry variation, and in South Africa, Rwanda and Namibia, for example, rural to urban migration accounts for more than half of the country's urban population growth. Finally, cross-border inward migration, as well as the annexation and reclassification of previously rural areas as urban areas, also contributes to urban population growth.²⁴

In contrast to Latin America, Africans do not necessarily expect better employment opportunities from migrating to urban areas. The main factors that push Africans to move to cities are dissatisfaction with public services in rural areas, changing weather patterns, land pressures, natural disasters and conflict.²⁵

In Nigeria, for example, since 2009 the Boko Haram insurgency in the northeast has displaced an estimated 1.5 million people, and the city population of

1.5 million

THE ESTIMATED NUMBER OF PEOPLE DISPLACED BY THE BOKO HARAM INSURGENCY IN NORTH-EASTERN NIGERIA SINCE 2009 Maiduguri may have more than doubled to 2 million due to the influx of internally displaced people.²⁶

Every country and every city or town is different when it comes to the main drivers of urban population growth, with important implications for urban planning and policymaking. To ease urban demographic pressure that stems from natural population growth, targeting fertility decline via family planning initiatives is the only valid short-term option for policymakers.²⁷ In the medium to longer term, improving female secondary education and healthcare also contributes to reducing fertility rates.

Whatever peoples' motives are to move to cities, more people will increase the pressure on existing infrastructure, the job market, service provision, housing and the environment.

Urbanisation and economic development

Africa's urban transition has long been viewed through the prism of what happened in the industrialised West, where cities followed factories. This has led to many enquiries about the 'urbanisation without growth' question or why, unlike in the West, in Africa the correlation between urbanisation and structural transformation and economic development is weak.²⁸ Yet, recent research suggests that the sub-Saharan experience of urbanisation without growth is not a historical anomaly but follows global patterns of urbanisation.²⁹

Africa's urban transition is in essence a demographic rather than an economic phenomenon or a 'by-product of economic development'.30 Fox argues that, after 1945, 'significant gains in life expectancy and increased access to surplus food supplies progressed more rapidly than economic development in sub-Saharan Africa' and that '[e]conomic development appears to be a sufficient but unnecessary condition for urbanization to occur'.31

In short: economic development has positive effects on urbanisation dynamics but urbanisation can and does happen in contexts of low growth and/or low income levels. At approximately US\$776 (2011),32 the DRC's GDP per capita is among the lowest in sub-Saharan Africa. Yet the country's current level of urbanisation is in line with the African average. Countries such as Angola and Nigeria are urbanising rapidly despite the lack of industrialisation. In comparison with other world regions, Africa's level of urbanisation is high relative to the continent's income level.33

In fact, urbanisation is not synonymous with structural transformation or economic development.³⁴ Figure 4 shows that in sub-Saharan Africa the variation in the level of urbanisation can only partially explain variations in the level of economic development measured in GDP per capita.

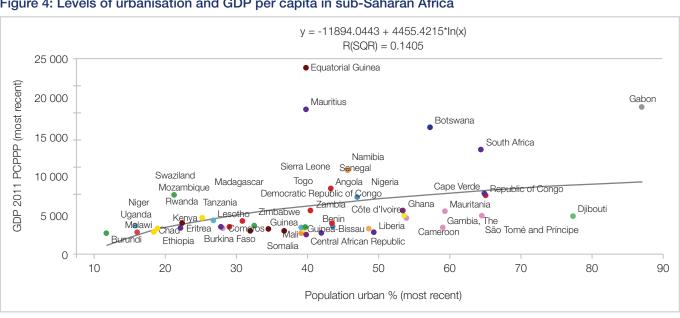


Figure 4: Levels of urbanisation and GDP per capita in sub-Saharan Africa

Source: World Development Indicators, United Nations World Urbanization Prospects, IFs version 7.22.

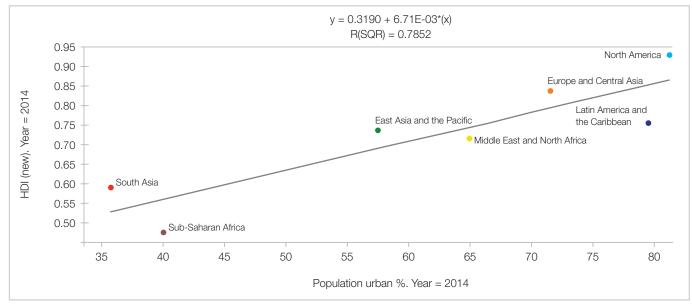


Figure 5: Levels of urbanisation and levels of human development globally

Source: UNDP Human Development Index (HDI) data, United Nations World Urbanization Prospects Urban population data, IFs version 7.22.

Having said this, globally there is a correlation between urbanisation rates and national levels of human development, 35 with higher levels of urbanisation generally corresponding to higher levels of human development and vice versa. 36

The African Economic Outlook 2016 goes as far as arguing that in sub-Saharan Africa, rapid urban population growth 'has compounded the consequences of slow structural transformation',³⁷ with structural transformation understood as the process of moving economic resources from low to higher productivity activities.

Providing productive employment opportunities for a growing urban workforce is key to promoting less unequal and therefore more sustainable urban futures

In Nigeria sustained economic growth over the last decade has not translated into tangible improvements in the standard of living of most Nigerians, in particular the poor. One key reason for this outcome is that the urban economy has not created sufficient jobs. Besides that, growth largely occurred in sectors with little connection to the poor, such as oil production. Gollin et al. also note that an 'income boost from resource exports makes cities richer, but it does not appear to translate into improved quality of life to the same degree that an income boost through industrialization would provide'. Ho

In many of Africa's urban economies, the majority of people are employed in informal low-wage and low-productivity jobs, which automatically translate in lower tax revenues. This is especially true for resource-exporting countries

 such as Nigeria or Angola, where the link between urbanisation and the development of manufacturing and services is weak. A Reliable city-level data is scarce but according to National Bureau of Statistics data, informal workers represent 53% of Nigeria's active labour force. A World Bank study estimates that the share of informal workers could account for over 80% of the country's work force. A In South Africa, a much more diversified economy, less than a third of the labour force works in the informal sector, a figure that is expected to drop to 15% by 2040.

In the longer term, urbanisation is expected to promote human development, but not necessarily for all. Growth that does not benefit the poor is likely to exacerbate existing inequalities. Providing productive employment opportunities for a growing urban workforce is key to promoting less unequal and therefore more sustainable urban futures. The issue of low-wage jobs is directly connected to the challenge of providing services for all from a small tax base and when most households are limited in their ability to pay for services. ⁴⁴ Freire et al. summarise that '[i]f urbanisation occurs without a corresponding increase in economic opportunities and services, the resulting cities will be characterised by concentrations of relatively richer people purchasing low-level services from those migrating to cities, [with] slums and concentrations of basic infrastructure services catering to the higher income parts of the city'. ⁴⁵

Africa's current and emerging megacities

Megacities, defined as cities with more than 10 million inhabitants, stand out because of their size and concentration of economic activity. Their defining features, such as demographic size, density and socio-economic diversity, lie at the heart of their dynamism. Most of the world's current and emerging megacities are in Asia. Currently, only three of the world's 29 megacities are African cities: Cairo in Egypt, Lagos in Nigeria and Kinshasa in the DRC. Also, city size is no longer a 'robust indicator of city-level living standards', as today's current and emerging megacities are much less likely to be rich compared to their counterparts in the developed world.

