



2015

Facts & Figures

**AFRICAN URBAN
DYNAMICS**

MO IBRAHIM FOUNDATION

In the next 35 years, Africa will need to accommodate almost 900 million new urban dwellers, which is equivalent to what Europe, USA & Japan combined have managed over the last 265 years.

Rwanda has the 2nd fastest urban growth rate in the world, after Oman.

Cairo, Africa's most populous city, manages a population that is larger than each of the 36 least populous countries on the continent.

3/4 of Africa's urban population is younger than 35.

Almost 1/2 of Africa's urban population lives in slums & informal settlements.

Inequality in African cities is the 2nd highest in the world.

Youth unemployment in Africa is 3 times higher in urban areas than in rural areas.

In Kinshasa, there is only 63m of paved road per 1,000 inhabitants, as opposed to 1,000m per 1,000 inhabitants in developing countries.

61% of urban employment opportunities in Africa are informal.

In Dakar, 1 million working hours are lost every day due to traffic congestion.

In Lagos, there are 200,000 commercial motorcycles.

Opened in September 2015, the Addis Ababa light rail carries 60,000 passengers per day.

Around 1/3 of urban dwellers in sub-Saharan Africa have no access to electricity.

37 out of the 54 African countries are still more than 50% rural.

In 2050, Africa is expected to host nearly 1/4 of the global urban population.

Between 1988 & 2012, Bangui has been flooded 7 times & Lagos 4 times.

By 2050, it is estimated that Abidjan could lose \$1 billion due to sea-level rise.

Residential electricity consumption per capita in Africa is only 1/2 that of China.

Mauritius, Swaziland & Zimbabwe are the only 3 African countries to have de-urbanised between 2010 & 2015.

In Nigeria, more than 80% of households use kerosene, charcoal or wood for cooking.

Waste generated in most urban areas in Africa could quadruple by 2025.

Agbogboshie, near Accra, has become the world's largest e-waste dumping site.

In Africa, less than 50% of solid waste is collected & only 5% is contained or recycled.

Nigeria's housing shortage is estimated at 17 million units.

The total resources of local authorities in Africa were estimated in 2010 at \$52 per capita per year.

Introduction

Held annually since 2010, the Ibrahim Forum aims to tackle specific issues that are of critical importance to Africa, and require both committed leadership and governance.

Bringing together a diverse range of high-level African stakeholders belonging to various public and private constituencies, as well as selected non-African partners, the Forum is an open and frank discussion. It aims to go beyond stating issues and renewing commitments by defining pragmatic strategies, operational action points and shared responsibilities.

In order to facilitate this and to focus energies on a constructive debate, the Foundation publishes a 'Facts & Figures' report for each Forum. The report compiles the best and most recent data and analysis relevant to the issues to be addressed.

The focus of the 2015 Ibrahim Forum is 'African Urban Dynamics'. Cities have the potential to play a pivotal role in Africa's development. As the last continent in which 50% of the population will become urban, Africa is expected to accommodate almost 900 million additional urban dwellers within the next 35 years. This is more than 3 times the current population of Indonesia, or slightly less than 3 times the population of the USA. This urban growth is characterised by a massive youth surge. Meanwhile, economic growth is often taking place without job creation, inequalities are widening and per capita incomes are up to 5 times lower than in other regions at similar urbanisation levels. Moreover, the new century brings unprecedented pressures linked to climate change, global pandemics, worsening security threats and growing migration flows.

This is a huge and immediate challenge. However, properly managed, with sound governance and focused leadership, it could also be a transformative opportunity. Urban policies and planning are about people's daily lives. They have the potential to foster and trigger sustainable and equitable development. They may also contribute to a renewed sense of participation, public service and citizenship.

The 'African Urban Dynamics' report provides data-driven content for the discussions at the 2015 Ibrahim Forum in Accra on 21 November, and beyond. With the urban agenda being so crucial for Africa, many global institutions will continue the debate in the coming months and will hopefully ensure that decisions are implemented. This report and event are contributions to this process.

The report presents an overview of the sheer demographic challenge; how this translates into the required delivery of goods and services; the impact on people's lives; and the significance of governance and leadership in the solution.

The research for 'African Urban Dynamics' has reinforced a primary challenge in the drive to harness the power of urbanisation on the continent: data availability. This vacuum will only be highlighted by the need to provide guidance for the implementation of urban development projects, and measure the progress of the Sustainable Development Goals (SDGs), specifically Goal 11, but also almost every other goal of the agenda. Without a concerted effort to address the data challenge, the urban opportunity will prove that much more difficult to harness.

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DEFINING "URBAN" IN AFRICA

There is no common global definition of what constitutes an urban settlement. Criteria may be based on 1 or a combination of characteristics including:

- Minimum population threshold.
- Population density.
- Proportion employed in non-agricultural sectors.
- Presence of infrastructure, education or health services.

Urban population data are taken from country censuses. Some African countries have not conducted a census for 30 years.

African countries that use population thresholds to define "urban"



For 18 out of 34 African countries, the urban population threshold begins at 5,000.

01_

THE URBAN LANDSCAPE



AFRICA'S URBAN OPPORTUNITY

- The rural-urban balance: Africa's population is still majority rural
- Sheer numbers vs. percentage of the population: 2 different challenges
- Both the rural & urban populations in Africa will continue to grow

A LATER START, A QUICKER PACE

- Africa has the world's fastest urban population growth rate...
- ...& is a steadily urbanising continent

THE DRIVERS OF AFRICAN URBAN GROWTH

- Natural population increase: a dominating factor
- Rural-urban migration: a contributing factor
- Re-classification of urban areas

THE MAGNITUDE OF AFRICA'S URBAN SETTLEMENTS

- Managing city populations equivalent to country populations
- Africa's urban youth explosion

AFRICA'S URBAN COMPOSITION

- The megacity: predominantly in Asia
- African cities: mainly middle-sized for now

URBAN GROWTH & ECONOMIC STRUCTURAL TRANSFORMATION: NOT ALIGNED IN AFRICA

- A historically outbound urban corridor
- Urbanisation & GDP per capita growth: a lower correlation in African countries
- Urbanisation & industrialisation: a weak link

01_The Urban Landscape

AFRICA'S URBAN OPPORTUNITY

The rural-urban balance: Africa's population is still majority rural

- Approximately 472 million people in Africa live in urban areas. This is equivalent to 40% of Africa's population.

40%
urban =
472 million
population

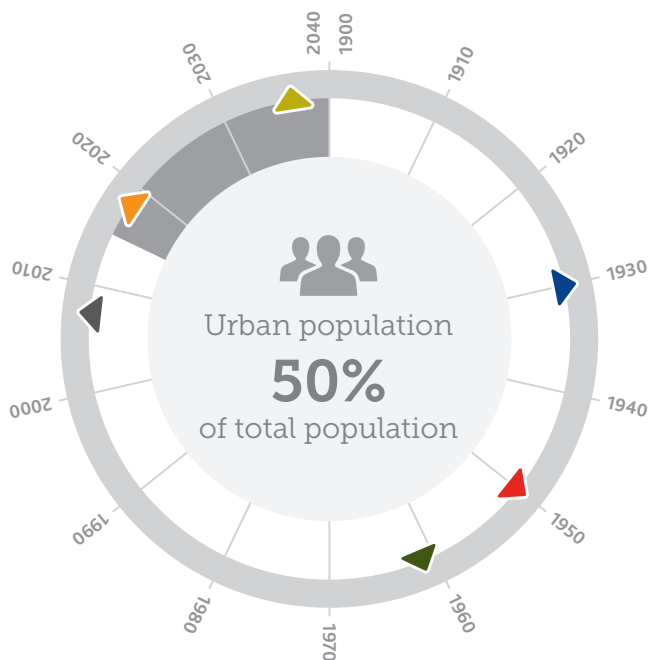


- 37 out of 54 countries are more than 50% rural.
- Only 17 African countries have a population that is over 50% urban.
- Burundi is the least urbanised country in Africa (12% urban).

Gabon is the most urbanised country in Africa, with 87% of the population living in urban areas.

Africa remains the least urban continent

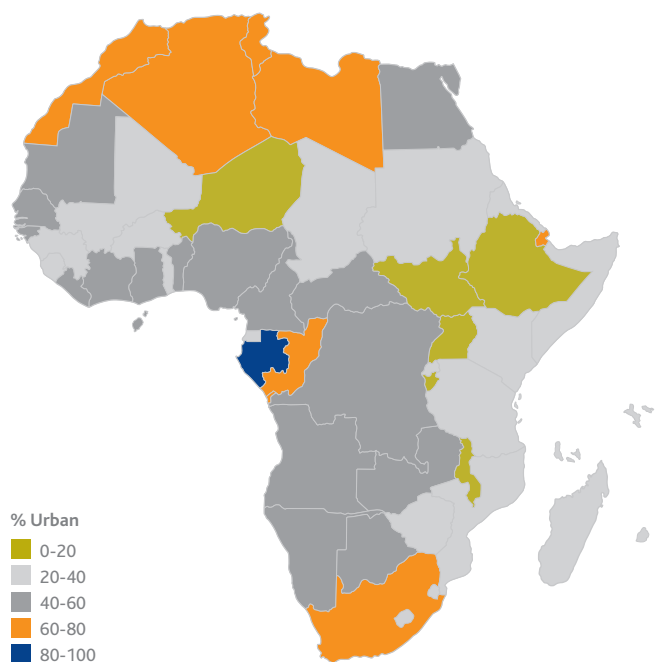
Year in which urban population is 1/2 of total population, by region



- ▶ North America
- ▶ Europe
- ▶ Latin America & the Caribbean
- ▶ World
- ▶ Asia
- ▶ Africa

- Africa's urban population, as a share of the total population, is considerably smaller than in Asia, Europe and Latin America & the Caribbean.
- The percentage of people living in urban areas in Northern Europe (82%) is more than double that of Africa.
- Africa will be the last continent to become 50% urban, in 2037.

Population residing in urban areas, 2015 (%)



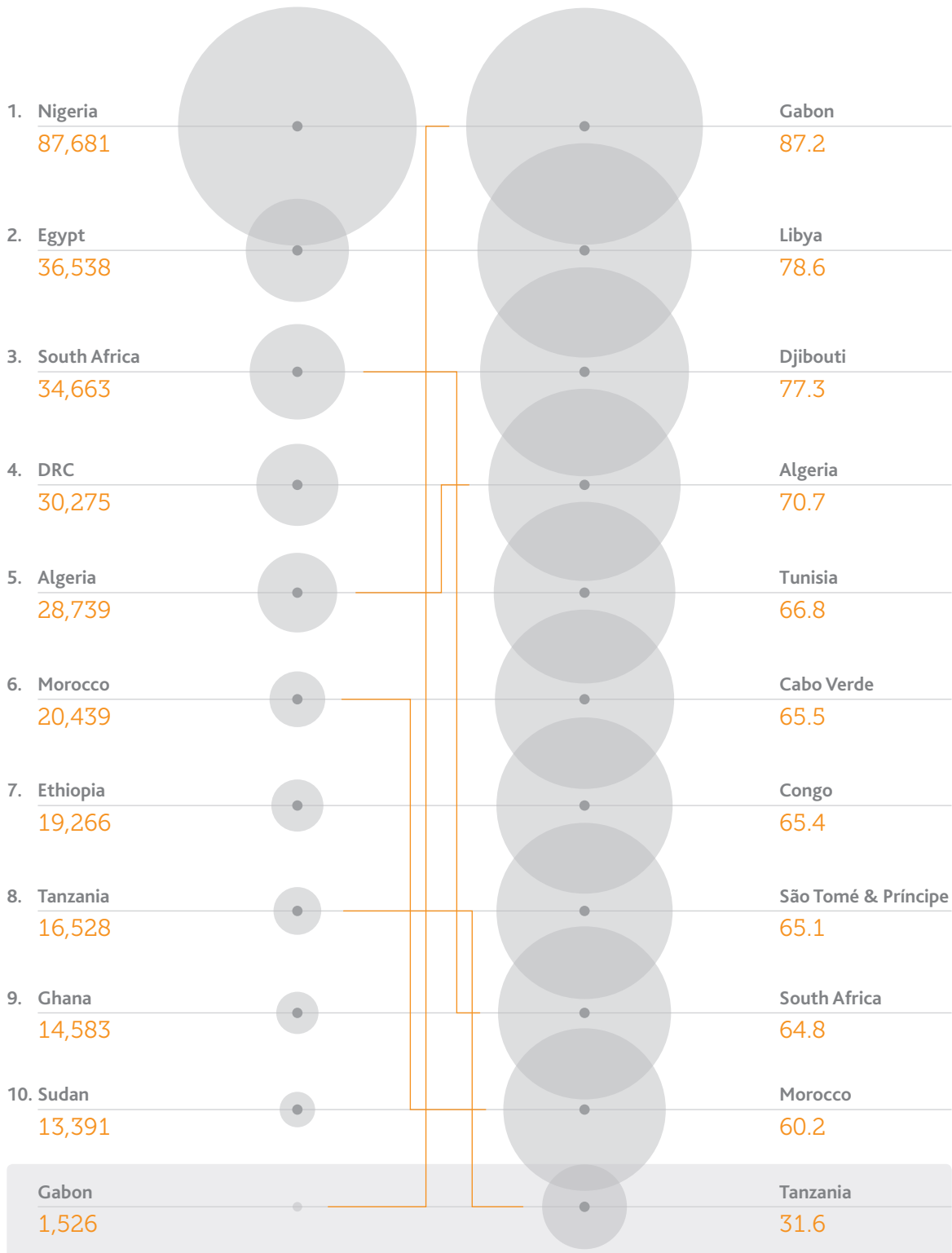
- 0-20
- 20-40
- 40-60
- 60-80
- 80-100

- The number of people living in urban areas in Asia is 4.5 times larger than in Africa.
- In 6 African countries, less than 20% of the population live in urban areas.
- In the majority of North African countries, over 50% of the population lives in urban areas.

Sheer numbers vs. percentage of the population: 2 different challenges

- Countries with the largest urban populations are not necessarily the most urbanised.

Top 10 countries by urban population, 2015 (thousand) Top 10 most urbanised countries, 2015 (%)

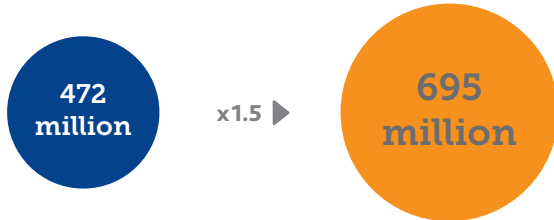


01_The Urban Landscape

Both the rural & urban populations in Africa will continue to grow

Africa's urban population, 2015

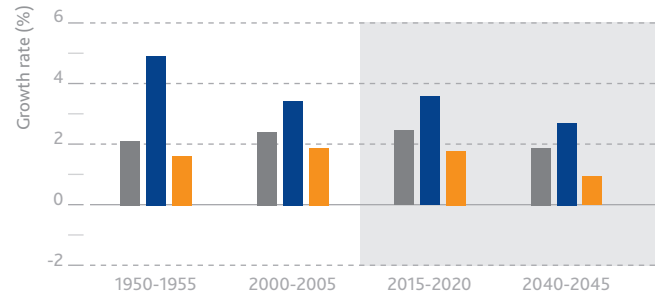
Africa's rural population, 2015



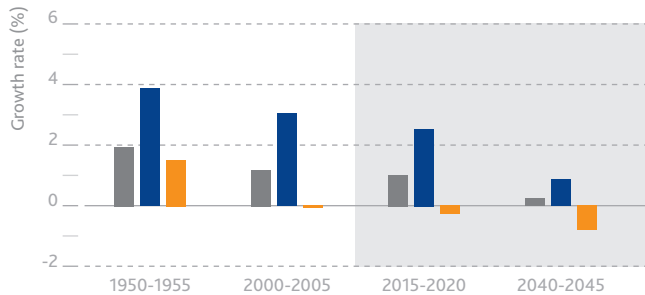
- Africa's rural population is still growing, albeit at a slower rate than the urban population.
- This contrasts with the situation in Asia and Latin America & the Caribbean, where the rural population is shrinking.
- In most African countries (52) urban population growth is outpacing rural population growth.

Rwanda shows the largest difference between its urban population growth (+6.4%) and rural population growth (+1.4%) rates.

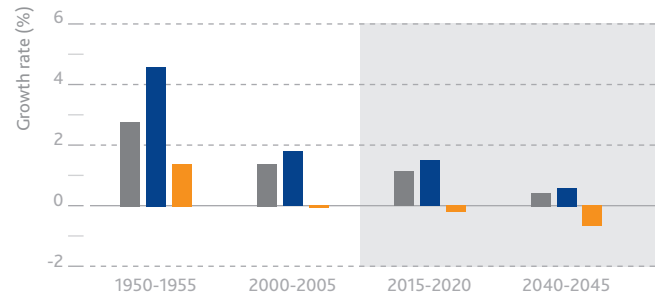
Africa: population growth rates (%)



Asia: population growth rates (%)

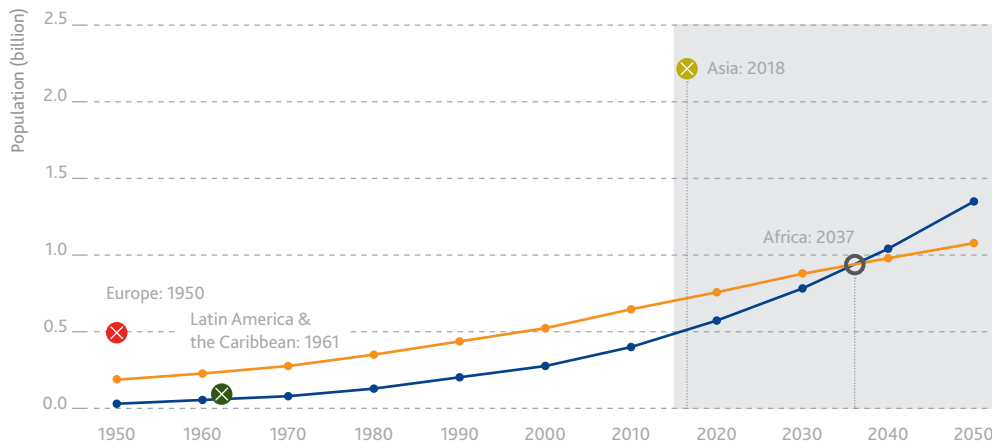


Latin America & the Caribbean: population growth rates (%)



■ Total growth ■ Urban growth ■ Rural growth

The rural-urban population growth path

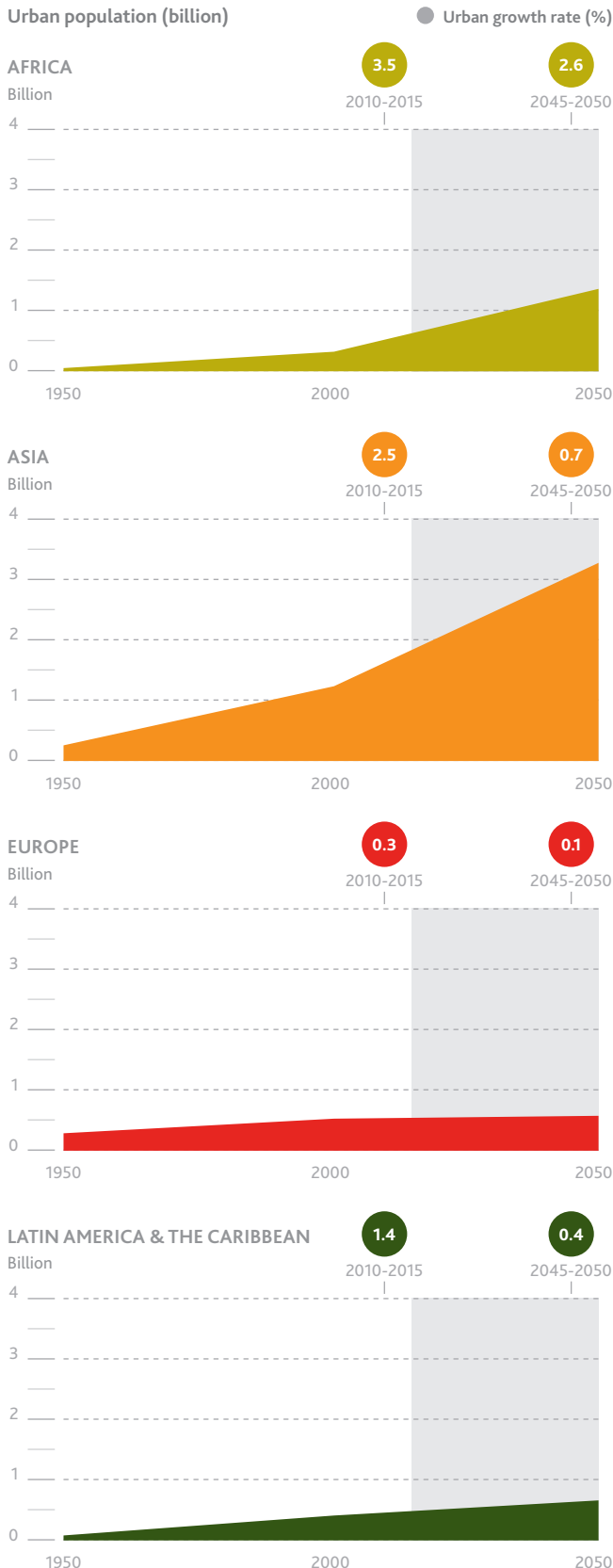


- Africa's urban population is only expected to become larger than its rural population in 2037.
- This will be around 20 years later than Asia, and nearly 80 years later than Latin America & the Caribbean.

● Urban population
● Rural population
⊗ Tipping point: year in which urban population becomes larger than rural population

A LATER START, A QUICKER PACE

Africa has the world's fastest urban population growth rate...



- Although Africa is not the world's fastest urbanising region, its urban population has been growing at a fast rate for decades.
- In 1960, Alexandria, Cairo and Johannesburg were the only 3 cities in Africa with a population over 1 million; by 1970 there were 8 (Algiers, Cape Town, Casablanca, Kinshasa and Lagos had grown to be over 1 million) and by 2015 there were 56.
- In 2030, 94 cities in Africa are expected to have over 1 million people.

Urban population growth rate:
average annual growth of the urban population.

- The urban population growth rate of Africa averaged 3.5% between 2010 and 2015.
- In the next 35 years, Africa's urban population is expected to almost triple, from 472 million to 1.3 billion.
- The urban population growth rate in Africa is expected to slow slightly by 2050, however Africa will remain the continent with the fastest growing urban population.

Top 10 countries in the world with the highest urban population growth rate

Country	Urban population growth rate, 2010-2015 (%)
Oman	8.5
Rwanda	6.4
Qatar	6.0
Burkina Faso	5.9
Burundi	5.7
Uganda	5.4
Tanzania	5.4
Niger	5.1
Eritrea	5.1
Mali	5.1

- 8 of the 10 countries in the world with the fastest current urban growth rates are African.