Africa's current and emerging megacities are Cairo, Lagos, Kinshasa, Johannesburg, Luanda and Dar es Salaam

Three more African megacities are set to emerge by 2030, as Dar es Salaam in Tanzania, Johannesburg in South Africa and Luanda in Angola are each expected to surpass the 10 million inhabitants threshold by then. Globally, by 2030 13 new megacities are expected to emerge in the less developed regions.⁴⁹ In fact, by 2025 both Cairo and Lagos are set to be meta- or hyper cities surpassing the 20 million mark, with Kinshasa expected to approach the 20 million mark around 2030.⁵⁰

BY 2025 LAGOS AND CAIRO ARE EXPECTED TO HAVE OVER

20 million

INHABITANTS EACH

Figure 6 shows a map of Africa's current and emerging megacities and large cities in 2014 and 2030.

By 2040 Abidjan in Côte d'Ivoire and Nairobi in Kenya are also expected to be megacities, and by 2050 six additional megacities are set to emerge: Ouagadougou in Burkina Faso, Addis Ababa in Ethiopia, Bamako in Mali, Dakar in Senegal and Ibadan and Kano, both in Nigeria. By 2050 Africa is likely to have 14 megacities; almost five times as many as today. Three of these megacities will be in Nigeria, the country with the largest current and expected future urban population in Africa.

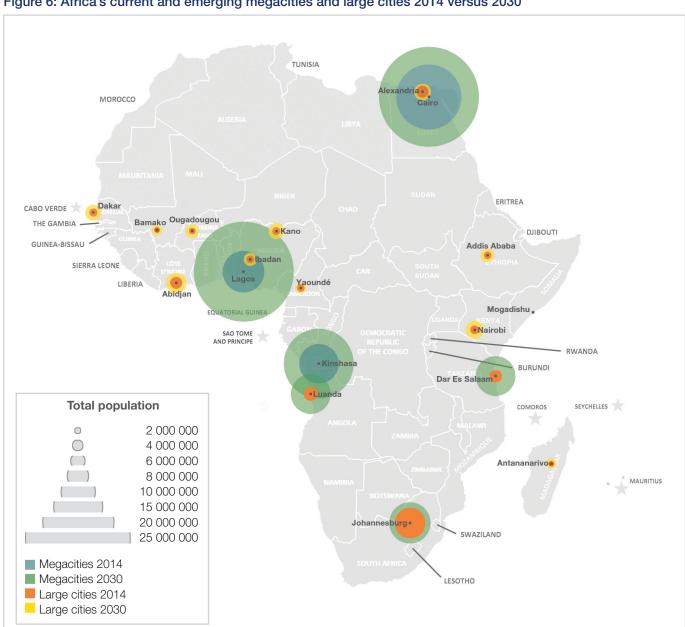


Figure 6: Africa's current and emerging megacities and large cities 2014 versus 2030

Source: City population data/estimates from UN DESA, urban population growth rates calculated by IFs version 7.22 and based on World Development Indicators.

With an estimated population of over 19 million people in 2016, Cairo is currently Africa's biggest megacity. By 2030 24.5 million people are expected to live in Cairo, and by 2040 it could be as many as 28 million. Cairo is followed by Lagos, and by 2035 Lagos is set to be Africa's top megacity with potentially 30 million inhabitants. By 2040 Kinshasa and Cairo are expected to compete for rank two amongst Africa's megacities. With a likely population of over 13 million and over 16 million people in 2035 and 2040 respectively, Dar es Salaam is set to emerge as Africa's fourth biggest megacity in the medium-term future, closely followed by Luanda and Johannesburg.

Between 2014 and 2030 Lagos could on average add over 700 000 people every year, more than three times as many as New York during the 1920s

Figure 7 shows the expected population size of Africa's current and emerging megacities in 2014, 2030 and 2050.

Megacities in Africa (and in the developing world more generally) are growing at absolute rates unprecedented in history. Between 2014 and 2030 Lagos would on average add over 700 000 people every year, more than three times as many as New York during the 1920s and more than eight times as many as London during the 1890s, when the city experienced the fastest change in its population yet.⁵¹

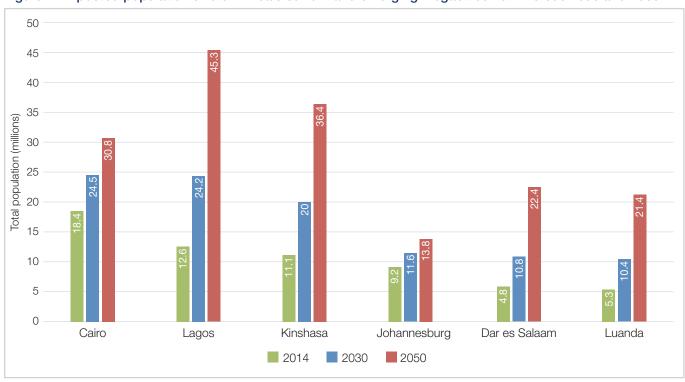


Figure 7: Expected population size of Africa's current and emerging megacities 2014 versus 2030 and 2050

Source: City population data/estimates from UN DESA, urban population growth rates calculated by IFs version 7.22 and based on World Development Indicators.

Table 1 sets out the 2014 baseline data and forecasted population numbers for Africa's current and future megacities to 2050.

Table 1: Expected population size of Africa's current and emerging megacities (million people), 2014–2050

City	2014	2030	2035	2040	2045	2050
Cairo	18.4	24.5	26.1	27.7	29.2	30.8
Lagos	12.6	24.2	29.3	34.7	40.2	45.4
Kinshasa	11.1	20	23.8	27.8	32.1	36.4
Johannesburg	9.2	11.6	12.3	13	13.4	13.8
Dar es Salaam	4.8	10.8	13.2	16	19.1	22.4
Luanda	5.3	10.4	12.8	15.5	18.4	21.4
Abidjan	4.9	7.8	9	10.2	11.6	12.8
Nairobi	3.9	7.1	8.6	10.2	11.9	13.7
Kano	3.6	6.2	7.5	8.8	10.3	11.6
Ouagadougou	2.4	5.9	7.2	8.8	10.6	12.5
Addis Ababa	3.2	5.9	7.3	8.9	10.7	12.6
Bamako	2.5	5.2	6.4	7.8	9.3	10.8
Dakar	3.5	6	7	8	9.1	10.2
Ibadan	3.1	5.5	6.6	7.9	9.1	10.3

Source: City population data/estimates from UN DESA, urban population growth rates calculated by IFs version 7.22 and based on World Development Indicators. Bold denotes when cities pass the megacity/10 million inhabitant threshold.