01_The Urban Landscape

...& is a steadily urbanising continent

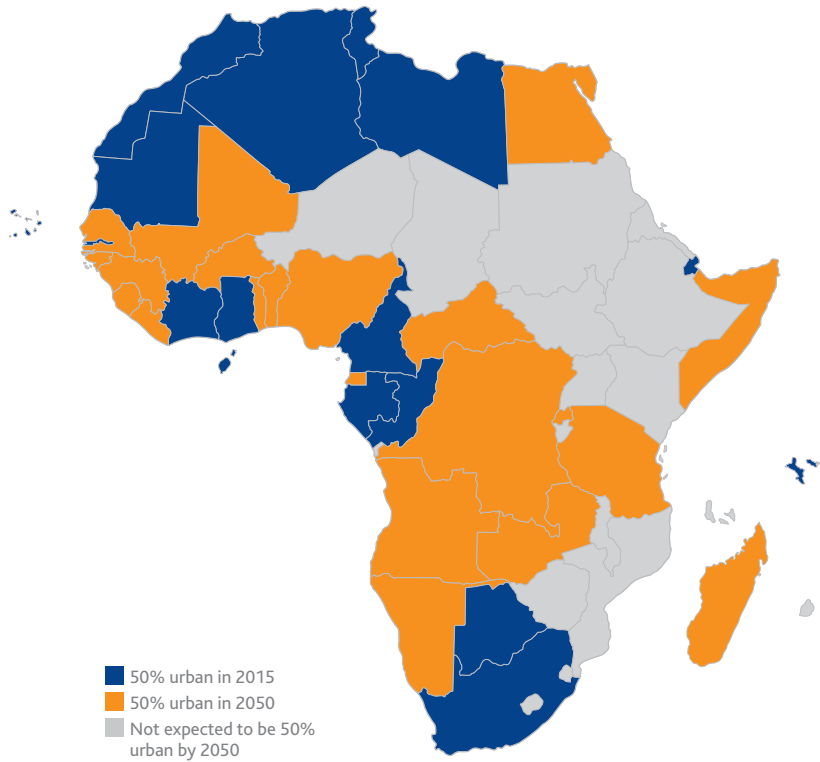
Population living in urban areas & urbanisation rate, by continent (%)



- Urbanisation only occurs if the rate of urban population growth exceeds the rate of overall population growth.
- Compared to Asia, although African urban population growth may be higher, the rate at which it has urbanised in recent years is slower.
- In the next 30 years, even with a slowing urbanisation rate, Africa is expected to replace Asia as the fastest urbanising continent.

Urbanisation rate: average annual growth of the percentage of the population living in urban areas.

Countries with an urban majority by 2015 or 2050



Africa's fastest urbanising countries, 2010-2015 (%)

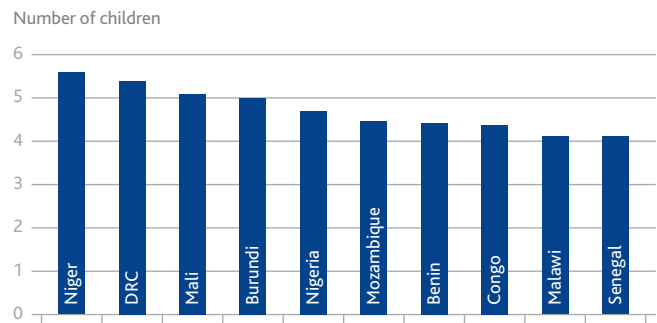
Country	Urbanisation rate
Rwanda	3.7
Burkina Faso	3.0
Burundi	2.5
Ethiopia	2.3
Tanzania	2.3

THE DRIVERS OF AFRICAN URBAN GROWTH

Natural population increase: a dominating factor

- The rapid growth of Africa’s urban population is predominantly being driven by natural population increase.
- Life expectancy in urban areas has increased, while fertility rates have remained high, resulting in an urban population boom.
- The 10 countries with the highest urban fertility rates over the past 5 years are African.
- Niger and Mali’s urban under-5 mortality rate fell by just under 30% over a 10-year period.
- Malawi’s urban mortality rate fell by 46% over a 20-year period.

Top 10 countries by total urban fertility rate, 2010-2014 (number of children per woman)



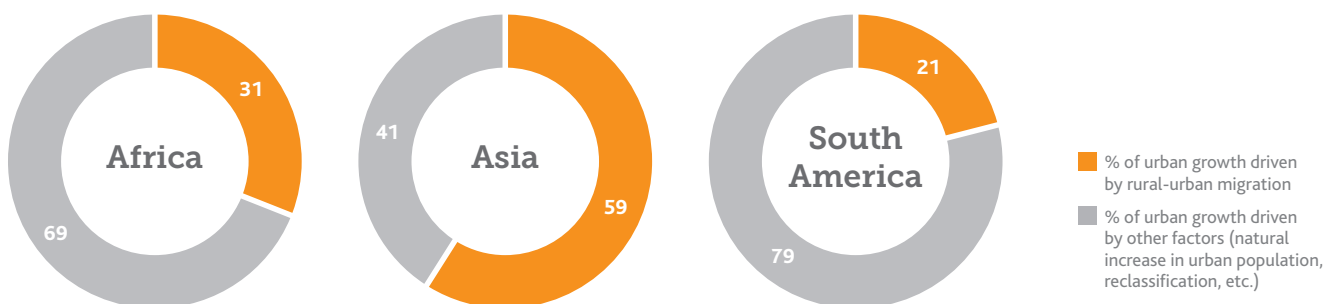
Rural-urban migration: a contributing factor

- Rural-urban migration contributes to urbanisation, accounting for 1/3 of Africa’s urban population growth between 2010 and 2015.
- In only 7 African countries, rural-urban migration accounts for over 1/2 of urban population growth: Burkina Faso, Cabo Verde, Lesotho, Namibia, Rwanda, Seychelles and South Africa.
- In 22 African countries rural-urban migration accounts for less than 1/3 of urban population growth.
- Over 1/2 of Asia’s urban population growth was fuelled by rural-urban migration between 2010 and 2015.
- Just over 1/3 of South America’s urban population growth was driven by rural-urban migration in the same period.

Re-classification of urban areas

- Re-classification of urban areas can also contribute to urban growth.
- Kenya’s census in 2009 recorded a surge in urban population to 29% due to definitional changes meaning large farming and peri-urban populations were included.

Urban growth driven by rural-urban migration & other factors, 2010-2015 (%)



De-urbanisation: a rare but present phenomenon

- Some countries have de-urbanised, experiencing a decrease in the proportion of the population living in urban areas.
- 3 African countries de-urbanised between 2010 and 2015: Mauritius, Swaziland and Zimbabwe.
- Zimbabwe’s de-urbanisation has been driven by urban-rural migration. The most recent census in 2012 showed a growing

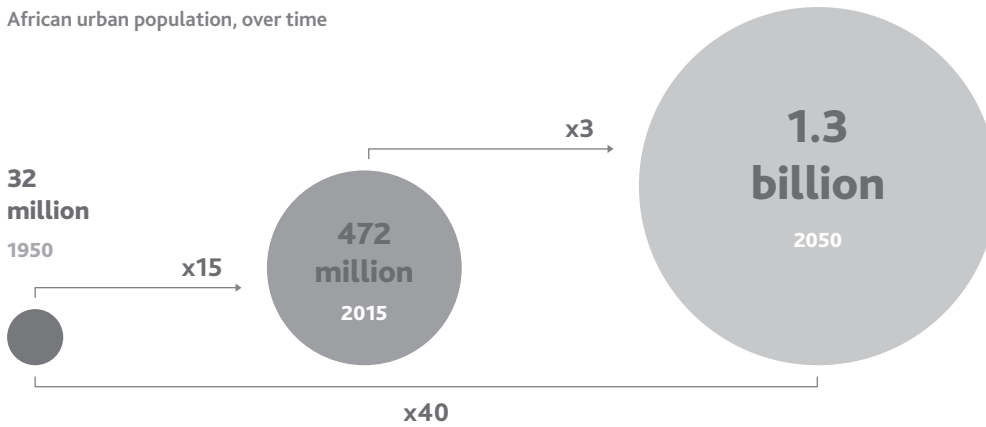
share of the population living in communal land and resettlement areas, suggesting de-urbanisation is being driven by the land resettlement programme.

- Mauritius’ de-urbanisation between its 2000 and 2011 censuses was partly due to the re-classification of urban and rural boundaries in the 2011 census.

01_The Urban Landscape

THE MAGNITUDE OF AFRICA'S URBAN SETTLEMENTS

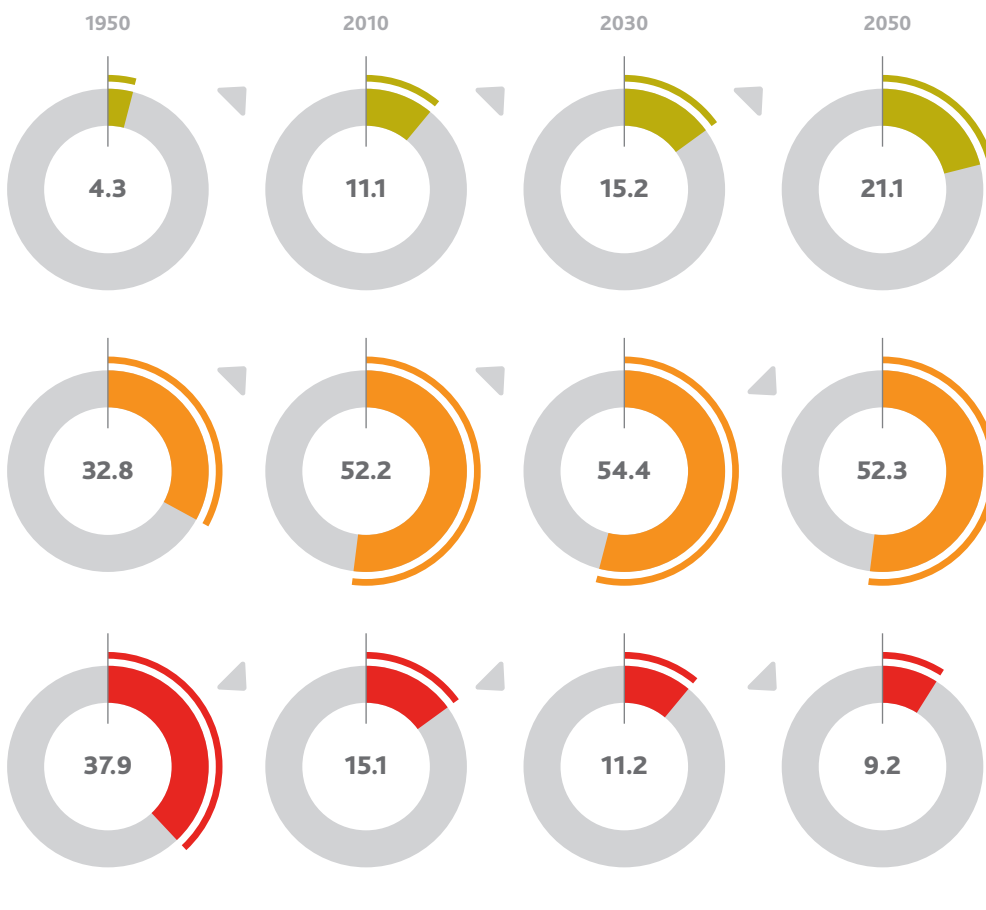
African urban population, over time



- Between 1950 and 2050 Africa's urban population is expected to multiply by 40, from 32 million to 1.3 billion.

Between now and 2050, the number of people living in urban areas in Nigeria is projected to increase by 208 million.

Global urban population, by continent (%)



- Africa's share of the global urban population is growing faster than any other continent.
- In 2050, Africa is expected to host nearly ¼ of the global urban population.
- Asia's share of the global urban population is likely to remain the biggest, although it is expected to decrease marginally.
- Meanwhile, the share of the global urban population living in Europe is expected to shrink.

■ Africa ■ Asia
■ Europe ■ World

Projecting Africa's urban demographics

- Urban population projections are modelled on current population figures, migration data, mortality figures and fertility rates.
- Countries with very high fertility rates, such as Nigeria and Zambia, pose a challenge when it comes to predicting future population size; these rates are likely to decline, but the speed of this decline is uncertain.
- In Africa, the quality of data can pose particular problems for the accuracy of projections.

Managing city populations equivalent to country populations

Cairo, Africa's most populous city, manages a population that is larger than each of the 36 least populous countries on the continent.

Population (million), 2015

Cairo 18.8 ≈ Rwanda 12.4 + Sierra Leone 6.3

Cape Town 3.7 ≈ Bosnia & Herzegovia 3.8

Lagos 13.1 ≈ Burundi 10.8 + Namibia 2.4

Kano 3.6 ≈ Gabon 1.8 + Guinea-Bissau 1.8

Kinshasa 11.6 ≈ Belgium 11.2

Dakar 3.5 ≈ Moldova 3.4

Johannesburg 9.4 ≈ Serbia 9.4

Casablanca 3.5 ≈ Lesotho 2.1 + Swaziland 1.3

Luanda 5.5 ≈ Denmark 5.7

Addis Ababa 3.2 ≈ Albania 3.2

Khartoum 5.1 ≈ Norway 5.1

Ibadan 3.2 ≈ Gambia 2.0 + Mauritius 1.3

Dar es Salaam 5.1 ≈ Bahrain 1.4 + Kuwait 3.6

Yaoundé 3.1 ≈ Lithuania 3.0

Abidjan 4.9 ≈ CAR 4.8

Douala 2.9 ≈ Armenia 3.0

Alexandria 4.8 ≈ Ireland 4.7

Durban 2.9 ≈ Mongolia 2.9

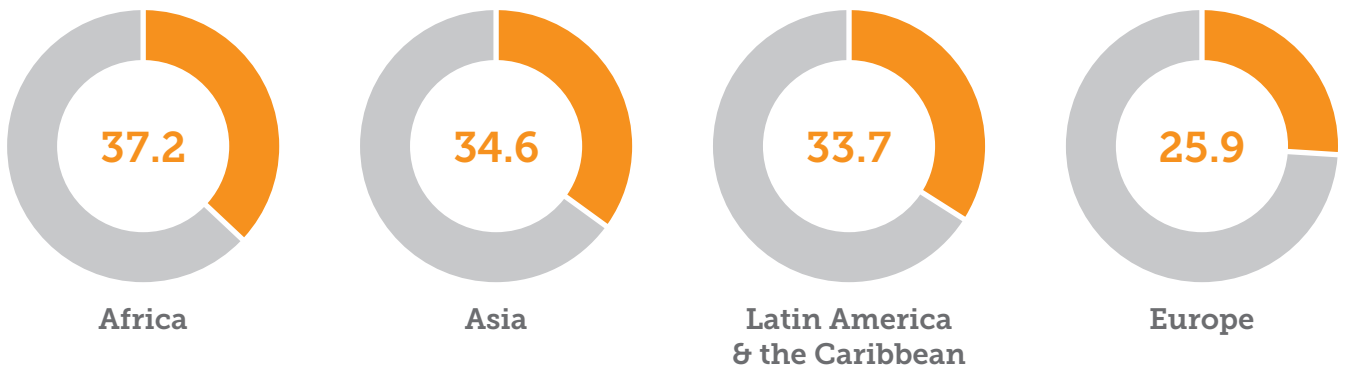
Nairobi 3.9 ≈ Panama 4.0

Ouagadougou 2.7 ≈ Jamaica 2.8

01_The Urban Landscape

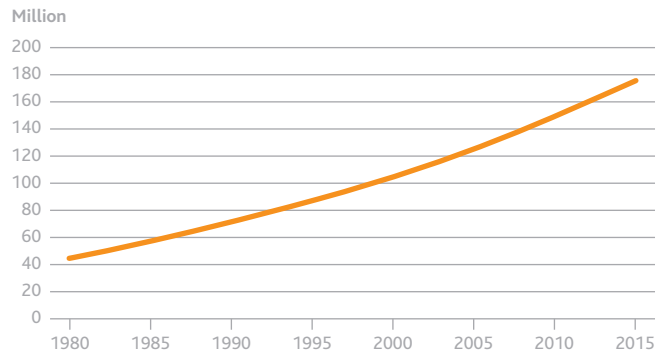
Africa's urban youth explosion

Youth living in urban areas, 2015 (%)



- Africa's proportion of youth (15-34 years) living in urban areas is the highest in the world.
- 74% of Africa's urban population is aged under 35.
- The number of youth living in urban areas has grown by 289% since 1980, from 45 million to 176 million in 2015.
- Between 2010 and 2015, Africa's urban youth population grew by 18%.
 - This is more than double the rate of growth seen in Asia (8.3%).
- A key challenge within African urban agglomerations will be providing jobs for the growing youth population.

Urban youth population in Africa, 1980-2015



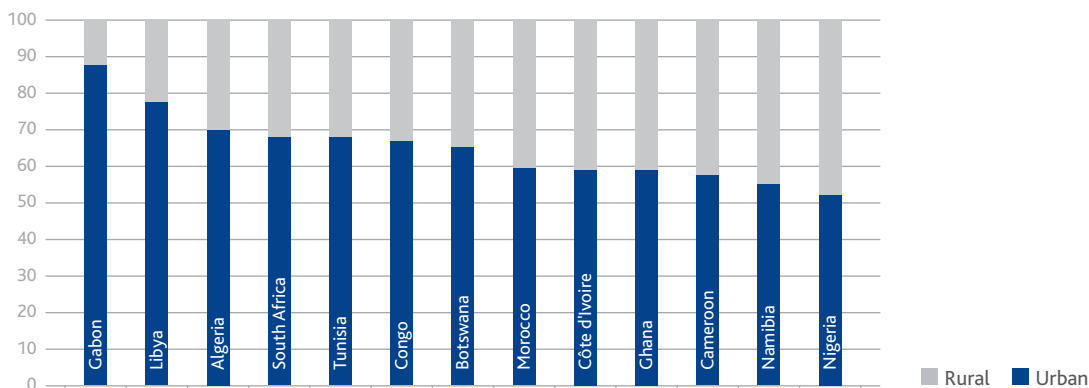
85% of Uganda's urban population is under the age of 35.

13 million urban South Africans are aged 15-34.

The median age of a person living in an urban area in South Africa is 25-29.

Youth population living in urban & rural areas, selected African countries, 2015 (%)

Youth population (%)

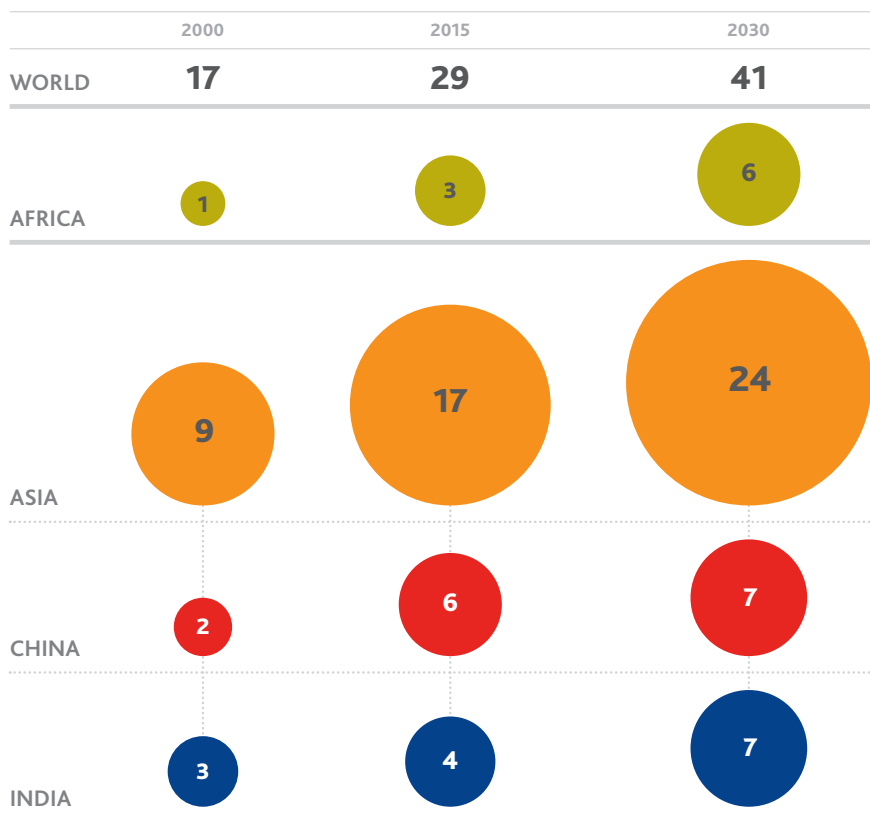


AFRICA'S URBAN COMPOSITION

The megacity: predominantly in Asia

- With a population of 1 billion people, Africa counts 56 cities of 1 million inhabitants or more.
- Almost ½ of Africa's urban areas have a population of less than 500,000 people.
- In 2010, almost ½ of Africa's urban population lived in settlements of fewer than 300,000 people.

Number of megacities globally, in Africa & Asia



- In 2015, only 3 of the world's 29 megacities are located in Africa: Cairo, Lagos and Kinshasa.
- China and India each have more megacities than Africa.
- In 2030, it is expected that only 6 of the world's 41 megacities will be located in Africa.

Megacity:

a metropolitan area with a total population of more than 10 million people.

Primate cities vs. the second largest cities, 2015 (population, million)

Algeria				Kenya			
Algiers	2.6	Oran	0.9	Nairobi	3.9	Mombasa	1.1
Angola				Madagascar			
Luanda	5.5	Huambo	1.3	Antananarivo	2.6	Toamasina	0.3
Burkina Faso				Nigeria			
Ouagadougou	2.7	Bobo-Dioulasso	0.7	Lagos	13.1	Kano	3.6
Côte d'Ivoire				Somalia			
Abidjan	4.9	Bouake	0.8	Mogadishu	2.1	Hargeysa	0.8
DRC				Sudan			
Kinshasa	11.6	Lubumbashi	2.0	Khartoum	5.1	Nyala	0.7
Egypt				Tanzania			
Cairo	18.8	Alexandria	4.8	Dar es Salaam	5.1	Mwanza	0.8
Ethiopia				Zambia			
Addis Ababa	3.2	Mekele	0.3	Lusaka	2.2	Kitwe	0.6

- In 7 African countries, the most populous city is at least 5 times bigger than the 2nd most populous city: Côte d'Ivoire, DRC, Ethiopia, Guinea, Madagascar, Sudan and Tanzania.
- This is not just an African issue. In 13 countries across Asia, Latin America & the Caribbean, and to a lesser extent, Europe, the most populous city is 5 times larger than the 2nd.
- The population of Addis Ababa (3.2 million) is 10 times larger than the 2nd largest city in Ethiopia, Mekele (0.3 million).

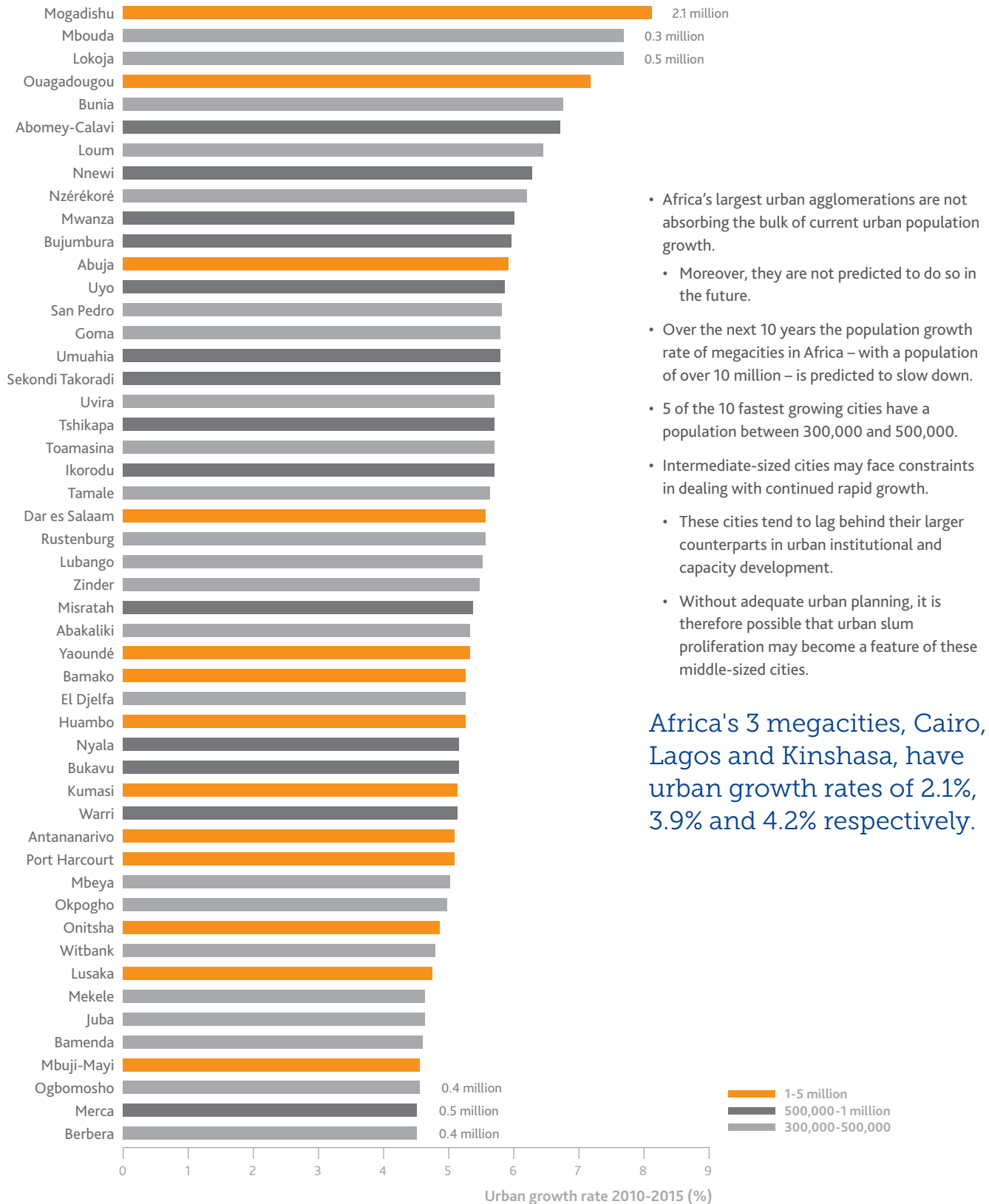
Primate city:

leading city in the country or region, disproportionately larger than others.