The number of large African cities with between 5 and 10 million residents is also expected to increase, from three in 2014 to 11 in 2030, and the number of medium-sized cities with between 1 and 5 million people is likely to increase from 50 to 75 during the same time period. 52

Africa's future large cities are predominantly clustered around the continent's West Coast. To a great extent this reflects the spatial legacy of European colonialism, under which many cities were sites of extraction. Urbanisation is 'the central spatial feature in Western Africa's development pattern' with urban settlements along West Africa's coastline increasing in density and interconnectedness.⁵³

City population growth rates

Africa's large cities tend to display higher annual rates of growth than its current and emerging megacities. Between 2015 and 2020 Ouagadougou and Bamako, for example, are expected to grow extraordinarily fast: at an average annual growth rate of over 5%. Yaoundé, Nairobi and Antananarivo



THE NUMBER OF PEOPLE THAT LAGOS WOULD ON AVERAGE ADD PER DAY BETWEEN 2014 AND 2030 are also likely to grow very fast, at above 4%. While the expectation is for average urban growth rates to decline over time, the data shows that some of these large cities are likely to grow even faster in the medium-term future (2020–2025), indicating that they are in fact at a relatively early stage in the demographic transition. This is true for Ibadan, Kano and Addis Ababa. Between 2025 and 2030 Bamako, Addis Ababa and Ouagadougou (from high to low) are likely to show the highest annual average urban population growth rates, all above 4%.

Table 2: Average annual population growth rate per large city, estimates and projections 2015–2030

City	2015–2020	2020–2025	2025–2030
Ouagadougou	5.97	4.95	4.25
Bamako	5.25	4.89	4.51
Antananarivo	4.73	4.45	4.11
Yaoundé	4.08	3.35	2.98
Nairobi	4.04	4.06	3.92
Dakar	3.75	3.66	3.41
Abidjan	3.36	3.15	2.88
Ibadan	3.13	4.08	3.86
Addis Ababa	3.09	4.36	4.39
Kano	3.02	4.06	3.86
Alexandria	1.79	1.86	1.93

Source: World Urbanization Prospects (WUP) report, 2014: 320.

It is not clear which category of cities is likely to absorb the largest portion of Africa's growing urban population in the future. The World Urbanization Prospects report argues that while in the period between 1990 and 2014 the highest growth was experienced by medium-sized cities, in the future Africa's large and megacities are expected to absorb most of the additional urban residents. By 2030 almost one out of four Africans are likely to live in an African megacity or a large city, and more than 40% of Africa's population is expected to live in a megacity, a large or a medium-sized city. So

In 2015, more than half of Egypt's population lived in Cairo. More than a third of the DRC's population lived

in Kinshasa and more than a quarter of South Africans resided in Johannesburg. These figures are unlikely to change much in the near and medium-term future. With around 15% of Nigerians living in Lagos in 2015, Africa's largest city-to-be concentrates a relatively small share of the national population.

City economies

Large cities play a key role in economic development due to economies of scale in production, large markets for labour and goods, and the ease of information flows, which can fuel productivity and innovation.

Countries and megacities vary in terms of their geostrategic location, resource endowment, economic footprint, physical and institutional infrastructure, energy supply problems, population structure, regulatory quality and investment climate, as well as the education and skill levels of their citizens and their environmental vulnerability. These factors all have an impact on the economic performance and growth potential of cities.

Large cities can boost economic development due to economies of scale, large markets, and the ease of information flows

The countries that are home to Africa's current and emerging megacities are each at different stages of demographic transition, urbanisation and the structural transformation of their economies. South Africa and Egypt are most advanced in the three processes with relatively high rates of urbanisation, fertility rates close to replacement rate and relatively diversified economies. The key challenge for both is to 'increase both productivity and economic complexity, as they have not yet been able to transition to sophisticated manufacturing'.56 The value added by South Africa's manufacturing sector as a proportion of GDP has been decreasing since 2014, when it was just over 22%, a trend that is expected to hold in the medium- to long-term future. Egypt's economy - coming from a similar base - is likely to see an increase in the value add from manufacturing.⁵⁷

Angola, Nigeria and the DRC are natural resourcebased economies that have urbanised 'with windfalls

from natural resources, which have attracted labour out of agriculture'. The diversification of the economy away from natural resources remains its key challenge; even more so in light of the slash in global commodity prices and associated revenue losses. Economic diversification is also driven by investments in Research and Development (R&D), but largely unfavourable terms of trade make it difficult for African countries to fund investments in R&D.⁵⁸ Tanzania is a 'late urbaniser', as it has embarked on its urbanisation, fertility transition and structural transformation more recently. Key challenges are to improve physical infrastructure, expand the manufacturing base of the economy and boost higher value services.⁵⁹

Africa's megacity economies dominate national economies in terms of their contribution to the national income. In 2014 Cairo is said to have contributed 34% to Egypt's economy. Cairo is Egypt's hub for business services as well as trade and tourism, and has a large pool of highly skilled employees compared to the rest of the country. However, Cairo's labour productivity advantage is offset by low labour force participation. Moreover, political instability during and after the Arab Spring weakened the city's economy.⁶⁰

Africa's megacity economies dominate national economies in terms of their contribution to the national income

Lagos is the commercial capital of Nigeria. In 2015 Lagos state's economy was estimated at US\$131 billion, which accounts for between 20–25% of Nigeria's GDP⁶¹ – it would be the fifth biggest economy in Africa if it were a country. ⁶² Lagos state is also the most self-reliant state in Nigeria, with approximately two-thirds of revenue generated from internal sources rather than oil or federal budget allocations. ⁶³ This makes Lagos more resilient to fluctuations in the oil price, yet it remains very vulnerable to 'deteriorating investor sentiment' and currency depreciation. ⁶⁴ Moreover, the levels of income inequality are high, which compromises economic development in the longer term. The Lagos State Development Plan 2025 identified four key areas for economic growth: infrastructure, social development, security and the environment. ⁶⁵ Lagos has great potential for innovation and job creation in sectors such as construction, information and communications technology, and retail trade. ⁶⁶

Even though Lagos's economy is more diversified than that of other states in Nigeria, it appears to be an example of what Gollin et al. call 'consumption cities' as opposed to 'production cities'. Consumption cities, characteristic of resource-exporting economies, feature 'a larger fraction of workers in non-tradable services such as commerce and transportation or personal and government services', whereas 'production cities' rely more heavily on manufacturing or tradable services in industrialised countries.⁶⁷

Johannesburg is South Africa's financial centre. The city is part of the Gauteng city-region, the largest metropolitan economy in the country, which consists

34%

THE AMOUNT CAIRO IS SAID TO HAVE CONTRIBUTED TO EGYPT'S ECONOMY IN 2014 of an integrated cluster of cities, towns and urban nodes. In 2013 Gauteng province accounted for more than a third of South Africa's national GDP in current prices, and the Gauteng city-region is estimated to have contributed up to 45% of the country's total economic output. 68 Gauteng's economy is dominated by tertiary industries, including finance, real estate and the business services sector. 69 On the downside, high levels of poverty, income inequality and unemployment are some of its main challenges.

In 2015 PricewaterhouseCoopers ranked 20 of Africa's large and megacities according to their levels of development, measured across the categories of infrastructure, human capital, economics, society and demographics. Overall, Cairo stood out as Africa's most advanced city, mainly due to its better infrastructure but also because it scored high on a series of economic variables. Johannesburg ranked third, Lagos eighth and Dar es Salaam 15th, while Kinshasa and Luanda are at the very bottom of the ranking (19 and 20 respectively). Cairo also happens to be Africa's bestconnected city with more than 70% of its firms operating in internationally traded and non-tradable sectors.⁷⁰ Looking at cities' future potential rather than their baseline, however, both Dar es Salaam and Lagos move to the top of the ranking: Dar es Salaam due to its high real GDP growth potential and Lagos because of its attractiveness for foreign direct investment, as well as the growth potential of the city's middle class. Cairo, in contrast, drops to 10th place.⁷¹

According to a study carried out by Oxford Economics, 72 the five biggest city economies by GDP in Africa in 2030 are expected to be Johannesburg, Cairo, Luanda, Lagos and Cape Town (in this order). Together they are set to generate a combined GDP of US\$651 billion, which would reflect an increase of US\$374 billion compared to 2013. With the exception of Kinshasa's economy, which lags far behind, this is consistent with the megacity map. Cape Town is not a megacity, which indicates that it is not necessarily population or territorial size that matters most but 'economic weight, proximity to zones of growth, political stability and attractiveness for foreign capital'.73

In this context, the McKinsey Global Institute suggests that the large cities or the so-called middleweights,⁷⁴

rather than the megacities, are set to drive global economic growth in the future. Yet only 15 African cities feature among the McKinsey 600 cities of the future that are expected to account for nearly 65% of global growth: Casablanca in Morocco; Lagos and Port Harcourt in Nigeria; Luanda and Huambo in Angola; Cape Town, Ekurhuleni (East Rand), Johannesburg, Pretoria and Durban in South Africa; Khartoum in Sudan; Alexandria and Cairo in Egypt; Algiers in Algeria; and Kumasi and Accra in Ghana. With the exception of Kinshasa and Dar es Salaam, all the current and emerging megacities are included in this list.

All six countries have large youth bulges that will boost their working age populations particularly in urban areas

Yet growth alone is not enough. Economic growth in contexts of high inequality negatively affects poverty reduction and hence sustainable development. Africa has some of the world's most unequal cities. Johannesburg's income distribution as measured by the Gini coefficient⁷⁵ is 0.75 (in line with the national figure of 0.76), with the average income of the bottom 10% of households over 300 times lower than the average income of the richest 10%.76 The Gauteng City-Region Observatory notes that the legacy of apartheid still negatively affects economic activity, limiting 'the opportunities for new market entrants, especially young work-seekers' and resulting in 'a quality of life for some that matches, and often exceeds, that enjoyed by residents of developed world cities, but high levels of frustration and marginalisation for many others'.77 Income distribution in Lagos is also very unequal with a Gini coefficient of 0.64, above Nigeria's overall value of 0.54. Kinshasa and Dar es Salaam have lower levels of income inequality (Gini values of 0.39 and 0.32 respectively).78

All six countries have large youth bulges that in the future will translate into a significant increase in their working age populations, in particular in urban areas. ⁷⁹ But these additional workers need jobs, and Africa's youth is vulnerable to unemployment. In South Africa, for instance, more than half of the country's youth is unemployed versus about a quarter of the overall population. ⁸⁰ Also,

generally speaking, unemployment is more prevalent among young people who live in urban areas.⁸¹

Unemployment statistics for Africa are problematic for two main reasons. First, quality data on unemployment is rare. Second, often it misses the point. On average, up to 60% of the urban job market in sub-Saharan Africa is estimated to be informal. ⁸² Usually that means that people work but under precarious conditions. In Africa young people, particularly women, are more likely to work in the informal sector than older adults. ⁸³

In Africa rapid population growth is happening in the context of slow structural economic transformation, poverty and inequalities

The African Economic Outlook argues that in Africa, 'the steady economic growth and rapid urbanisation of the last decade and a half have not been matched by proportional formal employment creation' but contributed to a growing informal sector.⁸⁴ Policymakers need to find ways to work with the informal sector, which can achieve high productivity via local economies of scale and eventually transition to formality. Securing property rights, enforce regulations and plan better for urban growth are important conditions for this to happen.⁸⁵

(Income) inequality and unemployment, in particular among young people, are closely connected to the issue of urban poverty. All current and emerging African megacities face challenges in this regard. Socio-economic inequalities and exclusion pose a threat to long-term stability and prosperity.

Challenges

The urban transition has the potential to contribute to sustainable development in countries across the continent.

However, in Africa rapid population growth is happening in the context of slow structural economic transformation, pervasive poverty, sharp inequalities, widespread socio-economic and spatial exclusion and environmental degradation. These conditions are a drag on economic development and compromise the potential future gains of the urban transition. They underlie most of Africa's urban ills, such as the proliferation of slums and informal settlements, urban violence, the lack of employment opportunities, inadequate infrastructure and service provision, and in particular access to reliable electricity and improved water and sanitation, to name a few. External pressures that stem from climate change and its direct and indirect impacts on cities, including food security, compound the challenges that cities face.

These challenges are linked in multiple ways. In the current global development agenda, more inclusive urbanisation or (more) inclusive cities are deemed a pre-requisite for sustainable growth and development. This section



FOOD AND HOUSING
PRICES IN SUB-SAHARAN
AFRICAN CITIES ARE 33% AND
57% HIGHER RESPECTIVELY
THAN IN OTHER
DEVELOPING COUNTRIES

takes a closer look at urban poverty, including housing, access to improved water and sanitation and electricity, and urban violence in Africa's six current and emerging megacities. Where available it compares city-level data for selected indicators.

Urban poverty

Poverty in Africa is concentrated in rural areas.⁸⁷ At the same time, the incidence of urban poverty is much higher in Africa and particularly in sub-Saharan Africa than in other world regions. According to the Multidimensional Poverty Index (MPI),⁸⁸ a composite measure of poverty headcount and deprivation intensity faced by households, Africa's urban MPI is well above the average for the sample of 54 non-African developing countries.⁸⁹

Historically, urbanisation is associated with a reduction in the overall (both urban and rural) poverty rates. However, recent data and research from the World Bank suggests that in the developing world 'the poor are urbanizing faster than the population as a whole, reflecting a lower-than-average pace of urban poverty reduction'. 90 All things being equal, more poor people are likely to populate Africa's towns and cities in the future.

All things being equal, more poor people are likely to populate Africa's towns and cities in the future

An aggravating factor is that the cost of living in urban areas tends to be higher than in rural areas, and poor urban residents often face even higher costs in terms of urban transport, clean water, waste and other services than those who are well off.⁹¹ Africa's cities are expensive for both households and businesses relative to their levels of economic development. Food and housing prices in sub-Saharan African cities, for example, are 33% and 57% higher respectively than in other developing countries.⁹²

Yet contemporary World Bank data on urban poverty indicates that in the countries in which Africa's current and emerging megacities are located, levels of urban poverty are lower than overall levels of poverty, and rural poverty levels in particular.⁹³ The urban population might also benefit more from economic growth than people

living in rural areas. In Nigeria, for example, relatively rapid GDP per capita growth between 1990 and 2013 had little impact on national poverty levels but disproportionately benefitted Lagos's poor (and the country's south more broadly). ⁹⁴ In Egypt high growth rates in the 1990s led to rising incomes for the poor in Cairo as well as in other metropolitan areas, while in rural upper Egypt they only benefitted the people who were already at the top of the income range. ⁹⁵

Generally speaking, living in a South African, Egyptian, Nigerian, Angolan or Tanzanian urban area means having a higher standard of living than living in a rural area in these countries. In South Africa more than three-quarters of the rural population is estimated to live below the national poverty line, versus around 30% of the urban population. Elikewise, in Nigeria, Angola, Tanzania and Egypt rural poverty levels are far higher than urban poverty levels, with Angola showing the greatest rural—urban poverty divide. Only in the DRC, where overall poverty levels are much higher than in the other five countries, is the share of people living below the national poverty line in urban areas almost as high as in rural areas.