01_The Urban Landscape

African cities: mainly middle-sized for now

Fastest growing cities in Africa, 2010-2015 (%)



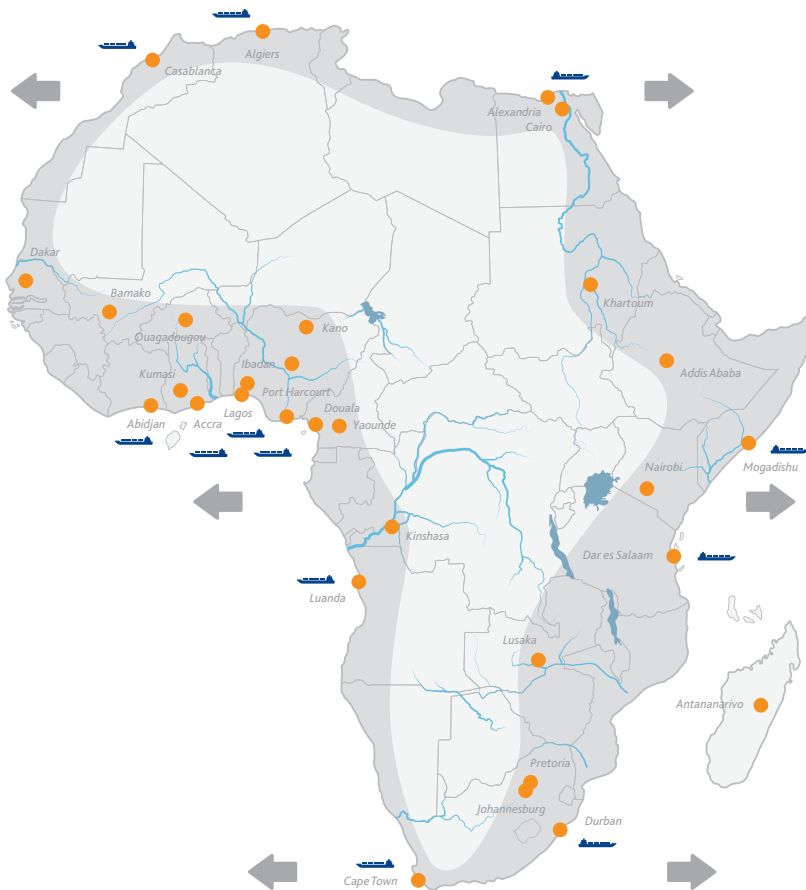
- Africa's largest urban agglomerations are not absorbing the bulk of current urban population growth.
- Moreover, they are not predicted to do so in the future.
- Over the next 10 years the population growth rate of megacities in Africa – with a population of over 10 million – is predicted to slow down.
- 5 of the 10 fastest growing cities have a population between 300,000 and 500,000.
- Intermediate-sized cities may face constraints in dealing with continued rapid growth.
- These cities tend to lag behind their larger counterparts in urban institutional and capacity development.
- Without adequate urban planning, it is therefore possible that urban slum proliferation may become a feature of these middle-sized cities.

Africa's 3 megacities, Cairo, Lagos and Kinshasa, have urban growth rates of 2.1%, 3.9% and 4.2% respectively.

URBAN GROWTH & ECONOMIC STRUCTURAL TRANSFORMATION: NOT ALIGNED IN AFRICA

A historically outbound urban corridor

30 largest African cities, 2015 (population)



When urbanisation follows Industrial Revolution

In England, the expansion of cities such as Birmingham, Sheffield, Manchester, Liverpool and Newcastle during the late 18th and early 19th centuries was fuelled mainly by the Industrial Revolution.

Between 1837 and 1891, over a period of more than 50 years, the number of cities outside London with a population over 100,000 increased from 5 to 23.

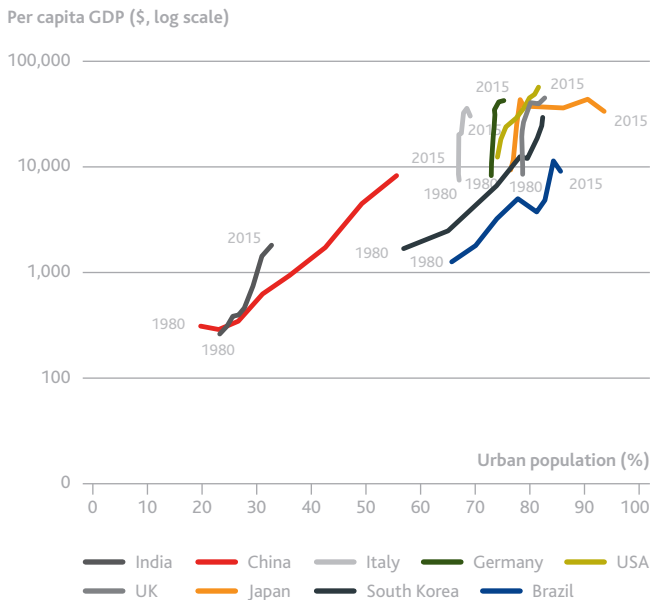
As a result of the mechanisation of the textile industry, Manchester became the world's first industrial city.

- Africa mostly remains an outbound continent. In 2014, 85% of Africa's total exports were traded with the rest of the world.
- The biggest urban spatial legacy of European colonialism lies in the location of many of Africa's major cities along the coast or close to sites of resource extraction.
- In 46 of the continent's states the primary city is still the colonial capital, main port or port-capital.
 - 28 of Africa's 50 largest cities are cities of this historical type.
- Pre-colonial cities, such as Kano (founded around 1000 AD) and Kumasi (founded in the late 17th century), were commercial centres due to their location on trade routes linking them with the rest of the continent.
- The modern city of Kinshasa has its roots in the establishment of Léopoldville by Belgian settlers in 1881. Its geographical location allowed it to develop as a commercial centre, particularly as a transit point for natural resources extracted from the interior of the DRC bound for Europe.
- The city of Luanda was founded by a Portuguese explorer in 1576, and became a major trading hub, exporting palm and peanut oil, ivory, cotton, coffee and cocoa around the world.
- Abuja is one of the few new cities in Africa created in the 1980s. Its location near the centre of the country was chosen because of its easy accessibility, low population density and the availability of land for future expansion.

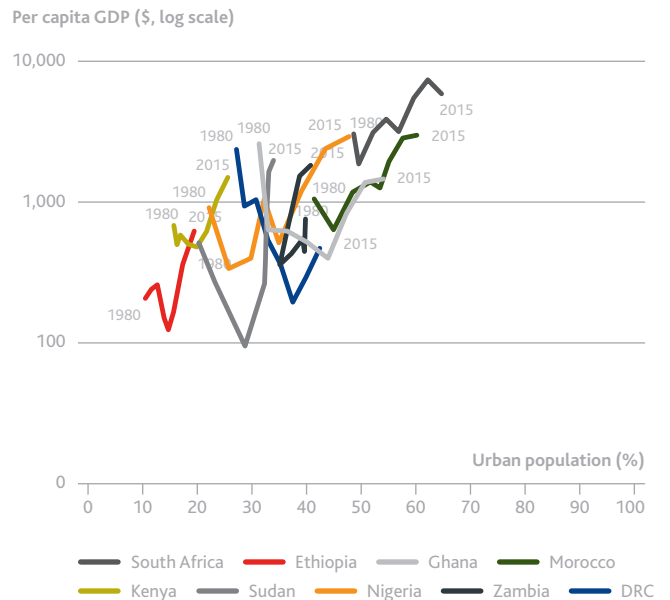
01_The Urban Landscape

Urbanisation & GDP per capita growth: a lower correlation in African countries

GDP per capita & urban population, selected non-African countries



GDP per capita & urban population, selected African countries



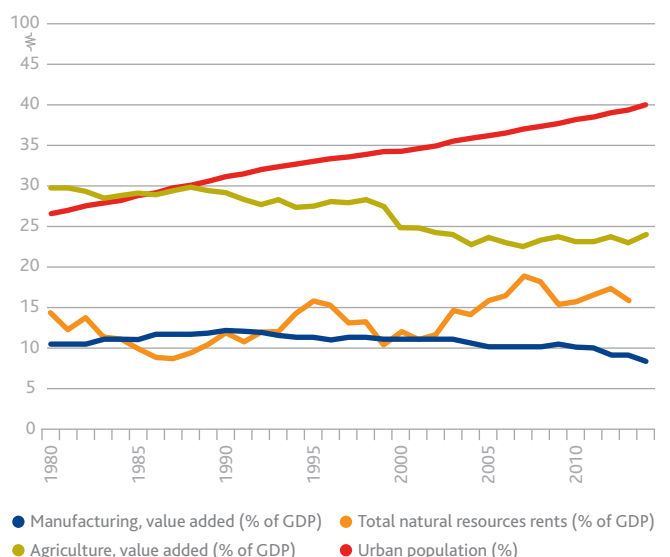
- In many countries there is a consistent link between a country's level of urbanisation and GDP per capita, observed in the selected non-African countries.
- In Africa, only Morocco and South Africa have followed this trend. As the level of urbanisation has increased so has their GDP per capita.
- In other selected African countries, diverse trends have been observed.
 - Zambia saw a period of de-urbanisation coupled with shrinking GDP per capita, but is now experiencing renewed urbanisation and economic growth.

- Ethiopia and Kenya experienced urban and economic growth, followed by a period of stagnation in the 1990s. Since 2000, they have been urbanising and their economies have grown.
- Ghana and Nigeria are urbanising and have shown economic growth since 2000.
- Sudan has shown growth in both its level of urbanisation and economy since 1990.
- The DRC has experienced urbanisation without economic growth.

Urbanisation & industrialisation: a weak link

- In most continents, urbanisation is a by-product of either a "push" from agricultural productivity growth, driven by improvements in technology, or a "pull" from industrial productivity growth, whereby industry requires an increasing amount of labour in cities.
- Urbanisation usually occurs alongside a country's economic structural transformation, and most urban agglomerations are "production cities".
- Asia is a striking example of this trend. The successful Asian economies typically went through both green and industrial revolutions, with urbanisation following and thriving, as economic activity shifted away from agriculture.
- In general, Africa has displayed urbanisation without modern structural transformation, often lacking a "push" from agriculture or a "pull" from industry.
- In some African countries, urbanisation has been driven by the effect of natural resource endowments rather than industrialisation.

Economic activity & urban population growth in Africa (%)

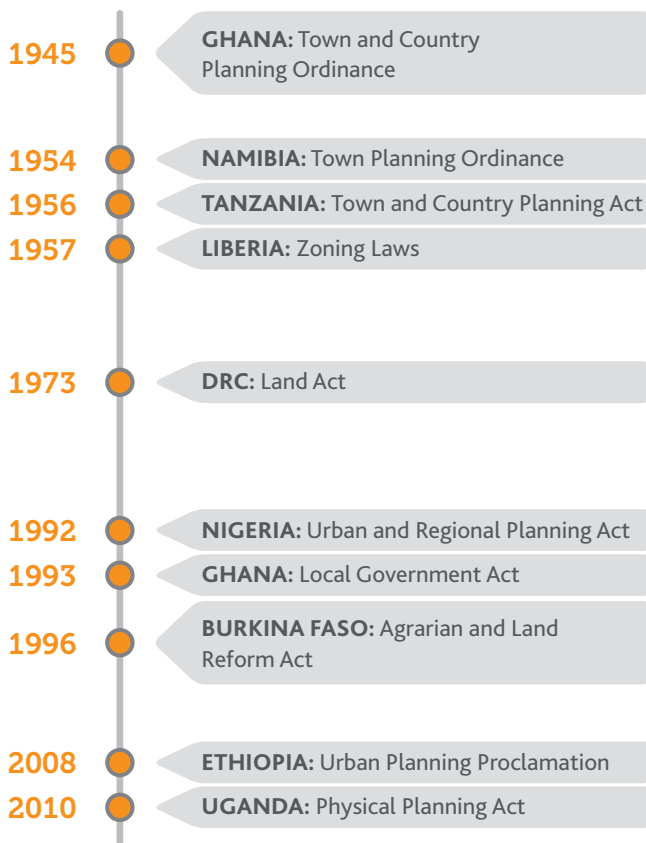


URBAN PLANNING

Many of Africa's urban planning laws are outdated & fail to meet the challenges

- Planning for urban expansion is one of the most important tasks for African governments. African cities are accommodating, on average, 40,000 to 50,000 people every day, putting enormous strain on urban services and the urban environment.
- Without inclusive planning the numbers of inhabitants without access to shelter and basic services such as water and sanitation, energy or formal employment opportunities will explode. Informal housing and development of land, already a feature of urban Africa, will continue unrestrained.
- This will compound existing hazards such as waste, air pollution and the effects of climate change. Unequal planning exacerbates social disparities by marginalising the urban poor from the inner most spaces of cities, where there are paved roads with street lamps, a regular power supply, an adequate water supply, infrastructure and amenities.

Urban planning laws in Africa



Operation Murambatsvina

- In 2005, around 700,000 people were evicted from their homes in Harare, Zimbabwe's capital city.
- Operation Murambatsvina, or "Drive Out the Rubbish", was legitimised by the 1976 Town and Country Planning Act.
- The act, and attendant municipal by-laws, emanated from the colonial era and were meant to keep Africans out of the cities by setting very high housing development standards, beyond the reach of the majority of people.

The influence of colonial planning systems

- Many master plans for African cities were written when current urban population growth rates and poverty levels were not anticipated.
- Town and Country Planning Acts are the principal legislation that govern urban development and planning in Africa. Many are based on outdated colonial planning systems, such as the British Town and Country Planning Act of 1947.
- Most of the former British colonies have retained this legislation as the principal land use control framework, including Ghana, Lesotho, Malawi, Mauritius, Namibia, Tanzania, Zambia and Zimbabwe.
- This legislation can be at odds with international commitments requiring governments to provide adequate shelter to all its citizens.

Urban areas have outgrown many city master plans

- Master plans in sub-Saharan Africa, both old and new, have almost always been drawn up by central governments.
- The current master plan for Dar es Salaam was drawn up in 1976, when the city's population was 628,000. In 2015, the city's population is over 5.1 million, 8 times the size it was in 1976.
- The centre of Kinshasa was originally built for a colonial citizenry, which grew to 400,000 inhabitants in the 1960s. Kinshasa has a current population of over 11.5 million, 29 times the size it was in the 1960s.

New plans, same mistakes

- Abidjan, Kinshasa and Luanda have recently announced the introduction of new master plans to address the complex problems of the modern African city, yet they must find new planning tools.
- Abuja was Africa's first modernist capital, following in the tradition of other planned cities such as Brasilia and Washington D.C.. However, more than 70% of Abuja's working population live in dilapidated satellite towns, owing to their inability to pay the high cost of accommodation in the city centre.

The need for a new generation of African urban planners

- Most planning textbooks used in Africa are produced for students in the USA, UK or other developed economies.
- There are a lack of planning schools in Africa, varying by region.
 - 36 out of 54 African countries do not have a planning school, including Angola and DRC, which have urban populations of over 10 million and 30 million respectively.
 - Nigeria has 36 planning schools and South Africa has 11, for urban populations of 87.7 million and 34.7 million respectively.
 - The École Africaine des Métiers de l'Architecture et de l'Urbanisme, located in Togo, admits students from 14 francophone countries.

AAPS member universities with a planning department, 2015



The Association of African Planning Schools (AAPS)

- The AAPS was formed in 1999 with the aim of improving the quality and visibility of planning in Africa.
- It is a voluntary, peer-to-peer network of African institutions that educate and train urban and/or rural planners.
- The AAPS promotes the review and revision of planning courses to produce programmes that are relevant to the African urban context.

The UK has 10 times more registered planners than Nigeria, despite Nigeria having over 20 million more urban dwellers.

Total number of planners vs. urban population, 2011

Country	Number of planners (per 100,000 urban dwellers)	Urban population (thousand)	Number of accredited planners
Zimbabwe	5.9	4,410	262
Mauritius	5.4	499	27
South Africa	5.2	32,596	1,690
Nigeria	3.2	72,840	2,333
Kenya	1.9	10,073	194
Uganda	1.7	5,202	90
Tanzania	1.2	13,349	158
Ghana	1.2	12,756	150
Malawi	1.2	2,421	30
Zambia	1.1	5,338	60
Mali	0.9	5,304	50
Burkina Faso	0.3	4,240	14
UK	55.0	50,922	23,000
Australia	22.0	20,211	4,452
USA	15.2	254,889	38,830
Pakistan	1.2	65,194	755
India	0.7	381,926	2,800

02_

URBAN STRUCTURES



HOUSING: STRONGER FOUNDATIONS REQUIRED

- Soaring demand left unmet
- Multiple obstacles to formal housing
- Lack of planning, unsafe dwellings

TRANSPORT: A ROADBLOCK TO PROGRESS

- Mass movement, often on foot
- No room to move: sharing available space
- Stuck in traffic: a huge monetary loss
- Public transport: high demand, high potential

ENERGY: POWERING CITY DEVELOPMENT

- Poor access, poor data
- Increasing demand, rising costs, widening inequality
- Unclean energy: fuelling disease
- Renewable energy: potential solutions

HEALTH: A VARIED DIAGNOSIS

- Health facilities in urban areas: access improved but unequal
- Lack of public infrastructure & services
- Dense cities: the epidemic risk

WATER & SANITATION: FUNDAMENTAL TO DEVELOPMENT

- Supply falling short of growing demand
- Differential access impedes progress

WASTE MANAGEMENT: AN OPPORTUNITY LIMITED BY CAPACITY

- More waste to come
- Growing risks for health & the environment
- Trash to treasure: the potential of recycling

EDUCATION: HARNESSING ONE OF AFRICA'S GREATEST RESOURCES

- Wider access & growing school attendance
- Education disparities between the urban rich & poor
- Striving for the 'brain gain': reclaiming lost resources

02_Urban Structures

HOUSING: STRONGER FOUNDATIONS REQUIRED

Soaring demand left unmet

- Sustained and rapid urban growth on the African continent is placing enormous strain on the provision and affordability of urban land and housing.
- Between 2001 and 2011 over 60 million new dwellings were required to accommodate the rapidly growing number of new urban households in Africa.
- In Addis Ababa, Ibadan, Kampala, Lagos and Luanda, more than 40% of the urban population live in overcrowded houses.

Almost ½ the urban population in Africa has no alternative but to live in slums and informal settlements.

Kenya's housing shortage is estimated at 2 million units, while Nigeria needs 17 million units.

Multiple obstacles to formal housing

Poor management & lack of formal land

- Overlapping systems and lack of public policies on land management means limited access and high costs are fundamental constraints to increasing supply of affordable housing.
- Building houses is not enough – houses need to be located in properly serviced and easily reachable areas. In many cities, an acute shortage of well-located, serviced land for housing has caused prices to rise sharply.
- Nova Cidade de Kilamba, located 30 km outside Luanda and designed to house 500,000 people, is home to barely 10% of that number. This is due to the high cost of the apartments and the distance from the capital city and urban amenities. Such cities are known as "ghost cities".

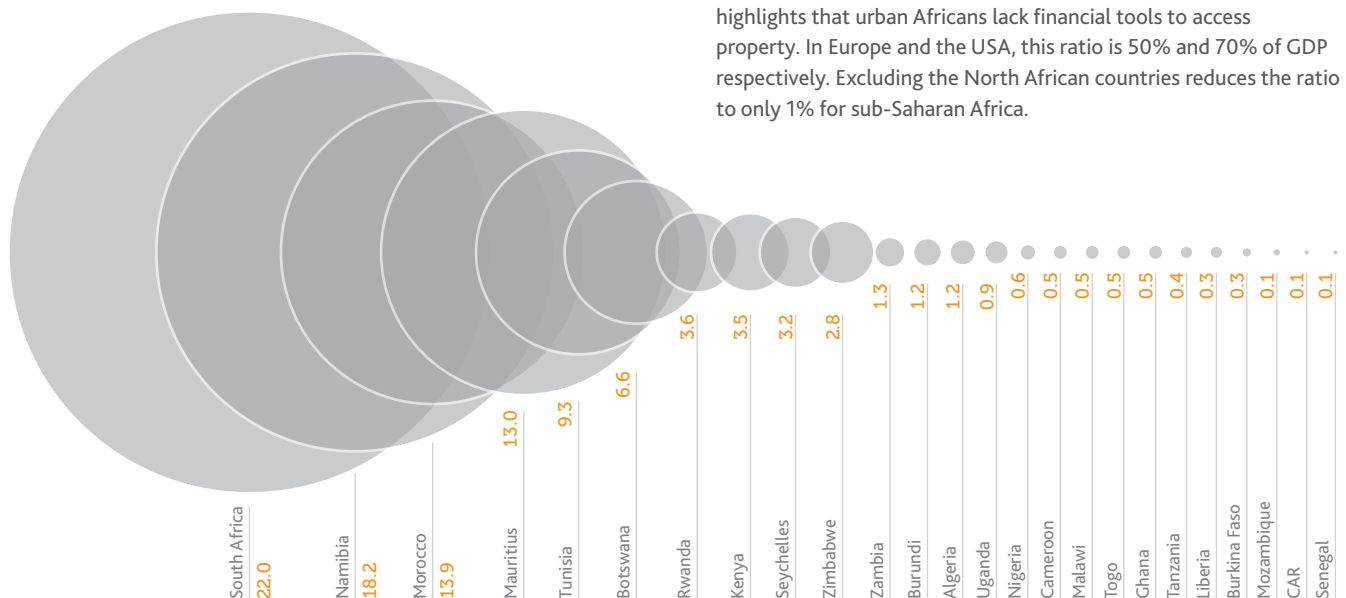
- Informal land development is being increasingly seen as a way in which the urban poor can access land for housing where formal supply is inadequate.

Lack of financing for affordable housing

- High rates of poverty, low and unstable employment coupled with high borrowing costs and lack of lending policies strongly limit accessibility to formal housing.