Table 3: Urban poverty in selected countries: urban poverty headcount ratio based on national poverty lines

	Year	Level of urban poverty (%)	Level of rural poverty (%)
Angola	2008	18.7	58.3
DRC	2012	61.6	64.9
Egypt	2010	15.3	32.3
Nigeria	2009	34.1	52.8
South Africa	2010	39.2	77

Source: World Development Indicators: poverty rates at national poverty levels.

Being poor is synonymous with being exposed to multiple risks relating to health, livelihoods, external shocks from natural disasters and governance. Poor city residents generally lack access to basic services such as water and sanitation, and live in informal settlements or slums. The more excluded communities are from services the higher risk there is for them to persist in, or fall deeper into, poverty. This risk prevails despite the fact there

are a number of advantages to living in one of Africa's current or emerging megacities when compared to other urban and rural areas.

Recent city level data compiled by the World City Report 2016 suggests that access to improved sanitation in Lagos is better than in the average Nigerian urban area and in rural areas. Over 85% of Lagos' residents have access to improved sanitation⁹⁹ compared to close to one-third of Nigeria's overall urban population and only one-quarter of the country's rural population.¹⁰⁰

Tanzania's urban population without access to electricity is expected to increase quite dramatically – from around 8 million people in 2016 to around 13 million in 2040

In Egypt improved access to sanitation is almost universal, although rural areas do lag somewhat behind urban areas. In Kinshasa over 60% of the urban population has access to improved sanitation versus 42% of the inhabitants of Dar es Salaam. The residents of Kinshasa and Dar es Salaam enjoy better sanitation than the average city dweller or person living in a rural area in the DRC or Tanzania. The rural urban divide is particularly stark in Tanzania, where not even 10% of the rural population has access to improved sanitation.¹⁰¹

In some of Africa's current and future megacities the population also enjoys higher levels of access to improved water than the overall urban or, in particular, rural population. This is the case for Kinshasa and Dar es Salaam. In Lagos and Luanda the megacity bias does not hold, however. Fewer than 60% of Lagotians enjoy access to improved water¹⁰² compared to over 80% of Nigeria's urban population and two-thirds of the country's overall population (rural: close to 55%). Similarly, just over half of Luanda's citizens have access to improved water compared to more than two-thirds of Angola's overall urban population.¹⁰³ The data for Lagos and Luanda points to a history of severe underinvestment in improved water. After all, higher population density and economies of scales in urban areas mean that providing public services is much more cost efficient than in rural areas.¹⁰⁴ Access to improved water and sanitation is a key driver for better health outcomes.

Table 4: Households with improved water and improved sanitation in selected cities¹⁰⁵

Country	City	Year	Improved water (%)	Improved sanitation (%)
Angola	Luanda	2006	51.4	92.4
DRC	Kinshasa	2013	99.0	64.9
Egypt	Cairo	2014	100.0	100.0
Nigeria	Lagos	2013	57.2	85.6
Tanzania	Dar es Salaam	2010	86.2	42.3

Source: WCR 2016, Statistical Annex, Table B.1.

IN KINSHASA OVER



OF THE URBAN POPULATION
HAS ACCESS TO IMPROVED
SANITATION VERSUS

42%

OF THE INHABITANTS OF DAR ES SALAAM

Access to electricity rates is another indicator for development. In the selected countries electricity access rates among the urban population surpass those among the rural population. As for Africa's current and emerging megacities, rates are even higher – at or close to universal access – in Cairo, Lagos and Kinshasa.¹⁰⁶

The rural-urban divide is particularly stark in Angola, where just over 15% of the rural population is connected to the electricity grid versus over 80% of the urban population and close to 90% of Luanda's residents. ¹⁰⁷ Angola is followed by Nigeria and Tanzania. ¹⁰⁸

Looking to the future, the IFs current path forecast¹⁰⁹ tells a story of improvement for both urban and rural electricity access rates in the countries of interest (see Figure 8). In Egypt access rates are practically universal already, and Nigeria improves only marginally over the longer term.

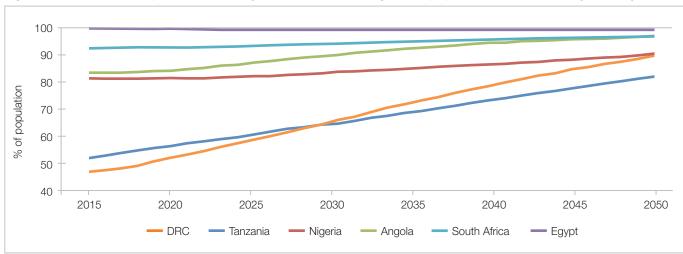


Figure 8: Current and expected electricity access rates among urban population 2013-2050, by country

Source: World Development Indicators in IFs, version 7.22.

However, higher access rates do not necessarily mean that more citizens will enjoy access to electricity in the future. On the contrary, by 2030 twice as many Nigerian city dwellers as in 2016 are expected to lack access to electricity, i.e. close to 33 million people. Similarly, Tanzania's urban population without access to electricity is expected to increase quite dramatically – from around 8 million people in 2016 to around 13 million in 2040. In both countries urban population growth is outpacing improvements in connecting urban residents to the power grid. In the case of the DRC, even though access rates are likely to improve over the longer term the number of people without access to electricity is unlikely to change much. By 2040 approximately 16 million urban residents in the DRC are expected to lack access to electricity, roughly as many as in 2016.

Yet being connected to the grid does not mean that power is supplied effectively. According to World Bank data on Nigeria, more than 30 power

outages happen in a typical month, compared to approximately 16 in Egypt, close to nine in Tanzania and on average fewer than 10 in sub-Saharan Africa. Survey data from Afrobarometer shows that Nigerians, Tanzanians and Egyptians strongly disapprove of their governments' performance when it comes to policies regarding reliable electricity supply. Chronic energy shortages compromise both human development and economic activity.

Massive investments in infrastructure are needed if Africa's cities are to match the rapid urban population growth with the provision of services. In the absence of this, existing problems risk being aggravated.

Informal settlements

Poverty directly affects peoples' housing choices. Currently, more than half (55%) of sub-Saharan Africa's urban population lives in slums. This is more than in any other major world region, although the share of sub-Saharan Africa's urban population living in slums has decreased since 1990, when more than two-thirds of people lived in slums.

In absolute numbers, the continent's slum population is growing, and urbanisation in sub-Saharan Africa has been described as 'synonymous with slum growth'. ¹¹⁶ The African Economic Outlook 2016 predicts that many African countries could see their slum population triple by 2050. ¹¹⁷ Slums are 'physical manifestations of social exclusion and marginal status'. ¹¹⁸ They are usually not on the 'service grid' and many residents must pay non-state providers that are often more expensive.

If African governments fail to invest in urban development, including urban planning and urban management, the future proliferation of slums is inevitable

But rapid urbanisation in itself does not have to lead to the proliferation of slums. Rather it is urban poverty that drives the emergence and persistence of slums in Africa's cities. Past and present underinvestment in housing and infrastructure, as well as poor or no planning, compounds the problem.¹¹⁹

The differences between the countries that host Africa's current and emerging megacities are stark. The DRC is the country with the highest percentage of its urban population living in slums: almost three-quarters, followed by Tanzania (70%), Angola (56%), Nigeria (50%), South Africa (23%) and Egypt (11%). 120 Reliable and comparable city-level data is difficult to find, but data on Lagos, for example, suggests that around half of its residents live in about 200 informal settlements spread across the city. 121

If African governments fail to invest in urban development, including urban planning and urban management, the future proliferation of slums is inevitable, and more so if urban poverty persists. In fact, new research challenges the common narrative that slums are transitional homes for rural—urban migrants

> 55%

OF SUB-SAHARAN AFRICA'S
URBAN POPULATION
CURRENTLY LIVE IN SLUMS.
THIS IS MORE THAN IN
ANY OTHER MAJOR
WORLD REGION

that leave again as they move up the income ladder. 122 Survey data from three slums in Lagos, for example, suggests that slums are 'poverty traps' rather than temporary living quarters for migrants incorporating into the urban economy'. 123 In fact, most of Africa's urban economies are unable to productively absorb the extra workers that urbanisation brings and provide them with opportunities to achieve higher standards of living.

Urban planning needs to address the problem of slums and informal settlements, as this is where most of Africa's city residents live and work. Yet there is a tendency instead to tidy up central business districts, further upgrade wealthy neighbourhoods and/or build new satellite towns. Large-scale luxury projects, often public-private partnerships such as Eko Atlantic City in Lagos, cater for the wealthy and not the poor (not to mention the questions about the new city's environmental sustainability). Such projects are likely to compound spatial segregation and existing inequalities. Inequality is a driver of violence and, in particular, crime.

Moreover, the conflict between informal settlement location and prime economic zones often results in stateled slum clearance programmes that drive large portions of the population from their homes. Zoning laws, in a similar fashion, restrict the poor from working or trading out of their homes, as they are located in areas classified as residential. In South Africa apartheid-era spatial planning and the building of dormitory suburbs that kept people far from their place of work and with a relatively low level of access to services still affects informal settlements in today's biggest South African metros.¹²⁴

Urban violence

Many of Africa's megacities and large cities face high levels of conflict fuelled by either political or criminal violence or a combination of the two. Urban violence compromises governance, citizens' safety and quality of life, and long-term economic development. Urban violence can take many forms, including armed battles between politically motivated groups, (organised) crime, protests and riots, terrorist attacks, xenophobic incidents, election-related violence, land conflict, etc.

Over the last 20 years the number of politically violent events in Africa's urban areas¹²⁶ has surpassed those in rural settings.¹²⁷ In 2015 riots and protests accounted

for almost 40% of total conflict events in Africa, a considerable increase compared to the previous year (up by almost 10%). Rioting and protesting increased significantly in more than half of African countries.¹²⁸

The relationship between urbanisation and violence is anything but clear. Recent literature suggests that rapid urban population growth is not directly linked to more violence. Pather it is 'the conditions of unplanned and underdeveloped urban spaces within African states' and 'economic stagnation, little job creation and poor governance' that can increase the risk of violence. Raleigh argues that 'the mal-distribution of public services, entrenched poverty and low growth, poor planning, rural coping mechanisms, political discrimination, and marginalization form the basis for large-scale urban poverty and increased violence'. Pather is a large-scale urban poverty and relative deprivation also drive violence, in particular crime, and relative deprivation plays a key role in radicalisation dynamics.

Urban planning needs to address the problem of slums and informal settlements where most of Africa's city residents live and work

Population density, on the other hand, could be associated with higher rates of violence. A 2007 report by UN-Habitat found a correlation between living in overcrowded settlements and engaging in violent behaviour. The youth bulge is also often associated with higher levels of (urban) violence. However, increases in violence seem to be driven by the exclusion of youth, in particular from employment opportunities but also from political participation. High levels of youth unemployment grow the pool of recruitable young men by gangs or rebel groups. In contexts in which young people are relatively well educated but marginalised economically and/or politically, the risk of violence increases. This became evident, for example, in the so-called Arab Spring uprisings in 2011.

Land is a highly contested space in urban areas.

Conflict typically arises over overlapping claims to land, land invasion, community protest over land, boundary disputes and inadequate shelter for the poor.¹³⁸

Megacities or large cities can be both strategic locations for political conflict and places of 'relative calm and security' during civil war.¹³⁹ For example, Kinshasa and Luanda were both relatively calm in the face of raging civil wars, attracting a huge influx of displaced people that fuelled rapid urban population growth.¹⁴⁰ On the other hand, cities, particularly commercial and administrative capitals often serve as the end goal or destination for civil conflict or armed battles between groups, as they are host to economic hubs, critical infrastructure, government buildings and elites' private residences.¹⁴¹

Figure 9 offers a comparative analysis of incidents of political violence in Cairo, Lagos, Kinshasa, Johannesburg/Gauteng province (including Pretoria), ¹⁴² Luanda and Dar es Salaam, based on data collected by the Armed Conflict Location Event Data Project (ACLED). ¹⁴³ Figure 10 compares the total number of riots and protests across the six cities from 1997 to 2016 and displays the frequency of incidents over time. A protest captures non-violent public demonstrations by groups and a riot refers to a violent demonstration. ¹⁴⁴

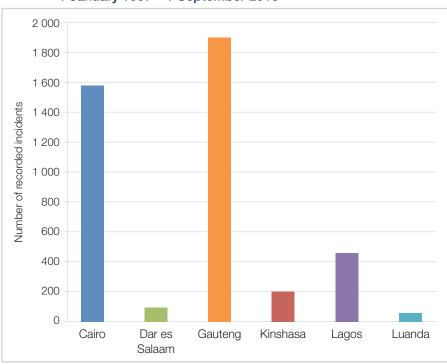


Figure 9: Total number of riot and protest events by city, 1 January 1997 – 1 September 2016

Source: ACLED Version 6, 1 January 1997 – 1 September 2016.

1900

INCIDENTS OF RIOTS AND PROTESTS TOOK PLACE IN SOUTH AFRICA'S GAUTENG PROVINCE BETWEEN 1 JANUARY 1997 AND 1 SEPTEMBER 2016 South Africa's Gauteng province (home to Johannesburg and Pretoria) stands out as the city-region where people took to the streets most often, with over 1 900 incidents between 1 January 1997 and 1 September 2016. Over time, there has been a significant increase in riots and protests. The 2009 peak corresponds to a presidential changeover as well as high levels of xenophobic violence. With around 1 600 events Cairo has the second highest number of protests and riots in the same period, the majority of which are attributable to the uprisings of 2011.

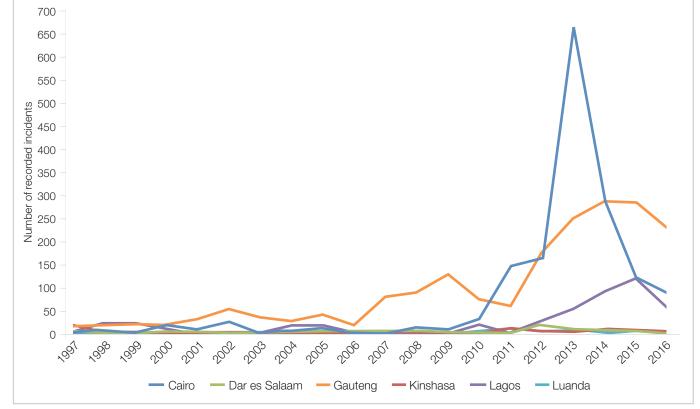


Figure 10: Riot and protests events over time

Source: ACLED Version 6, 1 January 1997 - 1 September 2016.