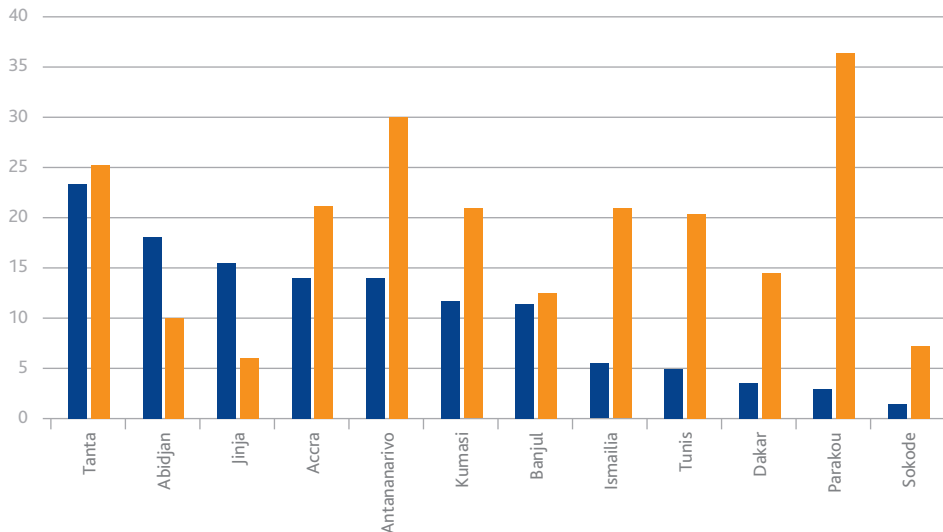
85% of Africa's urban population is not eligible or able to secure formal housing loans.

Mortgages as a share of GDP, selected African countries, selected years 2004-2014 (%)



- The low ratio of outstanding mortgages to GDP in Africa (10%) highlights that urban Africans lack financial tools to access property. In Europe and the USA, this ratio is 50% and 70% of GDP respectively. Excluding the North African countries reduces the ratio to only 1% for sub-Saharan Africa.

House price- & rent-to-income ratios, selected cities, 2003

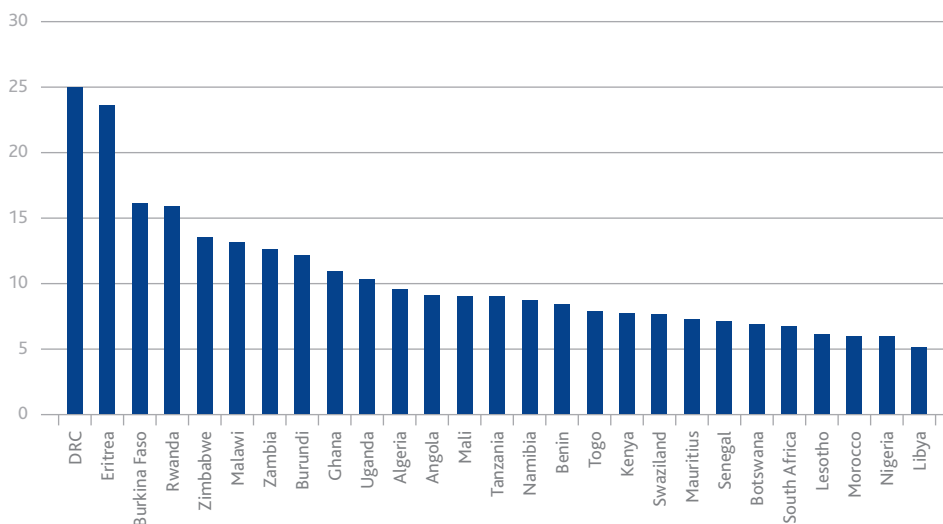


• High costs mean that in most African cities middle-priced housing significantly outstrips middle-income levels.

- Building materials such as cement are often more expensive in lower-income countries. Prices vary widely from about \$5 per bag in Libya, through to about \$25 per bag in DRC.

Cost of a standard 50 kg bag of cement, 2014 (\$)

\$ per 50 kg bag of cement



Lack of planning, unsafe dwellings

- In Nairobi, due to increased demand for housing, private developers can construct buildings without following due diligence. Officers in the housing department often clear the buildings for occupation without inspecting them.
- More than 70% of buildings in Nairobi are said to be unsafe for occupation.

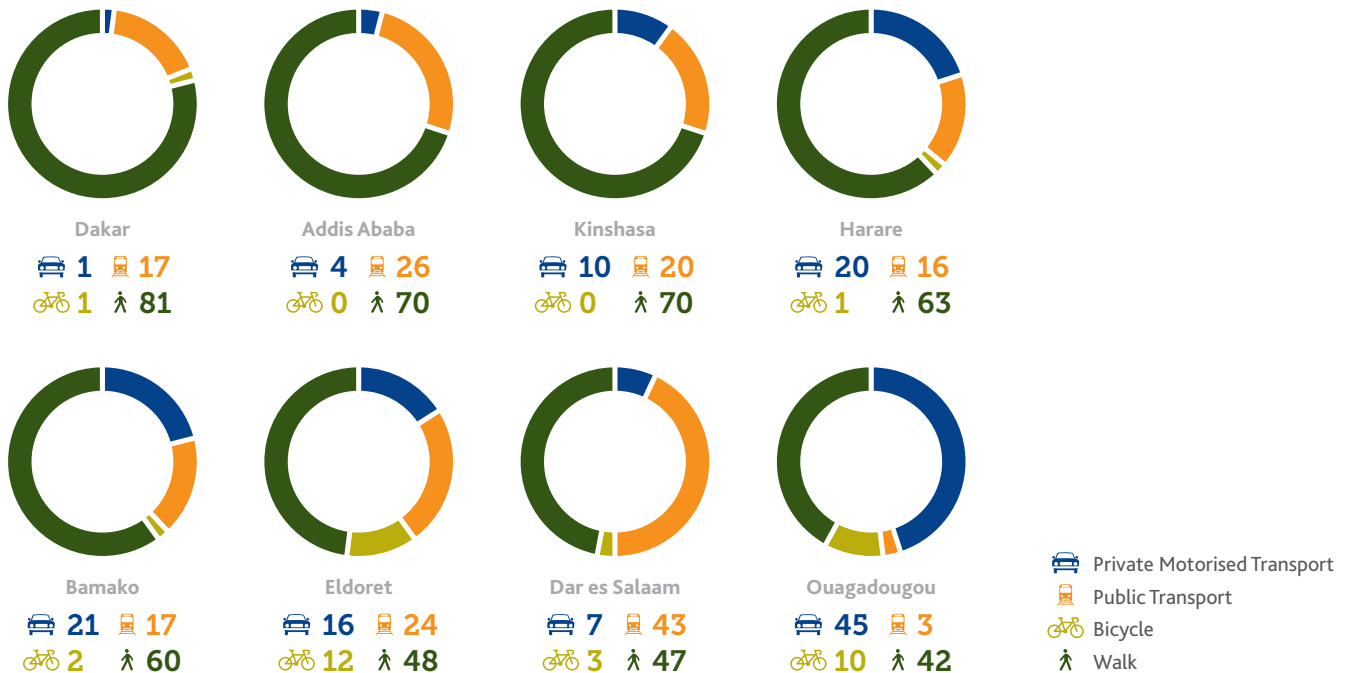
Between July 2012 and June 2013, 392 residential buildings collapsed in Egypt, 52% of them due to a lack of government regulation.

02_Urban Structures

TRANSPORT: A ROADBLOCK TO PROGRESS

Mass movement, often on foot

Mobility & modal choice in selected cities, 2005 (%)



- In Africa, walking accounts for 30-35% of urban mobility, and the use of public transport in African cities varies widely.
 - On average, less than 5% of trips in sub-Saharan Africa are made via public transport, compared to 45% in some cities in Eastern Europe and Asia, and 10-20% in Western Europe and Latin America.
- However, in cities such as Cairo, public transport (both formal and informal) accounts for 75% of daily motorised trips.
- A lack of affordable and accessible public transport systems has led to the proliferation of unregulated and non-scheduled minibus taxis that have become the most effective and preferred form of public transport in many African cities. Lagos alone has around 100,000 minibuses.

- Inefficient and unregulated public transport and low levels of traffic management and planning cause safety concerns, pollution and excessive time spent on urban movement.

In Bamako, 87% of women and 57% of men walk for virtually all trips, taking risks on poorly planned urban road systems.

No room to move: sharing available space

- Low percentages of urban land are allocated to streets – 6% in Bangui, 11% in Accra and 12% in Ouagadougou, compared to a developed country average of 29%.
- Road congestion is a problem in many African cities, caused by poor management of traffic flows, inadequate parking and weak enforcement of traffic rules.
- According to a 2008 study of 14 African cities, less than ½ of all roads were paved.
- In sub-Saharan Africa, street vendors occupy ⅓ of road space in crowded cities.
- Despite the high number of pedestrians, most cities have ignored their needs; pavements are missing on around 65% of the road network. Pedestrians account for ⅓ of fatalities in road-based accidents.

In African cities, paved roads per 1,000 population are 1/3 of that in the developing world

City	Paved roads (m per 1,000 pop.)
Dakar	467
Lagos	400
Abidjan	346
Kampala	225
Conakry	174
Dar es Salaam	150
Kinshasa	63
Average	318
Average, developing world	1,000

Stuck in traffic: a huge monetary loss

- The South African Chamber of Commerce and Industry estimates that road traffic congestion costs the country \$2 million per hour in lost productivity.
- One study in Lagos estimated that commuters lose 3 billion hours annually to congestion and that a 20% reduction in congestion would save \$1 billion every year.

Public transport: high demand, high potential

- In Kampala, minibuses employ up to 60,000 people.
- In Lagos, employment in the transport sector supports over 2.5 million people (15% of the city population).
- In Nairobi, Matatu minibuses are reported to have the highest per capita use of informal transport in the world with 662 trips per inhabitant per year. They provide 90% of public transport and create 80,000 direct and 80,000 indirect jobs.
- Growing vehicular traffic congestion in Africa has contributed to a boom in the use of **motorcycles** for commercial purposes.
 - In Lagos there are 200,000 commercial motorcycles.
 - It is estimated that motorcycles in Douala supported 30,000 direct jobs.
- **Metro systems** in Algiers and Cairo have a daily ridership of 2.2 million passengers.

The potential of light rail systems

- Opened in September 2015, Addis Ababa's 17 km light rail carries 60,000 passengers per day. When completed, the railway should carry 100,000 passengers per day. Fares are \$0.27 per ride. The \$475 million system took 3 years to build, 85% of which was paid for by a Chinese loan.

In Dakar, it is estimated that 1 million working hours are lost per day due to congestion.

Bus Rapid Transport (BRT)

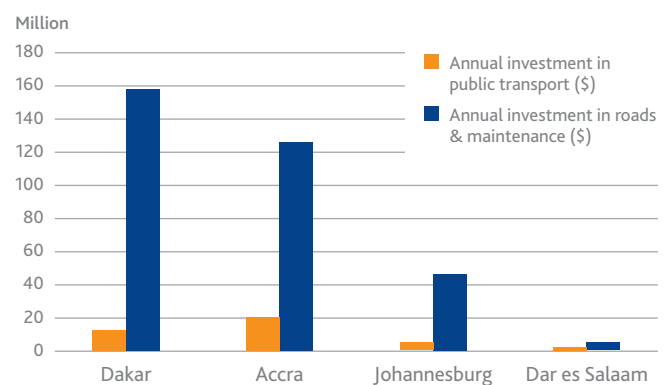
BRT is a bus-based mass transit system.

BRT has been implemented in Cape Town, Johannesburg and Lagos, and will be implemented in Accra, Dar es Salaam and Kampala.

In Lagos, BRT has reduced fares and journey times for more than 200,000 passengers. The BRT generated 2,000 jobs and reduced travel times by 40%.

In South Africa it is expected that, by 2020, most city residents will be no more than 500 m away from a BRT station.

Annual investment in public transport, roads & maintenance, 2008 (\$)



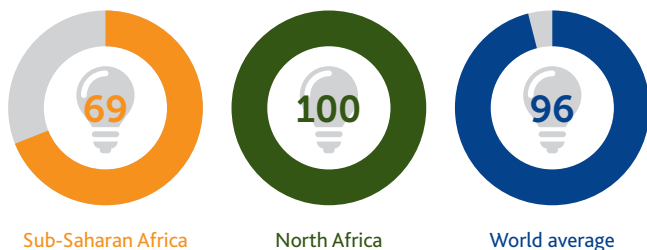
- The spending on roads for private motorised transport remains higher than on dedicated public transport infrastructure.

02_Urban Structures

ENERGY: POWERING CITY DEVELOPMENT

Poor access, poor data

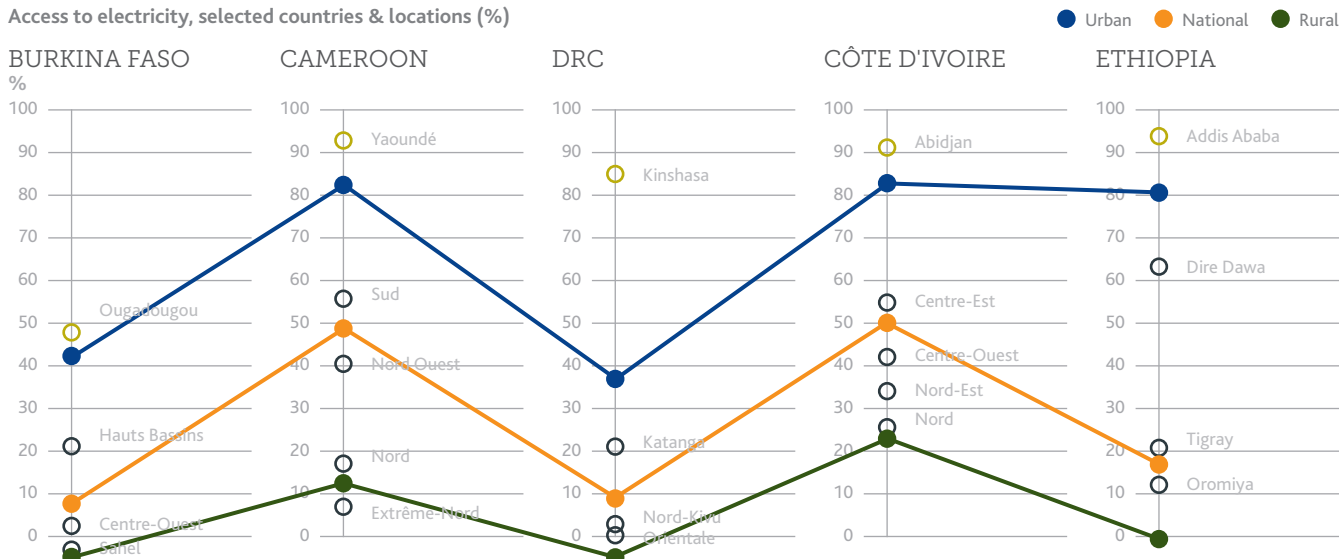
Access to electricity, 2012 (% of urban population)



- Whilst urban dwellers have better access to electricity than people in rural areas (15% in rural sub-Saharan Africa), electricity provision is heavily skewed towards high-income groups. Among the poorest 40% of the population, coverage rates are well below 10%.
- Connection to the grid typically exceeds 80% for the wealthiest 1/3 of households. Residents of informal settlements have particularly low coverage rates, partly because of household poverty and partly because they often lack the formal property titles needed to secure connections.

- Around 1/3 of urban dwellers in sub-Saharan Africa still have no access to electricity. For the 2/3 of urban sub-Saharan Africans that do have access to electricity in principle, traditional methods of measuring this access are not able to capture broader deficiencies in affordability, reliability and quality of service.
- Access to electricity in Kinshasa is only rated at 30% when taking into account efficiency of supply rates, compared to a 90% measurement through traditional indicators focusing on grid connections.
- In 2010, the total power capacity installed in Africa was 147 GW, equivalent to the total capacity installed in Belgium and to what China installs every 1 to 2 years.
- New York City has a generation capacity of 13,000 MW for a population of just over 8 million, compared to Nigeria that has a generation capacity of 4,000 MW for a population of 160 million.
- \$2 out of every \$3 put into the sub-Saharan energy sector since 2000 has been committed to the development of resources for export.

Access to electricity, selected countries & locations (%)



Increasing demand, rising costs, widening inequality

- For the time being, Africans consume little energy: the average residential electricity consumption per capita is 225 kWh (excluding South Africa), around 1/2 that of China.
- Demand for electricity is expected to increase 6-fold before 2050, with 80% of demand in urban areas.
- In sub-Saharan Africa, firms report an annual average loss of 7% of sales due to electrical outages.
- Due to a lack of infrastructure, urban Africans depend on widespread use of private generators running on costly diesel or gasoline.
- Load shedding, an intentionally engineered electrical blackout, is a widely used method to address electricity shortages.
- In Accra, elite neighbourhoods experience significantly fewer power cuts than poor neighbourhoods.
- In the poorer areas of the city, load shedding is severe with some households not receiving power for as long as 48 to 72 hours continuously.

Cost of generating electricity, 2010 (per kWh)



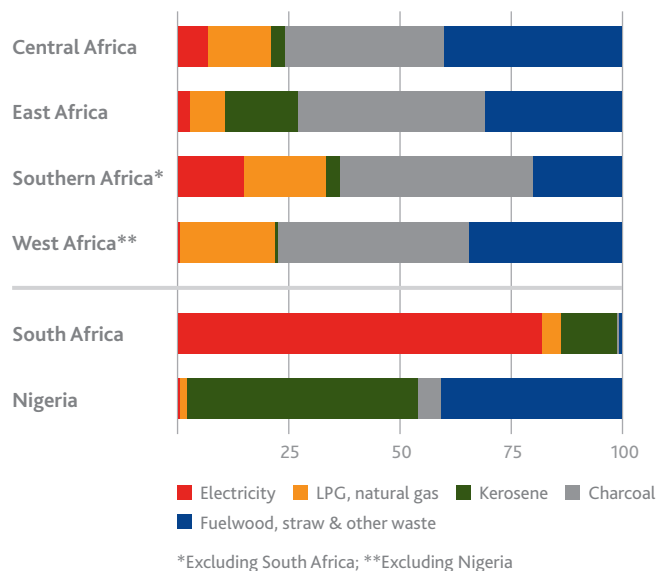
Unclean energy: fuelling disease

- Solid fuels are the most widely used types of energy, in particular solid biomass such as wood and coal, which accounts for 70% of final energy use in sub-Saharan Africa today.
- Around 80% of residential energy demand in sub-Saharan Africa is for cooking, compared with around 5% in OECD countries.
- In 6 African countries, 95% of urban households use solid fuels for cooking. In a further 10 countries, between 70% and 95% of urban households use solid fuels for cooking.
- The use of solid fuels in households is associated with increased mortality from pneumonia and other acute lower respiratory diseases among children, and causes 600,000 preventable deaths a year in Africa.

Access to non-solid fuels, 2012 (% of urban population)



Main fuel used by urban households for cooking, 2014 (%)



In Nigeria, a major oil and gas producing country, more than 80% of households use kerosene, charcoal or wood for cooking.

Renewable energy: potential solutions

- The untapped potential of Africa’s primary energy resources (excluding South Africa) is estimated to be 260 times the current grid-based capacity.
- The Great Rift Valley in East Africa is an area with high geothermal activity. It is estimated that around 9,000 MW could be generated from geothermal energy in this area. Yet the installed capacity in Kenya and Ethiopia is only 167 MW and 7.3 MW respectively.
- Many parts of sub-Saharan Africa receive daily solar radiation of between 4 kWh and 6 kWh per m², indicating strong solar energy potential.

Regional solutions to leveraging renewable resources

In West Africa, only 16% of the roughly 23,000 MW of hydropower potential is currently being exploited.

The Manantali Dam on the River Senegal is expected to distribute 200 MW capacity between Mali, Mauritania and Senegal and aims to help service the cities of Bamako, Nouakchott and Dakar.

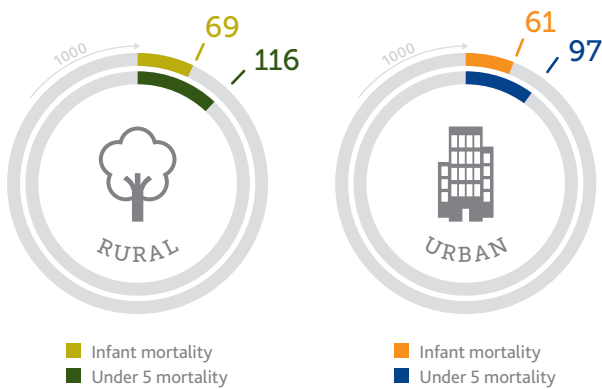
02_Urban Structures

HEALTH: A VARIED DIAGNOSIS

Health facilities in urban areas: access improved but unequal

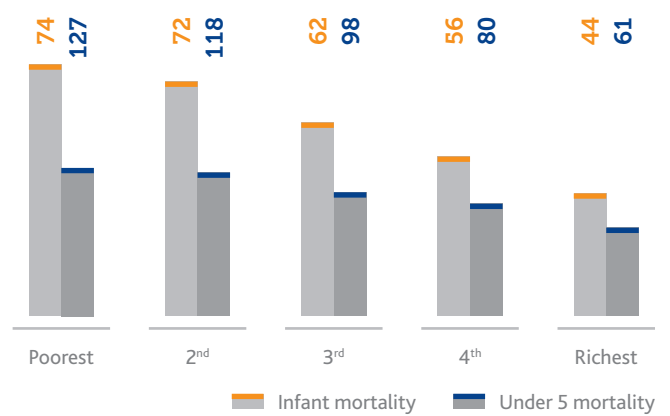
- Urban environments provide easier access to health facilities and services.

Child mortality, 25 African countries, selected years 2005-2011 (per 1,000 live births)

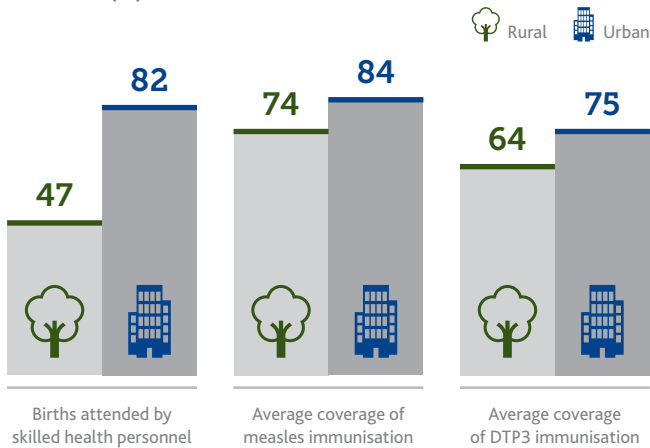


- Demand for limited services is resulting in growing inequality when it comes to accessing health services such as medicine and skilled practitioners.

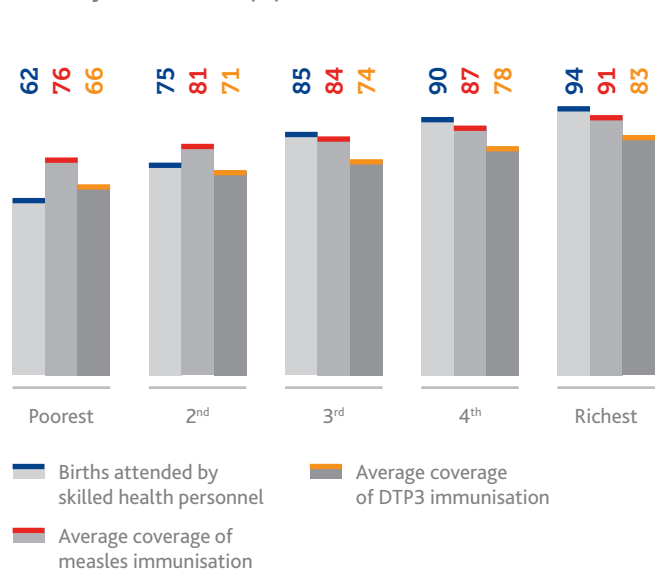
Urban child mortality by wealth quintile, 25 African countries, selected years 2005-2011 (per 1,000 live births)



Health service coverage, 25 African countries, selected years 2005-2011 (%)



Urban health service coverage by wealth quintile, 25 African countries, selected years 2005-2011 (%)



Urban health data

Data on urban health infrastructure in African cities are sparse. The majority of urban Africa relies on Demographic and Health Surveys for their health data, which focus on individual health.