The number of riots and protest events in the other four cities is considerably lower. Lagos was host to some 460 events, mainly protests over the economic climate. The increase since 2012 is significant, however, and worsening economic conditions can be expected to further fuel this trend. Kinshasa experienced fewer than 200 rioting and protesting events and both Dar es Salaam and Luanda fewer than a hundred.

But fewer protest incidents do not necessarily reflect more peaceful or stable cities. They can also indicate more repressive regimes that suppress citizens' right to voice discontent publicly, a case in point both for Angola and for Egypt before and after the 2011 increase. Freedom House International¹⁴⁵ also rates the media in both countries as 'not free', which compromises the accuracy of media monitoring data projects such as ACLED.

Megacities or large cities can be strategic locations for political conflict and places of 'relative calm and security' during civil war

Figure 11 compares the total number of armed battle events and associated fatalities during the same time period. Battles are violent events between armed groups, and in the graphs the measure of 'battles' encompasses six types of battle events by armed actors. ¹⁴⁶ Violence against civilians counts



FEWER PROTESTS DO NOT NECESSARILY REFLECT MORE PEACEFUL OR STABLE CITIES

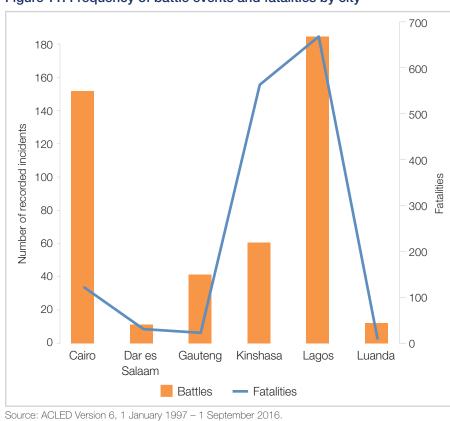
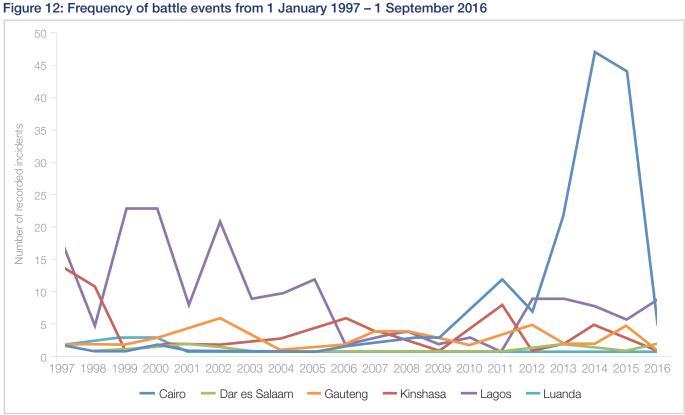


Figure 11: Frequency of battle events and fatalities by city



Source: ACLED Version 6 and RealTime data, 1 January 1997 - 1 September 2016.

any attack by armed groups against civilians. Figure 12 illustrates the trends in incidents labelled as battle events from 1 January 1997 -1 September 2016.

During this period and out of Africa's six current and emerging megacities, Lagos experienced the highest number of battle events at 180. It is followed by Cairo with close to 150 events, Kinshasa and Gauteng. Despite the fact that Lagos is showing the highest number of battles, significantly fewer events in Kinshasa caused more fatalities. In both Luanda and Dar es Salaam fewer than 20 battle events took place during the same time period, but events in Dar es Salaam left more people dead than those in Luanda.

Figure 13 situates the different types of conflict events (i.e. battles, riots and protests combined) and their scale per city in the countries in which Africa's current and emerging megacities are located. This shows that Lagos, Kinshasa, Luanda and Dar es Salaam were not host to their country's most

Cairo Algeria Libya Egypt Saudi Arabia Sudan Yemen Lagos Kinshasa · Dar es Salaam Luanda • **Number of recorded incidents** 1 500 1 000 1 500 2 083 **Event type** Johannesburg Battles and combat Riots/protests Violence against civilians

Figure 13: Major cities' proximity to conflict zones, 1997-2016

Source: ACLED Version 6 and RealTime data, 1 January 1997 - 1 September 2016.

intense conflict events. In South Africa and Egypt, on the other hand, the spread of political violence was concentrated in Johannesburg and Cairo, and riots and protests were the main type of activity.

ACLED focuses on political violence, but criminal violence and terrorism also threaten urban security, and the lines between different forms of violence are becoming increasingly blurred. Organised criminal activities tend to be concentrated in urban centres, as they offer more opportunities for criminal activity. ¹⁴⁷ Gangs often grow out of urban areas and can serve as alternative forms of service provision where state institutions are weak. Unfortunately, quality data on organised crime and gangs at the city level is largely unavailable.

With regards to acts of terrorism, urban centres in Africa may not be the apex of activity, at least not in the six countries that house the continent's current and emerging megacities. According to the Global Terrorism Database, the terrorist incidents¹⁴⁸ that these countries suffered in the period from 1992–2015 rarely occurred in major cities (less than 5% of the time).¹⁴⁹ Rather, the vast majority of terrorism incidents took place in rural locations. One stark example of this trend is Nigeria. Between 2012 and 2015 2 311 terrorist incidents occurred in the country, with only six of them in Lagos, 150 in Kano and 29 in Kaduna.

Gangs often grow out of urban areas and can serve as alternative forms of service provision where state institutions are weak

Crime in cities, on the other hand, is prevalent and tends to grow with city size, as in Johannesburg and Lagos. ¹⁵⁰ Afrobarometer survey data on perceptions of safety for Nigeria, South Africa, Tanzania and Egypt suggests that fear of crime is higher in cities than in rural areas, and that South African urban residents feel particularly unsafe. ¹⁵¹

Yet in some countries and under certain circumstances living in an urban area can be safer than living in a rural area. This is true for the DRC, for example, but also for parts of Nigeria. And despite multiple forms of urban violence, for many people these are trumped by the sense of opportunity that they associate with cities.

Africa's megacities are set to grow at unprecedented levels, as are unseen absolute population numbers. Unless structural challenges such as employment, housing, service provision and inequality are addressed in a comprehensive manner, conflict and violence are likely to remain defining features of Africa's urban areas in the medium and long term.

Urban planning

The failure of urban planning is a key risk for Africa. In the coming decades urbanisation decisions will shape the living conditions of many citizens for centuries to come. There is too much at stake to continue on the current

BETWEEN 2012 AND 2015

2311

TERRORIST INCIDENTS OCCURRED IN NIGERIA path of ad-hoc urban governance that typically benefits the wealthy and not the poor.