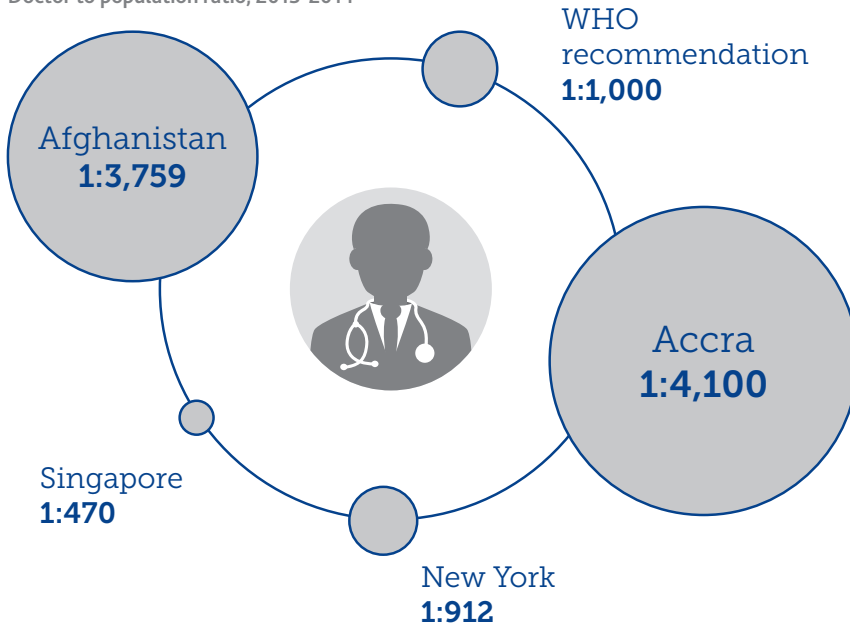
There is a lack of urban specific data on the causes of death in many African cities.

Red tape often prevents local governments from accessing much of the relevant data from national surveys carried out by public officials.

Aggregate statistics often portray urban areas as healthier than rural areas, without accounting for the large differentials in health outcomes that exist in cities.

Lack of public infrastructure & services

Doctor to population ratio, 2013-2014



- Accra has 800 private clinics compared with 20 government-run health facilities.
- The lack of infrastructure and access for the urban poor creates growing inequality in access to services.

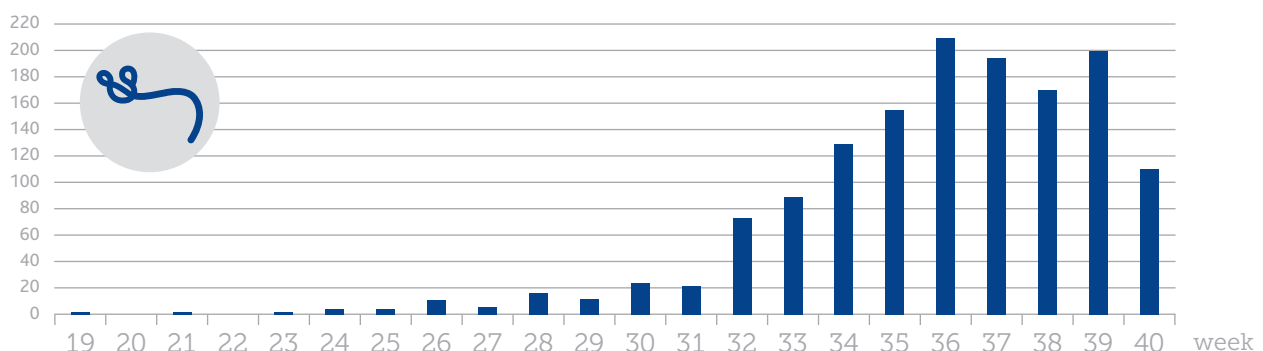
Dense cities: the epidemic risk

- The Ebola outbreak in West Africa in 2014 demonstrated how swiftly a virus could move once it reached urban settings and densely populated slums.
- In past outbreaks, Ebola was largely confined to remote rural areas, with just a few scattered cases detected in cities. However, during the latest outbreak, cities – including the capitals of the 3 main Ebola-affected countries, Liberia, Guinea and Sierra Leone – were epicentres of intense virus transmission.
- Montserrado county in Liberia, which includes the capital Monrovia, experienced an explosion of Ebola cases once the epidemic hit its cities, increasing from 16 cases to 209 in less than 2 months.

“The threat posed by infectious diseases will only grow with up to 2 billion people projected to be living in slums by 2030, urbanisation concentrating human contact, antimicrobial resistance on the rise and bioterrorism an increasing danger.”

Now for the Long Term: The Report of the Oxford Martin Commission for Future Generations, 2013

Number of Ebola cases by week of epidemic, Montserrado



02_Urban Structures

WATER & SANITATION: FUNDAMENTAL TO DEVELOPMENT

What is 'improved' water & sanitation?

'Improved' water includes access to sources that, by nature of their construction or through active intervention, are protected from outside contamination, particularly faecal matter.

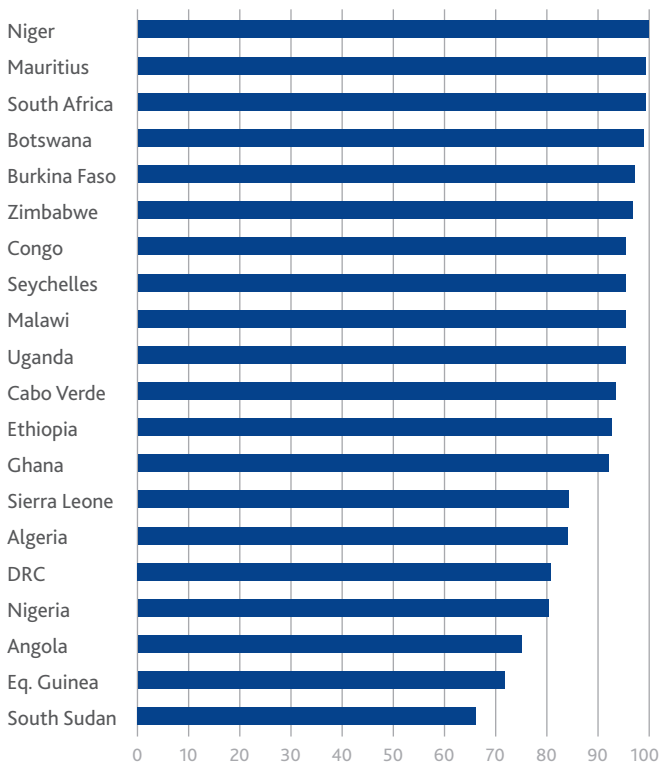
'Improved' sanitation facilities hygienically separate human excreta from human contact.

Supply falling short of growing demand

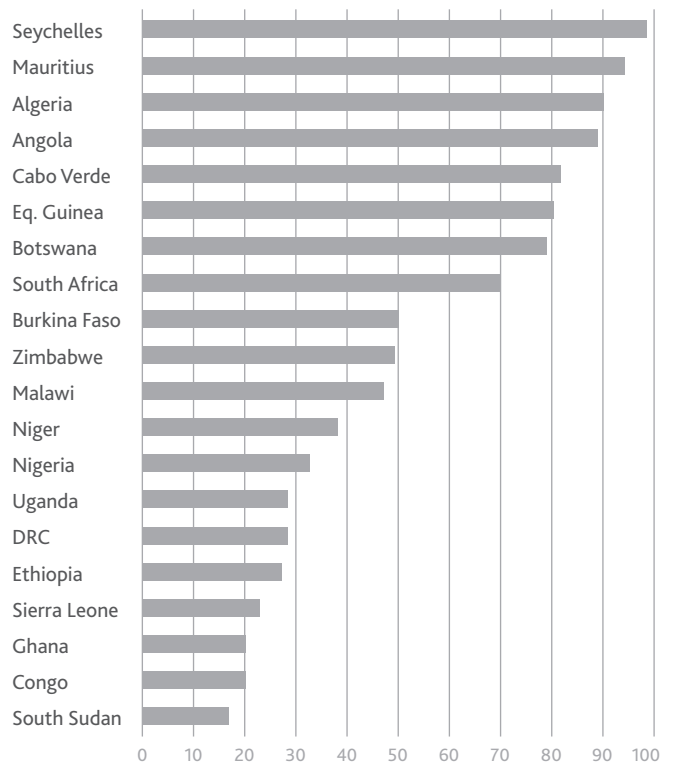
- Over the last 25 years, 247 million urban Africans gained access to improved water and 135 million to improved sanitation.
- Despite more urban Africans gaining access to improved water and sanitation, urbanisation rates are exceeding the number of urban Africans gaining access. In the last 25 years the number of people without access to improved sanitation has increased by 134 million.
- 89% of urban Africans have access to a water source that is protected from outside contamination. However only 46% of Africa's urban population is connected to piped networks, and 43% rely on public standpipes in 23 countries.
- 52% of urban Africans have access to an improved sanitation facility. However, 55% of those people have access to a shared sanitation facility only.

By 2030, water demand is likely to increase by 238% in sub-Saharan Africa, particularly in cities. This is 3 times more than any other region in the world.

Urban access to improved water, selected countries, 2015 (%)

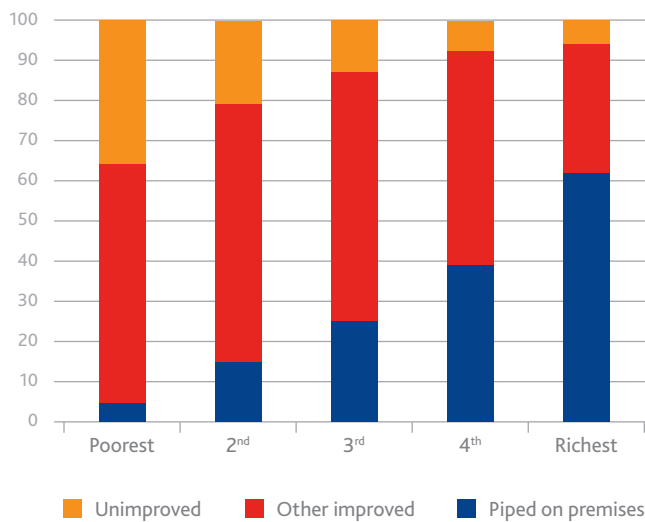


Urban access to improved sanitation, selected countries, 2015 (%)

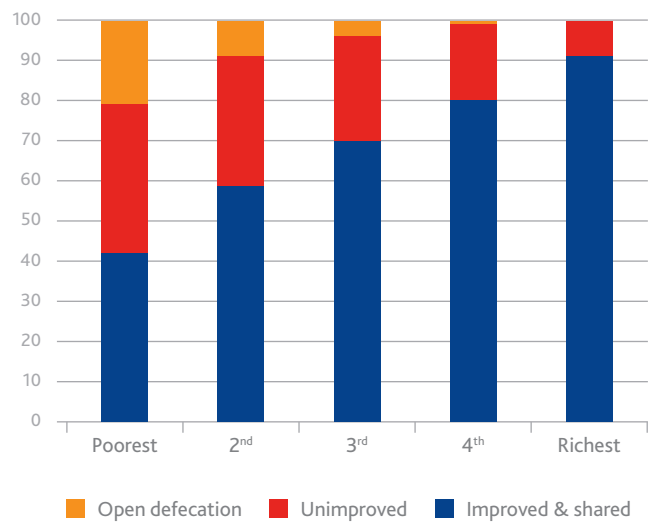


Differential access impedes progress

Drinking water coverage by wealth quintiles in urban areas, 35 African countries, 2004-2009 (%)



Sanitation coverage by wealth quintiles in urban areas, 35 African countries, 2004-2009 (%)



In the Clara Town slum in Monrovia, 75,000 people share 22 public taps: 3,400 people per tap.

Kibera, Kenya's largest slum based in Nairobi, is home to almost 1 million citizens and only has 1,000 public toilets: 1,000 people per toilet.

- Rising inequality in access to clean water and sanitation services in urban Africa has huge impacts on the urban poor, including in the areas of health and education.
- Limited access to sanitation constitutes the primary cause of diarrhoea, dysentery and typhoid.
- Limited access to water and sanitation facilities prevents privacy and increases the risk to women and girls of sexual harassment/assault.

02_Urban Structures

WASTE MANAGEMENT: AN OPPORTUNITY LIMITED BY CAPACITY

More waste to come

- African cities generate between 0.3 kg and 0.8 kg of solid waste per capita per day compared to the global average of 1.4 kg per capita per day.
- By the time 50% of the population of sub-Saharan Africa lives in cities, the daily rate of production of waste is expected to be raised by as much as 1 kg per capita.

Waste generated in most urban areas in Africa could quadruple by 2025, creating a potential waste management emergency.

The rise of e-waste: Agbogbloshie, Accra, the world's largest e-waste dumping site

- Agbogbloshie, a former wetland in Accra, has become home to the world's largest e-waste dumping site.
- The Basel Convention bans the export of hazardous waste including e-waste from developed countries to developing ones for "final disposal, recovery or recycling".
- In May 2015, a UNEP report estimated that 60-90% of the world's e-waste is illegally dumped. UNEP estimates that Ghana receives 40,000 tonnes of e-waste a year. Up to ½ of this may be repaired for local resale, questioning its classification as e-waste.
- Young teenagers work at Agbogbloshie, extracting copper and aluminium from the scrap by burning off other materials.

This can have serious health consequences, through the release of toxic dioxins into the atmosphere.

- The e-waste business is highly lucrative, despite its risky nature, with earnings of between \$7.50 daily for scrap collectors to as high as between \$20 and \$100 per day for e-waste refurbishers.
- These amounts are higher than the salary of lower- and middle-level officers in Ghana's public service.

Growing risks for health & the environment

- Lack of investment in solid waste management means the most popular method of disposal of waste in African cities is the use of unsanitary landfills or open dumping. Dumping grounds are often adjacent to informal settlements.
- Most municipalities fail to provide adequate waste management services because of poor governance, a lack of financial powers and poor capacity to adequately adopt technology-intensive methods.

Less than ½ of the solid waste generated is collected, and 95% of that is neither contained nor recycled.

East Africa: waste composition & collection, selected cities, 2012

City	Waste collected (%)	Population (million)	Population paying for waste collection (%)	Waste per capita per day (kg)	Paper (%)	Plastic (%)	Glass (%)	Metal (%)	Other (%)	Biowaste (%)
Dar es Salaam	40	3.1	Not determined	0.4	9	9	4	3.0	4	71
Moshi	61	0.2	35	0.9	9	9	3	2.0	12	65
Kampala	60	1.7	Not determined	0.6	8	10	1	0.3	3	77
Jinja	55	0.09	Not determined	0.6	8	8	1	0.5	4	79
Lira	43	0.1	Not determined	0.5	6	7	2	2.2	15	69
Nairobi	65	4.0	45	0.6	6	12	2	1.0	14	65

Trash to treasure: the potential of recycling

Economic potential

- Solid waste is increasingly seen as an alternative source of renewable energy, and successful waste management industries provide jobs and opportunities for recycling. Waste recycling yields a monthly income of between \$130 and \$800 for scavengers in Kenya, Senegal and South Africa.
- Waste generated in African cities typically contains over 50% of organic waste, highlighting the potential for "green economy" projects.
- The global market for waste-to-energy was valued at \$19.9 billion in 2008.

The Mariannhill Landfill in South Africa offsets 20,000 tonnes of carbon dioxide each month and produces enough electricity to power 3,750 small houses.

Keeping cities clean: different approaches

Kigali: the 'Umuganda' principle

- 'Umuganda' relates to community and payment.
- In 2000, President Kagame harnessed 'Umuganda' to help clean up Kigali and promote cohesive national identity through communal projects.
- On the last Saturday of each month, traffic is stopped for 3 hours while the city comes together to tidy up. All able-bodied people between the ages of 18 and 65 are required by law to participate.
- The knock-on effect is that people are less inclined to drop litter in the first place.
- The mayor of Kigali is now introducing cleanliness and hygiene awareness lessons to primary schools.

Cairo: the Zabbaleen

- Cairo produces more than 15,000 tonnes of solid waste every day.
- For several generations, the Zabbaleen have been collecting trash door-to-door for a small tip, and recycling up to 80% of the waste collected.
- Despite their tough living conditions, they have been able to form a tight community with around 70,000 people working on the informal waste management sector.
- Since 2003, attempts at privatising the waste disposal have failed in Egypt and the Government is trying to make the Zabbaleen's role official by promoting ways for their formal integration.

Singapore: cleanliness by legislation

- In the 1960s, Prime Minister Lee Kuan Yew introduced strict anti-litter laws, which are still in force today.
- Anyone convicted of dropping litter can be fined up to around \$700 for the first conviction. Repeat convictions cost up to \$3,500, and may lead to a community service order or anti-littering lectures. In the case of a 3rd offence, the person may be made to wear a sign reading "I am a litter lout".

02_Urban Structures

EDUCATION: HARNESSING ONE OF AFRICA'S GREATEST RESOURCES

Wider access & growing school attendance

- School attendance in urban areas is increasing in many African countries.

Urban net attendance to primary education, selected countries (%)

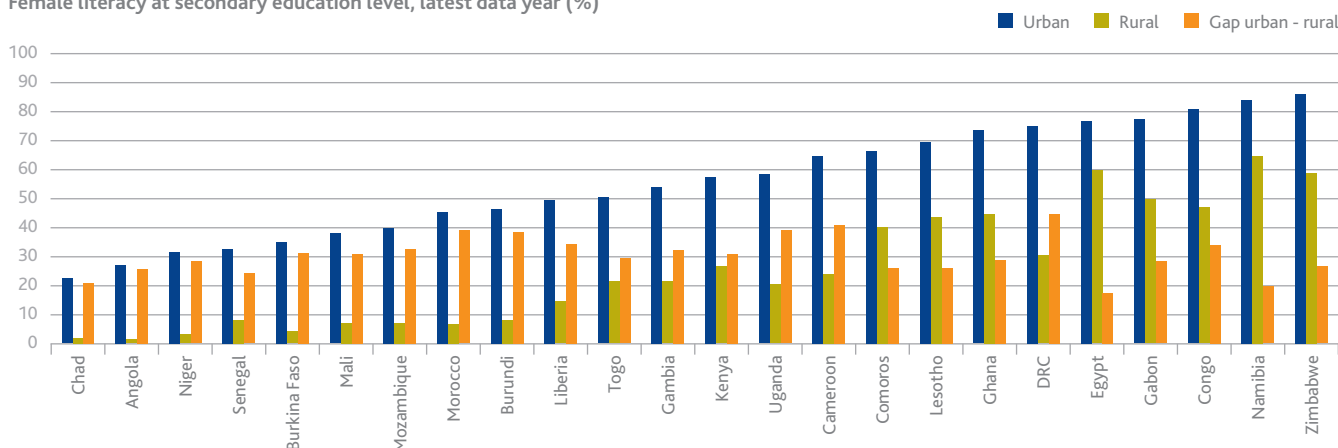
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Burkina Faso	71.8	.	.	71.5	.	.	.	79.2	.	.	.
Cameroon	.	84.8	.	82.9	.	.	.	.	83.4	.	.
DRC	.	.	.	.	79.8	.	.	84.1	.	.	87.8
Egypt	.	.	89.6	.	.	.	88.7	.	.	.	.
Ethiopia	.	.	80.2	.	.	.	.	.	80.1	.	.
Kenya	79.9	.	.	.	.	88.3	.	.	.	.	.
Malawi	.	87.7	.	.	.	.	.	90.3	.	.	.
Mozambique	82.4	.	.	.	.	87.6	.	83.5	.	.	.
Nigeria	72.6	.	.	.	68.3	74.2	.	.	.	.	.
Rwanda	.	.	89.5	.	.	.	.	93.9	.	.	.
Senegal	.	.	75.0	.	.	.	.	.	75.3	.	.
Sierra Leone	.	.	.	.	79.9	.	.	.	.	.	82.9
Swaziland	.	.	.	90.0	.	.	.	94.9	.	.	.
Togo	.	.	82.5	.	.	.	.	85.9	.	.	.
Uganda	.	.	89.5	.	.	.	.	.	90.5	.	.
Tanzania	.	91.5	.	.	.	.	.	87.8	.	.	.
Zimbabwe	.	87.3	.	.	.	.	.	88.6	.	.	.

Urban net attendance to lower secondary education, selected countries (%)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Burkina Faso	36.1	.	.	38.8	.	.	.	41.8	.	.	.
Cameroon	.	49.5	.	53.0	.	.	.	.	57.5	.	.
DRC	.	.	.	.	26.6	.	.	27.5	.	.	39.6
Egypt	.	.	51.1	.	.	.	73.3	.	.	.	.
Ethiopia	.	.	51.6	.	.	.	.	.	52.9	.	.
Kenya	24.9	.	.	.	.	47.3	.	.	.	.	.
Malawi	.	48.0	.	.	.	.	.	46.2	.	.	.
Mozambique	15.5	.	.	.	.	30.2	.	42.6	.	.	.
Nigeria	35.9	.	.	.	37.3	45.7	.	.	.	.	.
Rwanda	.	.	6.9	.	.	.	.	20.4	.	.	.
Senegal	.	.	28.1	.	.	.	.	.	47.5	.	.
Sierra Leone	.	.	.	.	43.0	.	.	.	.	.	48.6
Swaziland	.	.	.	54.1	.	.	.	53.1	.	.	.
Togo	.	.	48.1	.	.	.	.	54.5	.	.	.
Uganda	.	.	31.7	.	.	.	.	.	37.0	.	.
Tanzania	.	22.9	.	.	.	.	.	49.9	.	.	.
Zimbabwe	.	52.5	.	.	.	.	.	52.3	.	.	.

■ Improved ■ Deteriorated

Female literacy at secondary education level, latest data year (%)



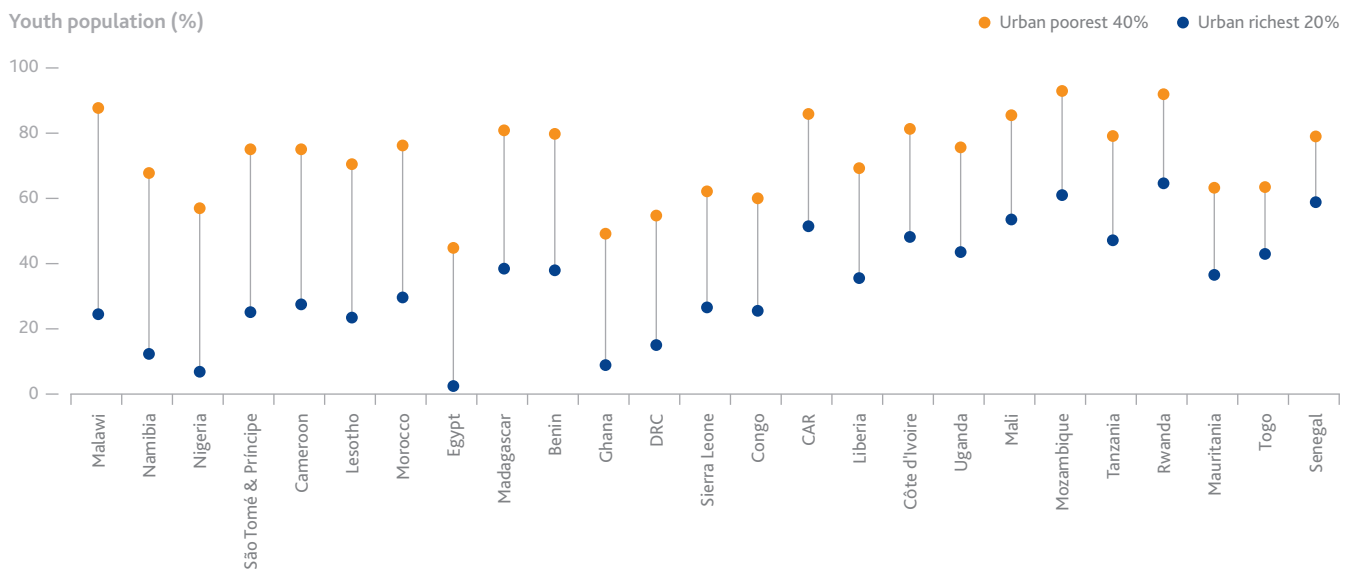
- Female literacy is usually higher in urban areas than in rural areas, although literacy levels still vary across countries. Congo, Namibia and Zimbabwe all have an urban female literacy rate above 80%, compared to Angola and Chad that have a rate below 30%.

Education levels of urban households in Africa (%)

Education level	Male	Female	Average
No education	14	20	17
Primary education	39	40	40
Secondary education	36	33	35
Higher education	10	6	8

Education disparities between the urban rich & poor

15-24 year-olds leaving before completing lower secondary school, by wealth & location, selected countries, 2012 (%)



Striving for the 'brain gain': reclaiming lost resources

- Between 2000 and 2010, university enrolments in sub-Saharan Africa more than doubled, increasing from 2.3 million to 5.2 million.
- While the enrolment rate in the region is still only 7%, compared to 29% worldwide, over the last 40 years the higher education system has been expanding at almost twice the global rate.
- Sub-Saharan Africa has the highest rate of outbound student mobility of any region, leading to a significant risk of 'brain drain'.
 - In 2010, there were just under 400,000 African students abroad, representing 6% of African students. This is over 2 times the size of the student population at Cairo University.
 - In 2013-2014 there were 35,095 African students studying in higher education in the UK. This is larger than the number of students at the University of Ghana (30,000 students).
 - There are almost 8,000 Nigerian students studying in the USA in 2013-2014. This is almost 1/3 of the number of students studying at the University of Cape Town.
 - There are more Ethiopian doctors in the USA than in Ethiopia.

There are already 50% more students per lecturer in sub-Saharan Africa than the global average.

CITIES OF OPPORTUNITY?

Ernst & Young's (EY) Attractiveness Survey, 2014

- Africa's cities are now emerging as the hotspots of economic and investment activity. Nearly 70% of respondents to EY's 2014 Attractiveness Survey stressed the significance of cities and urban centres in their investment strategy in Africa.
- In sub-Saharan Africa, ½ of respondents in the 2014 survey quote a South African city as their 1st option. Johannesburg is considered the most attractive city in which to do business, followed by Cape Town, Nairobi and Lagos. In North Africa, Casablanca, Cairo and Tunis are perceived as the top 3 cities in which to do business.
- Investors surveyed highlighted that, in order to attract greater investments, cities need to focus on the following critical factors: infrastructure (77%), consumer base (73%), local labour cost and productivity (73%) and a skilled workforce (73%).
- Attracting the largest share of investor activity in Africa are 3 consumer-facing sectors: technology, media and telecommunications; financial services; and consumer products and retail. Rising urbanisation has resulted in real estate, hospitality and construction becoming the 4th most attractive sector in Africa.
- There are however perceived barriers to investment in African cities.

Africa's urban appeal: top African cities according to survey respondents

North Africa		Sub-Saharan Africa	
Casablanca	26%	Johannesburg	34%
Cairo	20%	Cape Town	15%
Tunis	8%	Nairobi	6%
Algiers	8%	Lagos	5%
Can't say	27%	Can't say	23%

Perceived barriers to investment in Africa



Oxford Economics: Future trends & market opportunities in the world's largest 750 cities, 2015

- The 5 biggest cities by GDP in Africa in 2030 will be (in order) Johannesburg, Cairo, Luanda, Lagos and Cape Town and will generate a combined GDP of \$651 billion – \$374 billion more than in 2013.

PricewaterhouseCoopers (PwC): Cities of Opportunity, 2015

- PwC identified 20 African 'Cities of Opportunity', measured by infrastructure, human capital, economics, and society and demographics, with 4 of the top 5 situated in North Africa.

Rank	Overall	Infrastructure	Human capital	Economics	Society & demographics
1	Cairo	Cairo	Tunis	Casablanca	Kampala
2	Tunis	Tunis	Johannesburg	Tunis	Cairo
3	Johannesburg	Addis Ababa	Cairo	Johannesburg	Dar es Salaam
4	Casablanca	Johannesburg	Algiers	Cairo	Nairobi
5	Algiers	Casablanca	Casablanca	Accra	Accra

03_

URBAN REALITIES



POVERTY & INEQUALITY: THE URBAN ROUTE OUT?

- Poverty: the right direction, but a long way to go
- High risk, big wins: taking a chance on the city

EMPLOYMENT PROSPECTS: INSUFFICIENT & MAINLY INFORMAL

- Africa's demographic pattern: a ticking time bomb in cities?
- Disparities between urban labour markets
- The informal economy: the source of most urban employment

SAFETY, CRIME & VIOLENCE: SECURING CITIES

- African cities: crime hotspots?
- Policing Africa's cities
- Making cities safer

SLUMS: INADEQUATE HOMES FOR MANY

- Almost ½ of Africa's urban population live in slums
- Multiple deprivations, multiplied risks

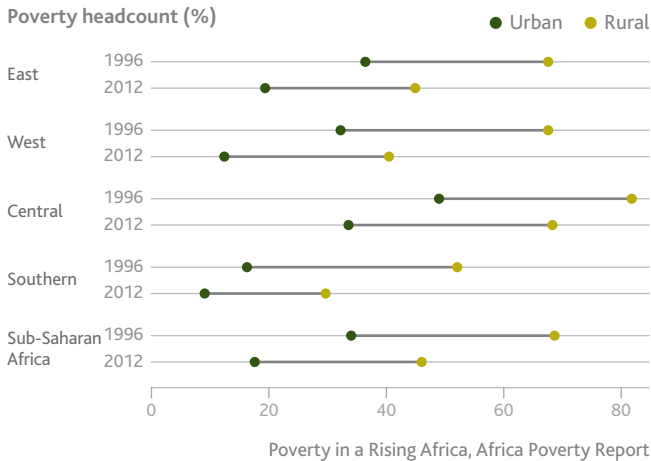
COMMUNITIES OF CONCERN: URBAN REFUGEES, REFUGEE CAMPS, MIGRATION HUBS

- Urban refugees: a hidden population?
- Refugee camps: shadow cities?
- Migration cross-roads: from transit hubs to destination points?

03_Urban Realities

POVERTY & INEQUALITY: THE URBAN ROUTE OUT?

Poverty: the right direction, but a long way to go



The challenge of measuring urban poverty

- Most income-based poverty lines do not take into account differences in the cost of goods across countries and within countries. In many urban areas, the cost of goods is higher than in rural areas.
- Getting representative samples of urban poor is problematic as household surveys for urban areas may not cover people living in informal settlements or informal rent arrangements in formal settlements, and those who are homeless, nomadic, displaced or in institutions.

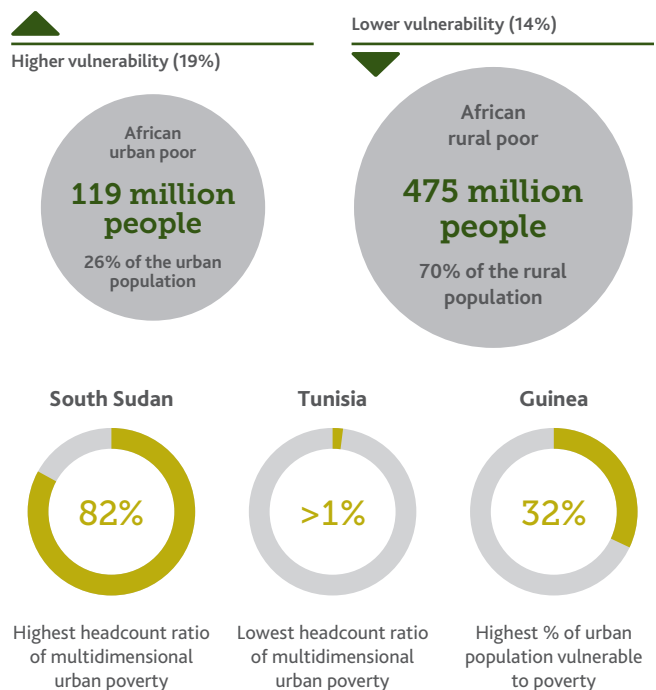
High risk, big wins: taking a chance on the city

- Urban Africans are less likely to live in multidimensional poverty than rural Africans, but are more likely to be vulnerable to poverty.
- By capturing a broad range of measures in its assessment of poverty, the MPI has identified 26% of the urban population as living in poverty.
- According to the MPI, 19% of the urban population are vulnerable to poverty, as opposed to 14% of the rural population.
- Just over 10% of the urban population live in severe poverty, as opposed to almost ½ the rural population. The intensity of deprivation in urban areas in Africa is 44% compared to 55% in rural areas.
- According to Afrobarometer, almost ½ (47%) of urban Africans describe their living conditions as “fairly bad” or “very bad”.
 - Over ⅓ of urban Africans reported being deprived of an adequate amount of food.
 - Over ¼ of urban Africans reported being deprived of cooking fuel and medical care.
 - The most reported deprivation for urban Africans was access to water, with 28% reporting a lack of access to clean water.

- The urban poverty headcount ratio in sub-Saharan Africa dropped by 16% (from 34% to 18%) between 1996 and 2012.
- Despite this progress, because of urban population growth, the number of urban poor remained the same.
- The gap in the poverty rate between urban and rural areas also declined (from 35% to 28%). However, the ratio of rural to urban poverty rose (from 2.0 to 2.6), because the rate of poverty reduction was higher in urban areas.

Beyond income: the Global Multidimensional Poverty Index (MPI)

- Defined by the Oxford Poverty and Human Development Initiative (OPHI), the MPI is a measure of poverty designed to capture the multiple deprivations that each poor person faces at the same time with respect to education, health and other aspects of living standards. It is seen as complementary to income poverty measures.
- The MPI reflects both the incidence of multidimensional poverty (the proportion of people in a population who are multidimensionally poor – those deprived in at least ⅓ of the weighted indicators), and its intensity (the average number of deprivations each poor person experiences at the same time).
- 2 additional categories of multidimensional poverty reflect varying levels of the intensity of deprivation. ‘Population vulnerable to poverty’ is the percentage of population at risk of suffering multiple deprivations (intensity of deprivation score of 20-33%). ‘Population in severe poverty’ measures the percentage of population with an intensity of deprivation score of 50% or more.



The Nigerian paradox: a rich country with poor people

- The MPI uses sub-national data for all 36 states in Nigeria and the Federal Capital Territory.
- 28% of the urban population live in multidimensional poverty, with a 47% intensity of deprivation among the poor.
- Cooking fuel is the biggest contributor to multidimensional poverty (25% of the population are deprived), followed by nutrition (17% of the population are deprived).
- The northern city of Zamfara is the poorest whereas Lagos, in the south, is the richest.
- Lagos has the lowest percentage of people living in multidimensional poverty (9%). Health is the biggest contributor to multidimensional poverty in the city.

Transitioning out of poverty: a greater chance in a secondary city

A study conducted in Tanzania over a period of almost 20 years concluded that out of those who exited poverty, about 1 out of 2 individuals/households did so by transitioning out of agriculture into the rural nonfarm economy or secondary towns whilst only 1 out of 7 did so by migrating to the big cities.

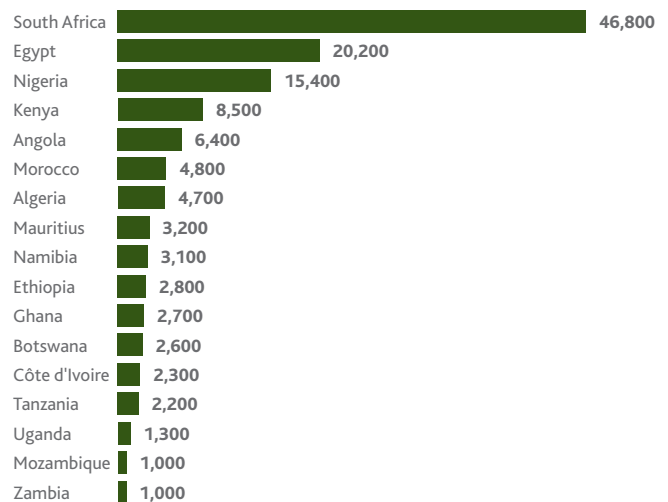
Urban millionaires

- Africa is now home to more than 160,000 people with personal fortunes worth in excess of \$1 million.
- In Africa, the combined wealth holdings of high-net-worth individuals – those with net assets of \$1 million or more – totalled \$660 billion at the end of 2014.
- During the past 14 years, the number of high-net-worth individuals in Africa has grown by 145%. The global average growth rate was 73%.
- By 2024, the number of African millionaires is expected to rise 45%, to approximately 234,000.
- Angola, where per capita wealth rose from \$620 a person in 2000 to \$3,920 in 2014, recorded the highest per capita wealth growth over the past 14 years.
- In Zimbabwe, wealth per capita dropped from \$630 a person in 2000 to \$550 a person in 2014.
- Banana Island in Lagos is Nigeria's most expensive neighbourhood and one of the most expensive in Africa. It is home to many of Nigeria's millionaires. It is a gated community with water supply networks, 24-hour electricity supply, tight security, a good road network and a central sewage system.
- A typical plot of land goes for between \$4 million and \$6 million and the minimum price for a house is \$8 million.

Inequality in African cities is the 2nd highest in the world with an average Gini coefficient of 0.6, above the global average of 0.4.

Africa's high-net-worth individuals

Number of people worth more than \$1 million, 2014



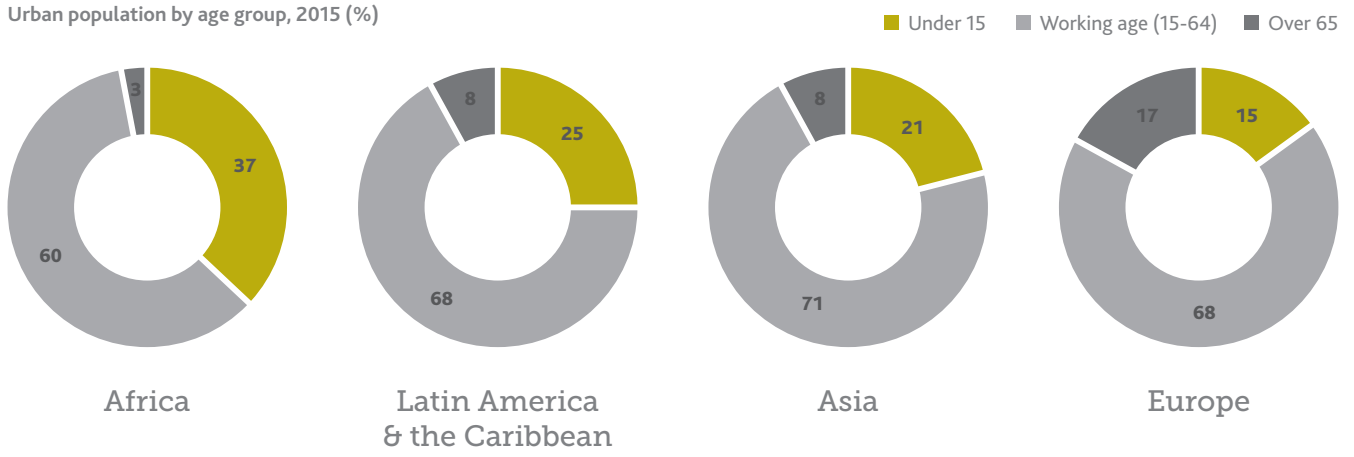
03_Urban Realities

EMPLOYMENT PROSPECTS: INSUFFICIENT & MAINLY INFORMAL

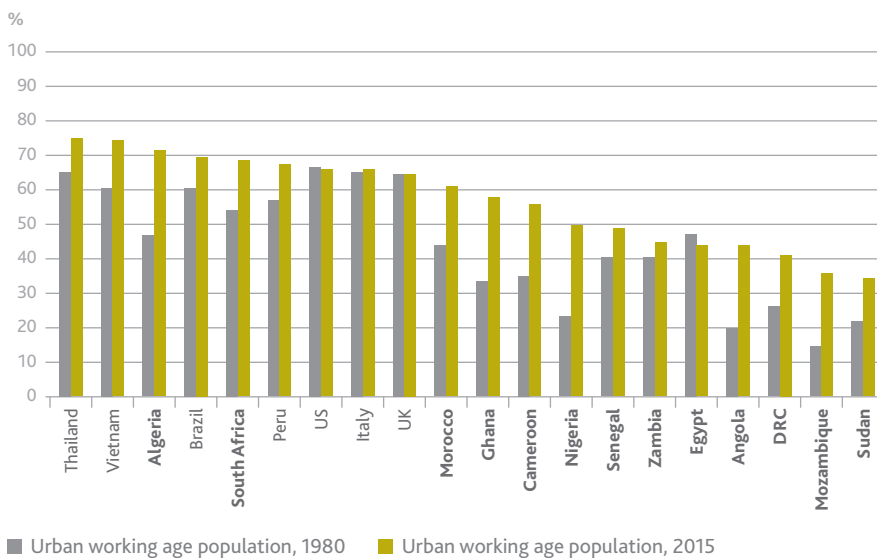
Africa's demographic pattern: a ticking time bomb in cities?

- More than 1/3 of Africa's urban population is under 15 years old (37%).

Urban population by age group, 2015 (%)



Urban working age population as a share of total working age population, 1980 & 2015 (%)



- In 1980, out of 13 selected African countries, which currently represent almost 1/2 of Africa's population and 2/3 of its GDP, 12 countries had less than 1/2 of the working age population living in urban areas.
- South Africa was the only country to have a working age population over 1/2 of the total urban population in 1980.
- In 2015, 5 of the selected countries have an urban working age population larger than 1/2 of the total working age population: Algeria (71%), South Africa (69%), Morocco (61%), Ghana (58%) and Cameroon (56%).

Employment for Africa's youth

- The youth population (15-34 years) accounts for 62% of the total urban working age population in Africa.
- In South Africa 64% of youth live in cities. Youth unemployment rates are around 30%, but are higher in larger metropolitan areas.
 - In South African cities youth migrants are more likely to be unemployed compared to their non-migrant counterparts.
- Cities will need to play a key role in providing sustainable job opportunities for the youth, to avoid unemployment and underemployment undermining political and social stability.

Youth unemployment in Africa is 3 times higher in urban areas than in rural areas.

Disparities between urban labour markets

- Urban labour markets vary across the continent, as shown by a study of 11 African cities.
- Developing policy to address key challenges in these diverse labour markets requires context-specific approaches.

Kinshasa 43%	Labour force participation rate All persons of working age who supply labour for the production of goods and services as a percent of the working age population.	Lomé 68%
Ouagadougou 15%	Unemployment rate The number of persons who are unemployed in a given time period as a percent of the total number of employed and unemployed persons (i.e. the labour force).	Antananarivo 4%
Kinshasa 20%	Time-related underemployment The proportion of employed persons who work less than a specified threshold of hours and are willing and available to work more hours in all their jobs, as a percent of total employment.	Yaoundé 10%
Ouagadougou 67%	Invisible underemployment Individuals who are underemployed in low-productivity jobs.	Douala 37%
Lomé 83%	Informal employment Comprised of own-account workers, contributing family workers, employees holding informal jobs, members of informal producers' cooperatives and own-account workers engaged in production of goods for own consumption.	Antananarivo 53%
Kinshasa \$22	Wages per month Average wage received per month.	Abidjan \$121

Employment data deficit

- In a study of 45 (out of 48) countries in sub-Saharan Africa, only 11 were able to estimate the national unemployment rate for at least 3 years between 1991-2008, and 16 countries had no employment statistics at all for this period.
- Labour force surveys, used to measure economic activities, are not widely adopted in African countries (with the exception of South Africa), partly due to statistical capacity being more focused on delivering household surveys, but mainly due to the cost of implementation.

03_Urban Realities

The informal economy: the source of most urban employment

- Low levels of economic structural transformation have had an impact on formal employment opportunities for the urban population in Africa, reflected in the low levels of formal waged employment in African cities and the large proportion of informal self-employment.
 - Formal sector industrial employment accounts for less than 5% of total urban employment in Africa.
- Even among wage earners, the informal sector accounts for more than ¼ of employment in urban Africa, and 40% in West Africa.
- Informal employment accounts for over ½ of urban employment in Liberia, Tanzania, Uganda and Zambia.
- In sub-Saharan Africa, ⅔ of employment in the non-agricultural sector is informal. This is equivalent to East and Southeast Asia (65%), higher than in Latin America (51%) and lower than in South Asia (82%).
- Regionally, informal employment levels vary.
 - Informal employment in the non-agricultural sector tends to account for more than ¾ of employment in some countries (84% in Cameroon, 77% in DRC, 82% in Mali, 87% in Mozambique and 76% in Tanzania).
 - However, lower levels are found in Southern Africa (33% in South Africa and 44% in Namibia).

61% of urban employment opportunities in Africa are informal.

West African cities: more than ¾ of non-agricultural employment is informal

- Informal employment accounts for more than ¾ of non-agricultural employment in selected West African cities, from 76% in Niamey to 83% in Lomé.
- In 7 West African cities, there are proportionally more women than men in informal employment. In Abidjan, 9 out of 10 women in the labour force have an informal job.
- People in urban informal employment are generally self-employed, i.e. employers, own account workers or contributing family workers. Self-employment constitutes between 58% and 78% of informal employment.
 - Levels of self-employment vary across cities. In Bamako, Cotonou and Lomé, 3 out of 4 workers are in informal self-employment, compared to Dakar, where the share of self-employment in informal employment is below 60%.

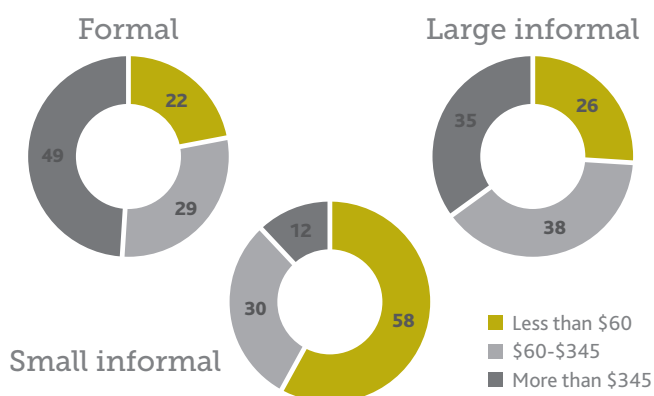
Informal employment as a share of non-agricultural employment, 2012 (%)

City	Total	Women	Men
Abidjan	79	90	70
Bamako	82	91	75
Cotonou	81	89	72
Dakar	80	88	74
Lomé	83	90	75
Niamey	76	83	72
Ouagadougou	80	87	75

Lower wages in informal employment

- Generally, informal employment is less well paid than formal employment.
- In Cotonou, Dakar and Ouagadougou more than ½ of small informal enterprises pay an average salary of less than \$60 per person, per month.
- Almost ½ of the formal firms in these cities report a salary per worker of over \$345 a month.
- In Dakar, 91% of formal firms report a salary per worker of over \$345 per month.

Monthly salaries in Cotonou, Dakar & Ouagadougou, formal & informal*, 2007 & 2009 (\$)



*'Large informal' refers to firms that meet most of the formality criteria, but do not generally maintain formal accounts and understate income. 'Small informal' refers to firms that may have fixed workplaces and be registered but rarely meet any of the formality criteria.

SAFETY, CRIME & VIOLENCE: SECURING CITIES

African cities: crime hotspots?

- African cities have some of the highest crime rates in the world. Crime however is not necessarily associated with large and fast growing cities. Many of the world's largest and fastest urbanising cities, such as Chongking or Tokyo, have very low crime rates.
- In Nairobi, 37% of residents report being victims of armed robbery.
- In Lagos, 70% of respondents in a city-wide survey were fearful of becoming victims of crime.
- 35% of respondents living in urban areas in Malawi felt unsafe "several times" in the past year while walking in their neighbourhood.
- 19% of respondents living in urban areas in Benin "always" felt unsafe while walking in their neighbourhood.
- Just under ¼ of respondents living in urban areas in Madagascar feared crime in their home "several times" in the past year.