Africa needs strategic foresight and integrated long-term urban planning. At the same time, short-term interventions are required to address some of the most pressing challenges, such as housing, employment, service provision and urban violence. These have to be calibrated carefully to avoid undermining longer-term objectives such as inclusion and sustainability. Trade-offs between focusing on the informal economy and enabling longer-term structural transformation also need to be considered and are highly context-specific. Colonially inherited or current influences from developed cities often neglect the informal job and housing markets in Africa and are rarely pro-poor.¹⁵²

The governance of African cities is incredibly complex. Local governments often have responsibilities but lack power and resources. Political conflict with higher levels of government is frequent, as cities are typically the base of opposition political parties. There are also high levels of malfeasance and/or corruption and parallel traditional and civil society forms of governance. 153

There is no blueprint solution for urban planning in Africa. It needs to be strategic and flexible, adapting to different urban and national contexts and requirements. It should be integrated across sectors and consider potential trade-offs. The State of African Cities Report emphasises:

At local scales, infrastructure and technology development plans need to cater for context-specific opportunities and requirements such as the need for low-cost, decentralized solutions that can be deployed and maintained with low levels of skills and training. Such approaches are critical to ensure that services reach the majority urban poor. Bulk infrastructure deployments also need to address the needs of informal settlement and slum dwellers.¹⁵⁴

Urban planning also needs to be embedded in national urban strategies and policies. ¹⁵⁵ The narrative and associated practices that pit the rural versus the urban or vice versa are counterproductive, and policymakers need to consider integrated solutions and acknowledge the importance of the rural–urban interface.

Even though the so-called 'urban bias' 156 – the notion that cities cannot make positive contributions to development – is largely outdated on both the multilateral and the local level, many African countries still have anti-urban policies in place.

Capacity for urban planning and implementation tends to be low, and it remains unclear how this capacity deficit will be tackled with the urgency and scale that is required. In any case, the education of and training for professional urban planners should be increased.

Mobilising the necessary funds for the tasks at hand presents another challenge.

Africa needs strategic foresight and integrated long-term urban planning, but short-term interventions are also required

According to the African Economic Outlook 2016, African governments and the private sector need to invest twice as much by 2050 as they have since the years of independence. ¹⁵⁷ Given the significant funding gap that African governments face to tackle urban challenges in comprehensive ways, urban development has to be a multi-stakeholder effort and public–private partnerships are a necessity. Yet, governments should take the lead.

According to a survey conducted by the African Economic Outlook 2016, central government transfers and local taxes have the greatest potential for revenue mobilisation, in terms of both magnitude and stability of funding. Funding from external donors, land value capture mechanisms and public–private partnerships were cited as other important sources of revenue. In addition, globalisation has brought opportunities for innovative finance, but not all cities can use these new tools equally. 158

Some experts argue that given the relatively early stage of Africa's urbanisation there is still enough time to steer the process in a positive direction. The idea of leap-frogging, i.e. skipping inferior, less efficient, more expensive or environmentally harmful technologies and industries and moving directly to more advanced ones has gained momentum, while the notion of Africa's cities catching up with cities in the developed world

by copying their policy paradigms has become almost obsolete in current development thinking.

Conclusion

Urbanisation is one of the most important mega trends in Africa. Its potential for positive contributions to human development on the continent is real. At the same time the urban transition poses many challenges. The new global and African urban development agendas are important because they acknowledge both potential and challenges, and promote a more balanced approach to urban development issues that can help overcome the urban bias. It is encouraging that four-fifths of respondents to an expert survey of country economists of the African Development Bank and the United Nations Development Programme carried out by African Economic Outlook 2016 see urbanisation as an opportunity for their country, and not as a risk. 159 There is momentum for governments to manage urbanisation in ways that support more inclusive and therefore more sustainable development outcomes. It should also open channels for much needed urban financing.

However, due to the context in which urbanisation is happening in Africa and the extremely fast pace at which it is taking place, there are no easy solutions or quick fixes.

To a great extent urban violence reflects structural violence, understood as the lack of economic and socio-political inclusion

Generally speaking, rapid urban population growth in contexts of slow structural economic transformation, pervasive poverty and sharp inequalities is not conducive to achieving the urban development objectives set out in the SDGs or the AU's Agenda 2063. ¹⁶⁰ To a great extent urban violence reflects structural violence, understood as the lack of economic and sociopolitical inclusion that prevents most of Africa's urban population from meeting their basic needs. Since inequality is a key driver of violence and conflict, urbanisation is a risk when it occurs without the concurrent inclusive economic development.

To date, few if any African urbanisation patterns can be considered 'sustainable economically, socially or environmentally'.¹⁶¹ In most countries rapid urban population growth is outpacing economic, social and institutional development. Moreover, urban governance in Africa has a history of being ad hoc and serving the interests of the few who are wealthy versus the interests of the many who are poor.

For sustainable urbanisation to occur, a few priority interventions are needed. Investing in physical infrastructure is vital for human development, as well as for the competitiveness of economies and the business environment.



GOAL 11 OF THE
SUSTAINABLE DEVELOPMENT
GOALS: MAKE CITIES
INCLUSIVE, SAFE, RESILIENT
AND SUSTAINABLE

Information and communications technologies are an important enabler across sectors, but Africa's physical infrastructure deficit constitutes a huge bottleneck. Economic growth is key, but that alone is not enough. It is necessary to address directly the challenges of urban poverty and inequality to bring about inclusive and sustainable development outcomes. Job creation, and preferably productive employment, is central to tackling inequality and exclusion, which are key structural drivers of urban violence. Similarly, youth is key. The demographic advantage of a youthful urban population can drive progress, but a lack of productive employment opportunities can skew this.

It is also vital to improve the connection between urban markets and rural economies, to increase agricultural output. By connecting rural economic activities, in particular food production chains, to large urban markets, higher agricultural productivity and rural development can occur. Moreover, urbanisation can drive broader industrialisation and economic structural transformation through providing a favourable business environment where companies realise economies of scale and share knowledge more easily. Similarly, services-led growth, by encouraging innovation and developing the skills of the urban labour force, will increase the supply of modern services for the growing urban middle class. This can also help attract more foreign direct investment to African cities, by incentivising investment in well-connected urban corridors. 162

Urban governance in Africa has a history of serving the interests of the few who are wealthy versus the interests of the many who are poor

There is also a need for targeting social investments to a wider base; or, in other words, increasing the inclusivity of cities by expanding the necessary infrastructure and services to all urban residents. In fact, the patterns of future social investments need to exhibit a bias towards the segments of the urban population that have historically been the most disadvantaged in urban infrastructure and service provision. It is important that services especially reach slums. Tackling social inequality

in this way in the context of growing cities remains imperative, and governments cannot do it alone but need to reach out to other stakeholders.

Lastly, it is imperative that the urban transition contributes to environmental sustainability by sensibly managing natural resources, promoting renewable energies, better access to safe water and sanitation, and sustainable waste collection.

Africa's urban transition is happening across towns and cities of all sizes, and better urban governance is key for improving the lives of all urban residents on the continent. The current and emerging megacities are central to their respective country economies and their place in the global economy, and need to be at the forefront of such efforts.

Notes

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The African Futures Project is a collaboration between the Institute for Security Studies (ISS) and the Frederick S. Pardee Center for International Futures at the Josef Korbel School of International Studies, University of Denver. The African Futures Project uses the International Futures (IFs) model to produce forward-looking, policy-relevant analysis based on exploration of possible trajectories for human development, economic growth and socio-political change in Africa under varying policy environments over the next four decades.

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