Organised crime: a new challenge for African cities

- The increase of international trade in Africa has attracted illicit businesses, protection rackets, smuggling and money laundering in cities.
- The economy of Gao in Mali is based largely on human trafficking, as the city is used as a gateway to the Sahara for migrants seeking to get to Europe. It is also a known transit point for South American drugs.

Policing Africa's cities

- African police forces are typically under-resourced, inadequately trained, unaccountable and distrusted by local communities.
- The slums of Bonaberi (Douala), Camp Luka (Kinshasa), Karu (Abuja), Kibera (Nairobi) and Soweto (Johannesburg) are largely no-go zones for state security forces.
 - The situation in Kibera demonstrates the scale of the challenge. With a population of 1 million, it means that just over ¼ of Nairobi's inhabitants may not receive the benefit of state security forces.
- 42% of people surveyed in urban areas in Uganda did not report a crime to police because "police would have demanded money or a bribe to help".
- Less than ½ of respondents living in urban areas in Burundi (45%), Madagascar (38%) and Uganda (41%) would go to the police first for assistance, if the victim of a crime.
- In South Africa, there are approximately 452,000 registered private security officers, compared to 195,000 police officers.
- With private security an option for the wealthier population in African cities, security could now be seen as another social exclusion issue.

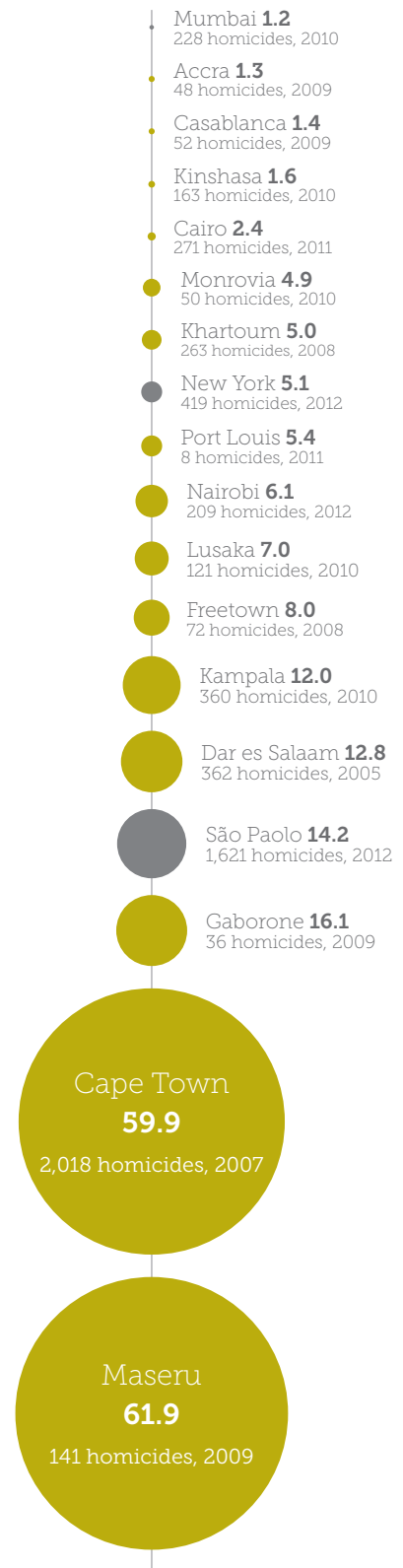
Designing out crime in South America: Medellín & Rio de Janeiro

During the 1990s, Medellín was the murder capital of the world, witnessing 6,349 killings in 1991, a murder rate of 380 per 100,000 people.

By focusing infrastructure investment on the poorest and most dangerous neighbourhoods, the city has reduced homicidal violence by about 80%.

In Rio de Janeiro, the city has benefited from widened streets, newly introduced lighting, upgraded housing and new mobility systems to link poorer and wealthier areas.

African & non-African cities by homicides (per 100,000 people)



03_Urban Realities

Making cities safer

Dakar, Volunteers Engagement and the Management of Public Space: involves volunteers in the surveillance of public spaces.

Monrovia, Community policing: police, in consultation with community leaders, established security zones with local watch teams.

Lagos, Upgrading of Oshodi Urban Interchange: used urban planning as a tool for effective urban policing.

Cape Town, Violence Prevention through Urban Upgrading Programme (VPUU): uses small community centres to tackle crime.



Cairo, Harassmap: uses crowdsourcing techniques, encouraging women to anonymously report incidents of sexual harassment in Egypt's public spaces.

Yaoundé, Project for the Social Integration of Youth at Risk: promotes the social integration of youth at risk through small job creation, education about drug and alcohol abuse, and the creation of a free community library.

Kampala, Mobilising Communities to Prevent Domestic Violence: works with a cross-section of community members to develop creative, locally appropriate ways of challenging and changing attitudes and practices that perpetuate domestic violence.

The Safe Cities Index, 2015

Due to the poor quality of data on crime and security in Africa, Johannesburg is the only African city included in the Index. It ranks 47th out of 50 countries, above Ho Chi Minh City, Tehran and Jakarta.

Safe & Inclusive Cities (SAIC) Initiative, 2013

A 5-year initiative with Canada's International Development Research Centre (IDRC) and the UK Department for International Development (DFID) providing joint funding over \$8 million to understand the complex causes of urban violence and find practical solutions in 6 African countries.

Tackling crime in Cape Town

- Cape Town residents are almost twice (1.8 times) as likely to be murdered than Johannesburg residents (when accounting for population).
- Almost $\frac{2}{3}$ of Cape Town murders in 2014 took place in just 10 of the 60 police station precincts in the city.
- The Harare police station in Khayelisha, in a particularly disadvantaged area, has a detective-to-citizen ratio of 1:2,626, compared to 1:435 in the affluent area of Sea Point.
- 18% of murders in Cape Town are the result of gang-related violence.
- There are as many as 130 street and prison gangs operating in the Cape Town area, which between them have around 100,000 members.

Dealing with gang violence: the CeaseFire programme

In the Hanover Park area of Cape Town, when gang violence breaks out individuals are quarantined by "violence interrupters" to prevent it from spreading further.

The programme has successfully intervened with 158 youths, 70 of whom have left gang life and are now in gainful employment.

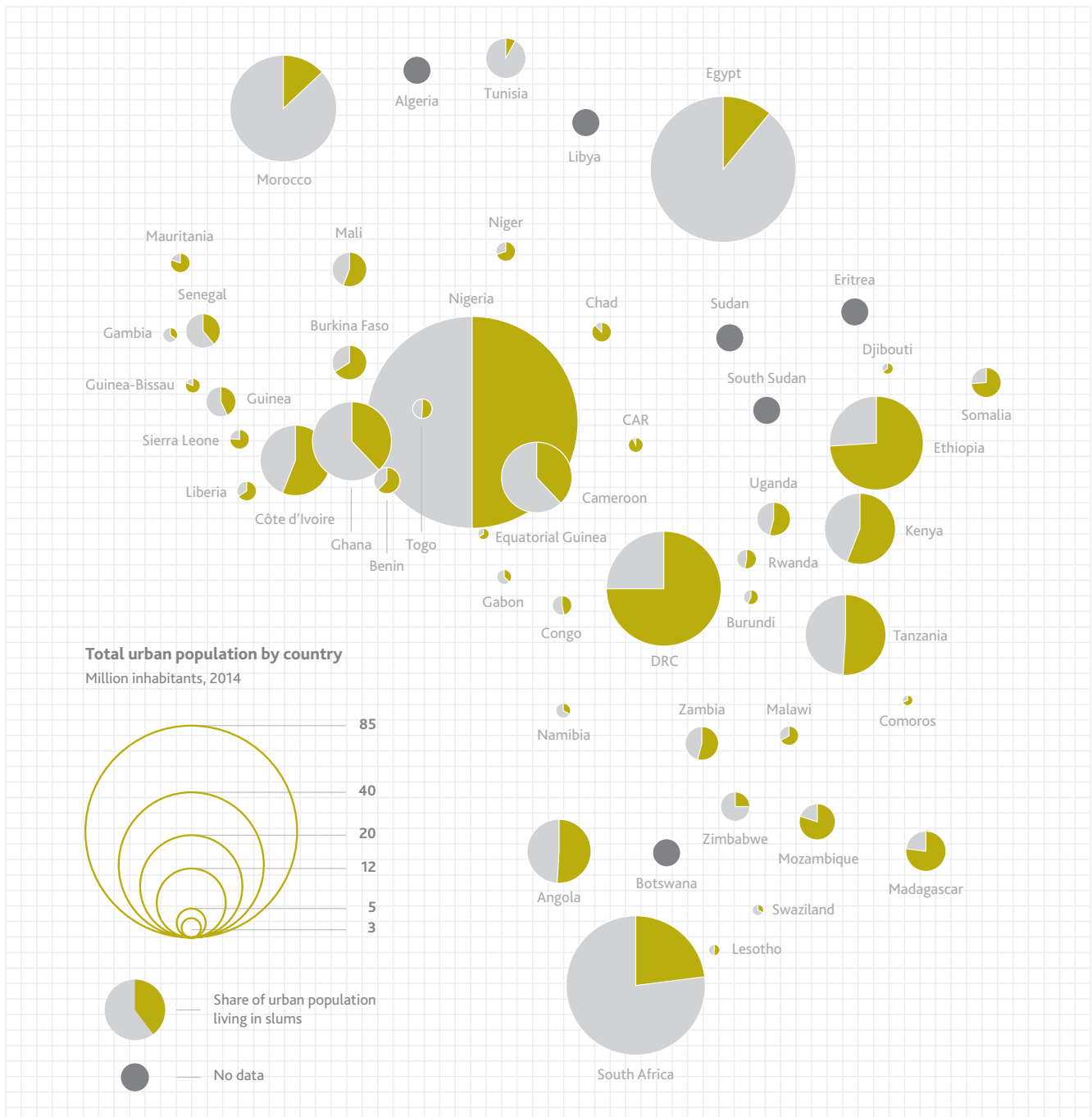
The Central City Improvement District (CCID)

- The CCID is a non-profit organisation that seeks to make Cape Town safe and secure, and promote business and economic activity. It is an initiative of the Cape Town Partnership, a not-for-profit company founded by the City Council and the local business community, funded through an additional tax on property owners.
- In the city centre, private security guards patrol the area and secure public spaces.
- In 2014 the CCID's Public Safety Officers assisted law enforcement officers with over 2,000 arrests.
- Cyclops, Cape Town's surveillance system, has around 650 CCTV cameras, one of the largest public area surveillance projects on the continent.

SLUMS: INADEQUATE HOMES FOR MANY

Almost 1/2 of Africa's urban population live in slums

Share of urban population living in slums, 2014 (%)



In CAR, over 90% of the urban population live in a slum.

In Chad, Guinea-Bissau, Mozambique and São Tomé & Príncipe over 80% of the urban population live in slums.

03_Urban Realities

Multiple deprivations, multiplied risks

The multiple deprivations of slum dwellers

A slum household is defined as a group of individuals living under the same roof lacking **1 or more** of the following conditions:

Access to improved water

In the Langas slum in Eldoret, 91% of people use wells for water, in which ¾ of water samples are contaminated with faecal matter.

Access to improved sanitation facilities

In 2008, up to 70,000 people in West Point slum in Monrovia were sharing 4 working toilets.

Sufficient living area

In a study of 7 sub-Saharan African slums, privacy is an unachievable luxury with an average occupancy of slum rooms of 9 m² for 4 people. That's just over 2.25 m² per person.

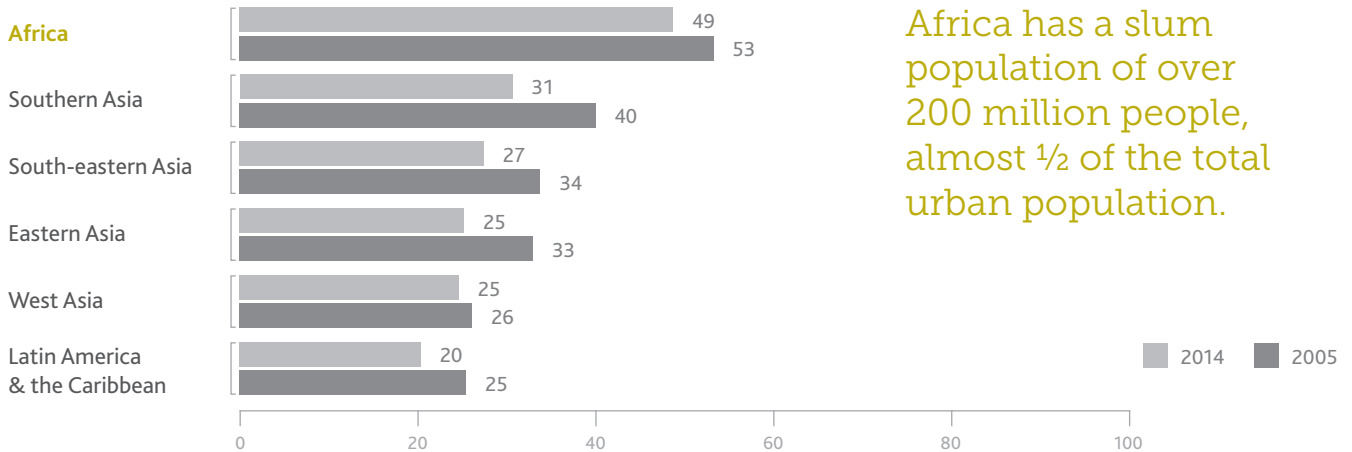
Structural quality/durability of dwellings

Globally, permanent constructions represent only 28% of all slum structures.

Security of tenure

In a study of 7 sub-Saharan African slums more than ½ of the households are informal tenants, while the majority of the rest are house owners without official title deeds.

Proportion of urban population living in slums, 2005 & 2014 (%)



Africa has a slum population of over 200 million people, almost ½ of the total urban population.

- Globally, Africa has the highest proportion of urban population living in slums, although there has been a slight decrease since 2005.

COMMUNITIES OF CONCERN: URBAN REFUGEES, REFUGEE CAMPS, MIGRATION HUBS

"Refugee": according to the Geneva Convention on Refugees, "a refugee is a person who is outside their country of citizenship because they have well-founded grounds for fear of persecution because of their race, religion, nationality, membership of a particular social group or political opinion, and is unable to obtain sanctuary from their home country or, owing to such fear, is unwilling to avail themselves of the protection of that country; or in the case of not having a nationality and being outside their

country of former habitual residence as a result of such event, is unable or, owing to such fear, is unwilling to return to their country of former habitual residence."

"Populations of concern": according to UNHCR, include refugees, those in a refugee-like situation, asylum seekers, internal displaced persons, returned internal displaced persons, returned refugees and stateless persons.

Urban refugees: a hidden population?

- 3.7 million refugees live in sub-Saharan Africa, which amounts to ¼ (26%) of the global total.
- In sub-Saharan Africa, this number increased in 2014 for the 5th consecutive year, due to new outbreaks of violence in CAR, DRC and South Sudan.
- Since 1950, refugees have been steadily moving towards cities and towns.
- Urban refugees are often among the poorest and most vulnerable urban dwellers.
- Lack of official legal documentation prevents them from proving displacement, and denies any access to proper employment and urban services.
- They are highly vulnerable to arrest or detention, xenophobia, sexual harassment and enrolment in criminal organisations.

Refugee camps: shadow cities?

- Globally, about 30% of the refugee population lives in planned camps.
- 45% of the refugees have been in this situation ('protracted refugees') for more than 5 years, with an average duration of 25 years.
- Most of these camps have become permanent settlements with second-generation inhabitants and brick constructions.
- Most of these camps are also located in remote areas. Access is often limited by impassable roads, heavy rains, floods and insecurity. Continued economic hardship combines with weak governance, the impact of climate change, human rights abuses and open-ended military conscription.
- The camps are mostly managed by NGOs or multilateral agencies, at least at the beginning, and by community leaders.
- There is a growing concern that the lack of prospects leads to an increasingly politicised younger population vulnerable to recruitment by militia.

Top 'host' countries

In 2014, Ethiopia was the 5th biggest host country of refugees, with 659,500 people (mainly from Eritrea, Somalia and South Sudan), after Turkey, Pakistan, Lebanon and Iran.

Number of refugees 'hosted' per 1,000 inhabitants, selected countries, 2014

- Chad – 34
- South Sudan – 21
- Djibouti – 23
- Mauritania – 19

Among the 50 largest refugees camps in the world, 33 are African

- Ethiopia: 7 camps – Melkadida (12th), Bokolmanyo (13th), Buramino (17th), Fugnido (18th), Kobe (22nd), Hilaweyn (23rd), Adiharush (34th).
- Kenya: 6 camps – Hagadera (1st), Dagahaley (2nd), Ifo 2 West (3rd), Ifo (4th), Ifo 2 East (25th), Kambioos (47th).
- Chad: 12 camps – Bredjing (14th), Oure Cassoni (19th), Touloum (26th), Goz Amer (27th), Farchana (32nd), Am Nabak (33rd), Gaga (36th), Iridimi (39th), Treguine (41st), Mile (42nd), Kounoungou (43rd), Djabal (45th).
- Uganda: 4 camps – Nakivale (8th), Rwamanja (24th), Kyangwali (40th), Kayaka II (49th).
- Tanzania: 1 camp – Nyarugusu (5th).
- South Sudan: 1 camp – Batil (15th).
- Djibouti: 1 camp – Ali-Addeh (48th).
- Sudan: 1 camp – Wad Sherife (50th).

03_Urban Realities

Dadaab: Kenya's 3rd largest 'city'



- Established in 1991, the Dadaab refugee settlement has a total population of 332,455, most of whom are Somali.
- The settlement has a population that is larger than the population of Juba (321,000) and Eldoret (321,000).
- Dadaab is the world's largest refugee settlement, and the unofficial 3rd largest 'city' in Kenya.
- The settlement is managed by UNHCR, and has amenities and social frameworks that may be more expected of a formal settlement, including schools, football teams, cafes and small restaurants, beauty salons and theatre groups.
- However, it also suffers from floods, epidemics, violence and human rights violations.
- After the terrorist attack on Garissa University in 2013, in which 147 students were killed, the Kenyan Government asked UNHCR to shut down the camp, saying it was "a nursery of terrorists".

Migration cross-roads: from transit hubs to destination points?

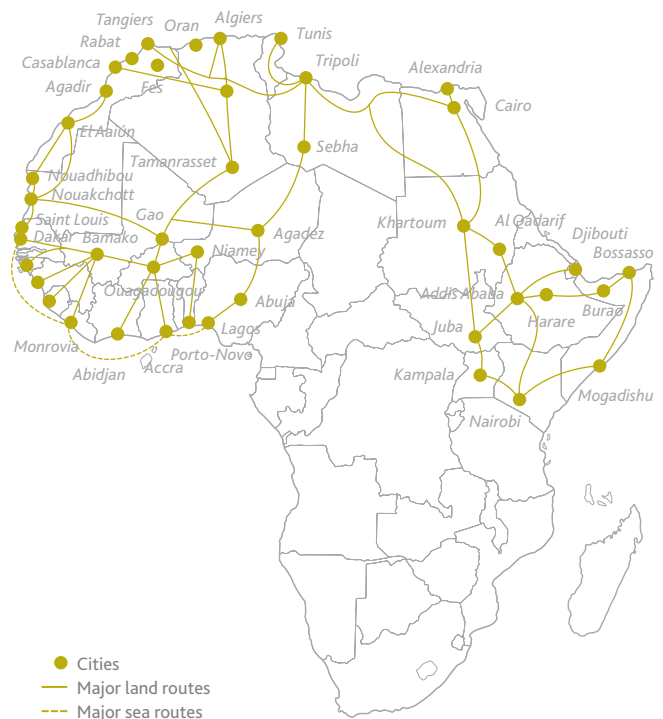
- Migration policies of both origin and destination countries can affect cities in many ways.
- Restrictive, inadequate or unclear policies on labour mobility in Africa may give rise to irregular migratory flows and the growth of informal urban settlements.
- Strict border control policies can lead to urban "transit hubs" where migrants become stranded on their way to intended destinations.
- In Africa, some cities serve as staging posts for internal migrants to become international ones, often while people accumulate sufficient resources to move further afield.
- As European border security has tightened and employment opportunities have dwindled after the European financial crisis, an increasing number of migrants from sub-Saharan Africa have started to remain in North African cities. This is also the case elsewhere in Africa.
- Cities such as Rabat, Tangiers, Tripoli and Tunis that were traditionally seen as gateways to Europe, are now the final destination for some migrants.
- These places now face increasing pressure to provide services and security to migrants.

"Fortress South Africa"?

In South Africa, the increase in mixed migratory movements has led to growing xenophobia towards refugees and migrants.

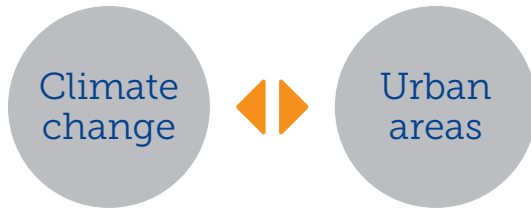
- May 2008: riots against migrants from Malawi, Mozambique, and Zimbabwe.
- May 2013, June 2014 and April 2015: riots against Somali nationals.
- April and October 2015: riots against migrants in general.

Transit cities in Africa



Since 2011, 2 million Libyans have fled to Tunisia.

CLIMATE CHANGE & THE PIVOTAL ROLE OF URBAN AREAS



- Urbanisation affects climate change, whilst the severest burden of climate change is borne by the urban poor.
- At the same time, cities can provide solutions to climate-related challenges. The main bulk of Africa's urbanisation is still to happen, presenting an opportunity for Africa to avoid past mistakes, use current knowledge and plan efficiently.
 - Urban density can create the possibility of a better quality of life and a lower carbon footprint through more efficient infrastructure and planning.
 - How cities develop will play a major role in determining the success of climate change mitigation efforts.
- Governance and leadership are key to climate change adaptation and resilience.

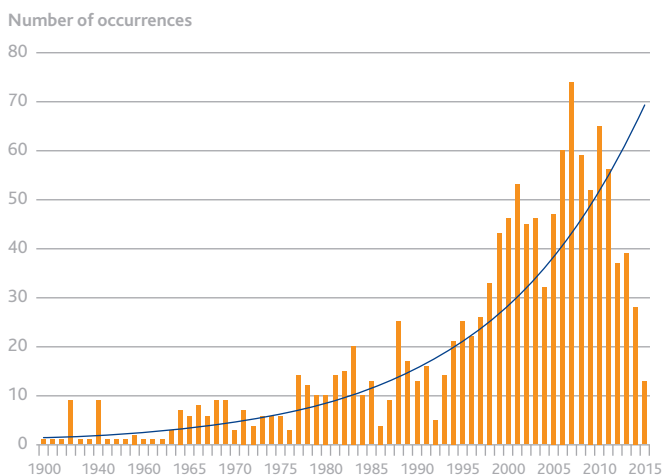
COP21, Paris, December 2015

- The international policy response to climate change began at the Rio Earth Summit (1992), where the 'Rio Convention' included the adoption of the UN Framework Convention on Climate Change (UNFCCC).
- The main objective of COP21 is to review the Convention's implementation. For the first time in over 20 years of UN negotiations, the objective will be to achieve a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C.
- The bottom line for Africa is that i) the Paris summit must result in the commitments needed to stay within the 2°C threshold; and ii) developing countries must secure the support they need to embark on a low-carbon threshold.

Most disasters are climate-related & their frequency is increasing in Africa

- There are multiple topographic causes for natural disasters and most of them are threatening a majority of African cities: sea-level rise and increased flooding, desertification and heat waves, and volcanoes and earthquakes.

Occurrence of climatological & hydrological disasters in Africa, 1900-2015



- Since 1900, nearly 500 million people have had their lives disrupted in some way because of natural disasters in Africa.
- Over the period 1900-2015, droughts have been the deadliest type of natural disaster in Africa.

Top 10 natural disasters, Africa, 1980-2008

Country	Disaster	Date	Total affected people (million)
Kenya	Drought	1999	23.0
South Africa	Drought	2004	15.0
Ethiopia	Drought	2003	12.6
Ghana	Drought	1983	12.5
Sudan	Drought	1991	8.6
Sudan	Drought	1983	8.4
Ethiopia	Drought	1983	7.8
Ethiopia	Drought	1987	7.0
Malawi	Drought	1992	7.0
Ethiopia	Drought	1989	6.5

- Between 1994 and 2013, 41% of drought disasters were in Africa. The continent suffered 131 droughts, of which 75 occurred in East Africa.

Vulnerability to climate change: why cities suffer

Temperature
Increases



EXTREME
CLIMATE EVENTS

- Drought
- Floods

POPULATION
HEALTH

- Vector-borne diseases

SEA-LEVEL RISE

- Coastal erosion
- Storm surges

DAMAGE TO
INFRASTRUCTURE

- Landslides
- Mudslides

GROUNDWATER

- Limited domestic supply

PRESSURE ON
WATER RESOURCES

- Urban water scarcity

ACCOMMODATING
CLIMATE REFUGEES

- Civil conflicts, strife
- Accelerated migrations

ENERGY

- Changes in precipitation affect hydropower

FOOD SECURITY

- Agricultural, forestry and fisheries disruption

Cost of potential damage from climate change, 2010-2030

Alexandria
\$1.7 billion

Casablanca
\$1.4 billion

Tunis
\$1.1 billion

Flooding & drought: challenges & innovative approaches

Flooding

Urban areas can be affected by:

- Loss of livelihoods.
- Structural damage to infrastructure.
- Crop and livestock loss.
- Economic damage.
- Landslides.
- Contamination of water supplies due to waste overflow, and disease outbreak.

Flood risks are exacerbated by:

- High rates of urbanisation (increased construction creates more impermeable areas).
- Inadequate planning, infrastructure and regulation: settlements are being built in areas prone to flooding, and excess water management systems are inadequate.
- Climate change: urban areas experience higher frequency, duration and intensity of flooding events. Sea-level rise threatens coastal cities.
- The poorest are most at risk: informal settlements are often built on marginal land that is prone to flooding and access to adequate and safer building materials, or insurance, is low.

The 5 City Climate Change Adaptation Network

- The municipal councils of Cape Town, Dar es Salaam, Maputo, Port Louis and Walvis Bay are part of a 5 city network pioneering climate change adaptation through participatory research and local action.
- Each city has a Climate Resilience Handbook which provides research and tools to tackle climate change.
- In Port Louis the focus has been on introducing renewable energy, addressing flooding and drought, protection of coral reefs and threats to port infrastructure from tropical cyclones and storm surges.
- Projects have involved local participants to identify climate adaptation options, establishing SMART (specific, measurable, achievable, realistic and time-framed) goals for the city.

An innovative solution: mobile technology in Pemba

- The USAID Coastal City Adaptation Project in Pemba uses an early warning and response system to protect residents from severe floods. The system uses simple texting technology to send alerts and request data that government officials can use to respond to the hardest hit areas first.

Drought

The impact of drought on hydropower reliant cities

- Drought and falling water levels have an impact on cities dependent on hydropower such as Nairobi.
- In Nairobi, water rationing has been used to sustain energy supply, but these efforts are likely to prove inadequate to ensure the necessary scales of savings.
- During the 2009 drought in Kenya, some sections of Nairobi had power for just 2 days a week.
- The Kariba hydropower plant that serves Harare has been impacted by a decline in rainfall, resulting in load shedding by electricity providers.

Desertification: challenges & solutions

- Creeping dunes of sand from the Sahara Desert pose daily challenges for the inhabitants of Nouakchott.
- Increased grazing of livestock, as a by-product of urbanisation, has destabilised the 11 coastal dunes that surround the city, exposing it to frequent sand storms.
- Desertification in Ouarzazate, a city located in the Atlas Mountains, has led to degradation of land and loss of biodiversity.
- To overcome these challenges, the government is building a "greenbelt" – by planting trees and greening dry lands – around the city using treated waste-water and clean energy.

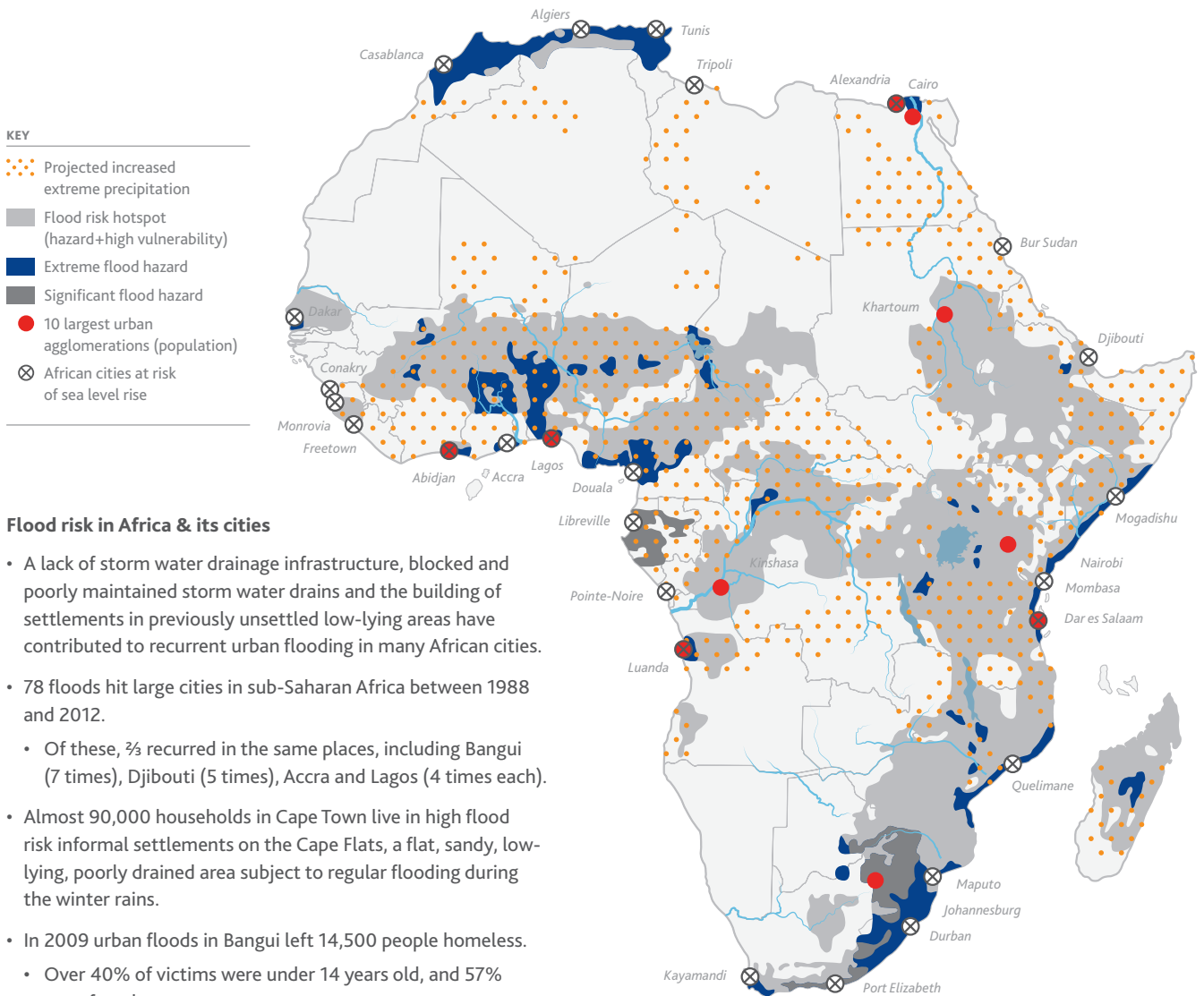
IGAD Drought Disaster Resilience & Sustainability Initiative

- 15 year programme which started in 2013.
- Financially supported by the AfDB alongside organisations such as BMZ/GIZ, USAID, JFA, UNDP and FAO.
- Its mission is to enhance drought disaster resilience and sustainability in the IGAD region while its overall goal is to introduce disaster resilient communities, institutions and ecosystems in the IGAD region by 2027.
- It calls for improvements in the areas of:
 - Information and knowledge management.
 - Capacity building and institutional development.
 - Programming, monitoring and evaluation.
 - Resource mobilisation including funding.
 - Coordination.

Climate change risks

A rising tide: sea-level increase & flooding

African land at risk of flooding



Flood risk in Africa & its cities

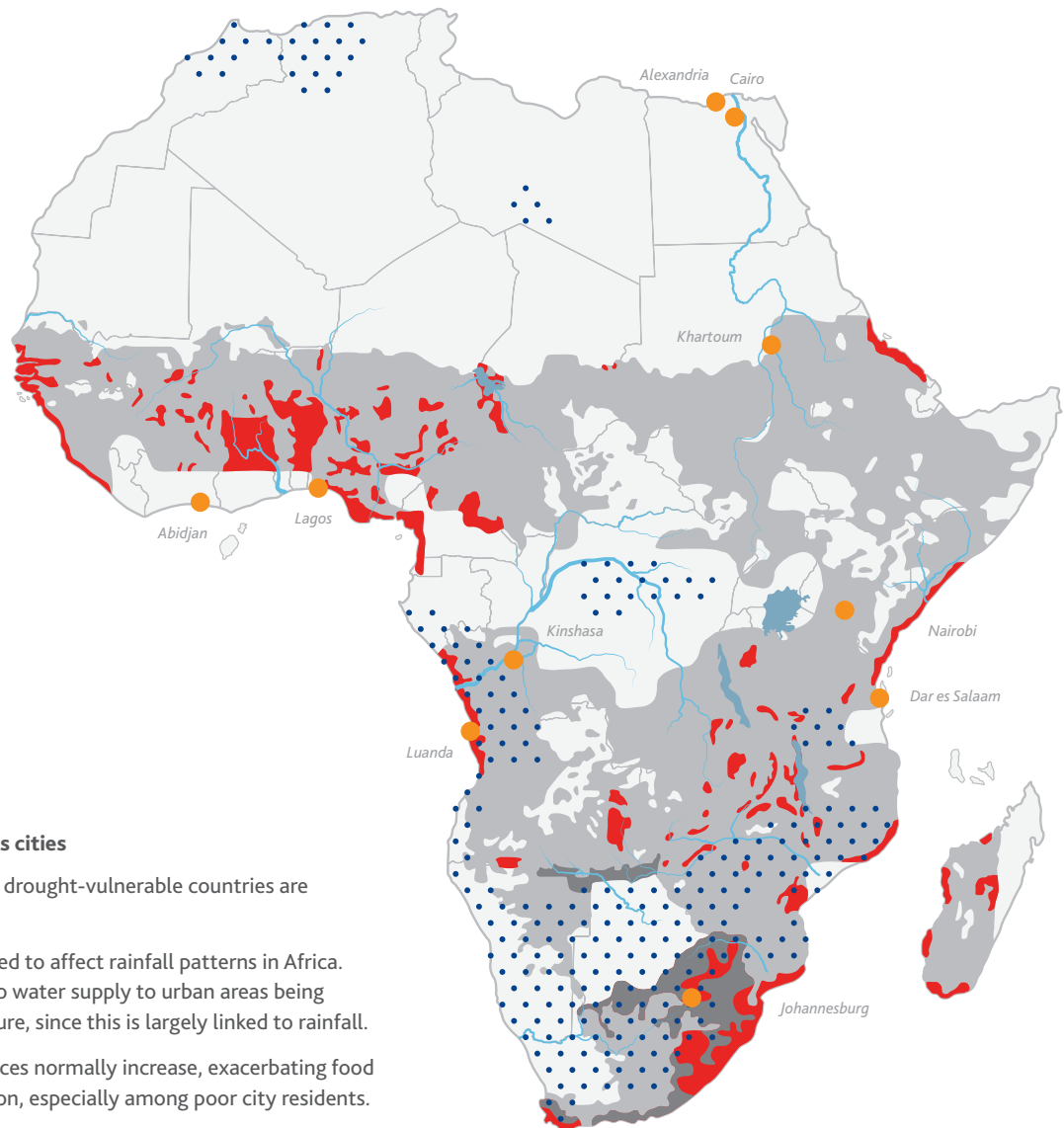
- A lack of storm water drainage infrastructure, blocked and poorly maintained storm water drains and the building of settlements in previously unsettled low-lying areas have contributed to recurrent urban flooding in many African cities.
- 78 floods hit large cities in sub-Saharan Africa between 1988 and 2012.
 - Of these, 2/3 recurred in the same places, including Bangui (7 times), Djibouti (5 times), Accra and Lagos (4 times each).
- Almost 90,000 households in Cape Town live in high flood risk informal settlements on the Cape Flats, a flat, sandy, low-lying, poorly drained area subject to regular flooding during the winter rains.
- In 2009 urban floods in Bangui left 14,500 people homeless.
 - Over 40% of victims were under 14 years old, and 57% were female.
 - Diseases such as malaria, diarrhoea and water-borne illnesses followed the floods.

The impact of rising sea-levels

- Africa has close to 320 coastal cities.
- A projected 25% increase in extreme weather events in Tunis by 2030 will raise the city's flood risk from "high" to "very high".
- An increase of 30 cm is capable of causing the submergence of Mombasa. It is estimated that 267,000 people in this area will be at risk of coastal flooding by 2030 if no deterrent measures are put in place.
- Sea-level rise of 70 cm by 2070 would cause damage to port infrastructure in Dar es Salaam, exposing assets of \$10 billion, or more than 10% of the city's GDP.
- By 2050, it is estimated that Abidjan could lose \$1 billion as a result of anticipated sea-level rise.

Thirsty earth: drought & desertification

African land at risk of drought



Drought risk in Africa & its cities

- 10 of the world's 12 most drought-vulnerable countries are in Africa.
- Climate change is expected to affect rainfall patterns in Africa. This is expected to lead to water supply to urban areas being severely tested in the future, since this is largely linked to rainfall.
- During droughts, food prices normally increase, exacerbating food insecurity and malnutrition, especially among poor city residents.
- In North Africa, it is estimated that climate change will result in a decrease of rainfall in coastal regions of up to 12%.
- Gaborone is located in a region that is facing the worst drought in 34 years.
 - It receives 55% of its urban water supply through the North-South Carrier, a 360 km pipeline that failed 15 times in 2015.
- Mogadishu is particularly vulnerable to recurrent droughts, as a result of 5 distinct factors: population growth, weakened resilience of the eco-system, environmental degradation, weather cycles and the absence of agricultural development.
- Since the end of the 1990s N'Djamena has experienced severe heatwaves and droughts.

KEY

- Projected increased dry periods
- Drought risk hotspot (hazard+high vulnerability)
- Extreme drought hazard
- Significant drought hazard
- 10 largest urban agglomerations (population)

Mitigation & adaptation: Africa's contribution

"Africa, too, has no choice other than join hands to adapt and mitigate the effects of climate change. However, Africa can make a choice on how it can adapt and mitigate and when it can do so in terms of timeframe and pace. For Africa, this is both a challenge and an opportunity. If Africa focuses on smart choices, it can win investments in the next few decades in climate resilient and low emission development pathways."

H.E. Kikwete, former President of Tanzania

- Low per capita CO₂ emissions, low levels of car ownership and the lack of urban infrastructure in African cities are a symptom of under-development and low household incomes.
- However, in the context of climate change the fact that so much of African cities are yet to be built and serviced presents a significant opportunity for Africa to become a major leader in low-carbon urban development.

Mitigation

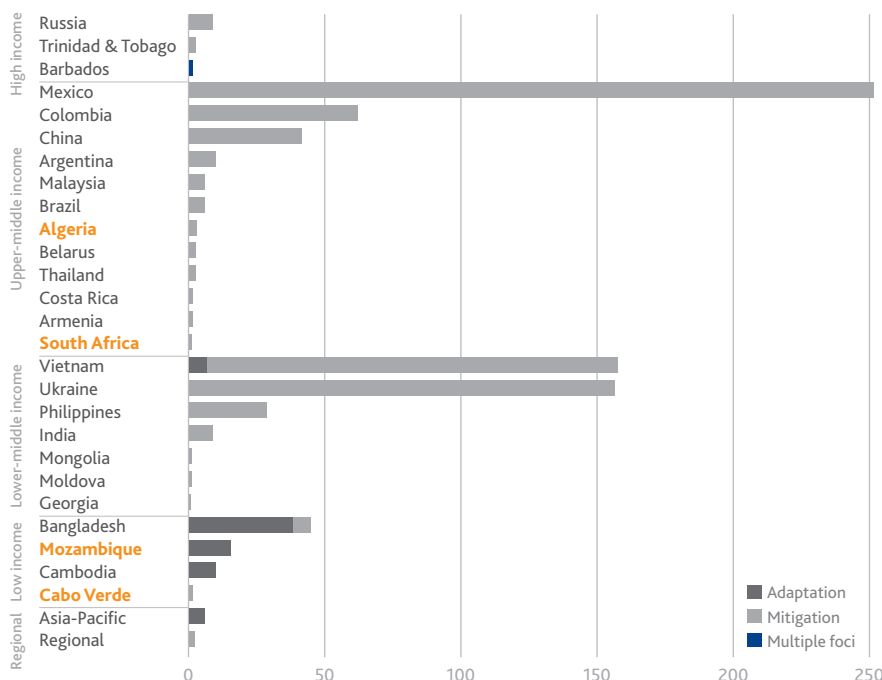
- Africa contributed only 3% of global greenhouse gas emissions in 2013. 38% of these emissions were in South Africa and 46% in Algeria, Egypt, Libya, Morocco and Nigeria.
- Potential methods of mitigation:
 - Energy efficiency in local government facilities.
 - Forward-thinking in transport and infrastructure planning.
 - Urban patterns that reduce travel distances and infrastructure networks.
 - Energy efficient building materials.
 - Landfill methane recovery.
 - Protect forests.

Adaptation

- Potential methods of adaptation:
 - Climate-proof urban infrastructure.
 - Storm water drainage.
 - Early warning systems.
 - Enhance community resilience.
 - Upgrade/relocate vulnerable settlements.
 - Access financing mechanisms (e.g. UNFCCC Adaptation Fund).
 - Insurance schemes.

Climate finance: the allocation of resources

Climate finance approved for explicitly urban projects, selected countries, 2010-2014 (\$, million)



- Between 2010 and 2014, 89% of urban-focused climate finance was approved for projects in middle-income countries.
- Less than 10% of funding was approved for projects in low-income country cities.
- 50% of adaptation funding was approved for non-low income countries between 2010 and 2014.
- Cities in sub-Saharan Africa must not be overlooked by those facilitating low-carbon urban development.

Green city bonds

Green bonds help fill gaps in development finance for climate-friendly projects. Johannesburg issued Africa's first municipal green bond in 2014 to help finance emissions-reducing projects including biogas energy, solar power and sustainable transportation.

City-scale carbon banks, such as Gwangju Carbon Bank in South Korea, may become viable if the price of carbon stabilises.

Selected initiatives: cities' combined power

C40 Cities Climate Leadership Group (C40)

C40 is a network of large and engaged cities from around the world committed to implementing meaningful and sustainable climate related actions locally that will help address climate change globally.

Current C40 Members (8 out of 75 are African)

- **Megacities (as defined by C40):** Addis Ababa, Cairo, Johannesburg, Lagos (4 out of 47 are African).
- **Innovator Cities:** Durban (1 out of 21 is African).
- **Observer Cities:** Cape Town, Dar es Salaam, Nairobi (3 out of 7 are African).

C40 Cities account for:

- 75 cities in the world.
 - 25% of global GDP.
 - 1 in 12 people worldwide.
 - 8,068 actions to combat climate change.
- **2005:** Created by former Mayor of London, Ken Livingstone.
 - **2006:** Expanded via a partnership with the Cities Program of President Clinton's Climate Initiative (CCI).
 - **2013:** Rio de Janeiro Mayor Eduardo Paes began his tenure as Chair.

100 Resilient Cities (100RC) – pioneered by the Rockefeller Foundation

100RC is dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. 100RC's view of resilience includes not just the shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day-to-day or cyclical basis.

100RC Members:

- The 100RC Network began working with a first group of 32 cities in December 2013, 2 of which are African (Dakar and Durban).
- In 2014, 100RC announced the 35 cities selected for the second group, 4 of which are African (Accra, Arusha, Enugu and Kigali).

Selected cities receive:

- Funding to hire a Chief Resilience Officer (for 2-3 years).
- Assistance in developing a resilience strategy.
- Access to a suite of resilience-building tools and services supplied by a carefully selected platform of partners from the private, public, academic and non-profit sectors to help design and implement that strategy (includes engineering, architecture, insurance, infrastructure, finance, data analytics firms and beyond).

Local Governments for Sustainability (ICLEI)

- Founded in 1990, ICLEI is a global sustainability network of more than 1,000 cities, town and metropolises committed to building a sustainable future. It helps members to make their cities and regions sustainable, low-carbon, resilient, ecomobile, biodiverse, resource-efficient and productive, healthy and happy, with a green economy and smart infrastructure, impacting over 20% of the world's urban population.
- 3 African member countries: Botswana (through BALA – Botswana Association of Local Authorities), Burkina Faso (Sabcé Municipal Council) and Burundi (City Council Bujumbura).

"Smart Cities": a clever solution for climate change?

- A "Smart City" is created when investments in human and social capital, and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic development and a high quality of life, with wise management of natural resources.
- The ultimate goal of a "Smart City" is transformational: to achieve enhanced quality of life for citizens and deliver tangible benefits at national, provincial and municipal levels while leveraging natural resources judiciously.
- 5 layers or dimensions within a "Smart City":
 - Goals, aspirations and quality of life are the key drivers of all "Smart Cities".
 - Key stakeholders in the city are its citizens.
 - Ecosystem: city governments are no longer the key drivers but merely a stakeholder in the larger ecosystem that is the city.
 - Interconnected city systems: inter-departmental collaboration is a base requirement to ensure a consistent and aligned vision of the various city departments but also to maximise data being derived from their respective data resources.
 - Infrastructure: "Smart Cities" consist of both hard infrastructure like houses and roads and soft infrastructure such as governance, leadership and innovation.

- Some innovative examples:

Solar power in Cape Town

In Kuyasa, a deprived neighbourhood of Cape Town, houses are progressively being equipped with solar water-heaters, with more than 2,300 low-cost houses fitted with this technology in the past few years. With a solar water heater, inhabitants no longer have to use coal to heat water, thereby avoiding polluting the air inside their homes as well as saving up to 56% on their energy bills. Every dwelling equipped with a solar water heater reduces its emissions by 1.29 tonnes of CO₂ a year.

Energy efficient public transport in Johannesburg

In 2015 Johannesburg unveiled a fleet of energy-efficient buses. The new buses are fitted with a fleet management system that allows buses to be tracked, while an in-house gas filling facility cuts out wasteful refuelling. In October 2015 Cape Town also announced that it will be introducing public transport to be run solely on electricity or biofuel.

Integrated transport systems in Seoul

In Seoul, bus operators use GPS-enabled, clean energy vehicles integrated within the city's subway system. The new bus network and intelligent bus management systems have led to a decrease in CO₂, nitrogen dioxide and particulate matter by 35%, 20% and 40% respectively.

Smart transport system in India

Lavasa is benefitting from a smart transport solution called Skybus, a microbus service which offers a personalised, convenient, low-cost and sustainable alternative to commuting. Skybus uses a platform that manages web and mobile requests, allocates them to vehicles and adapts routes in real-time, taking passengers to destinations in the fastest possible way.

04_

URBAN POWER



FINANCIAL RESOURCES: THE FUNDING DEFICIT

- A 40% financing gap
- Deprived local authorities
- Bridging the gap: towards greater financial autonomy

INSTITUTIONS: COMPLEX & OVERLAPPING STRUCTURES

- A myriad of models

URBAN GOVERNANCE: WHO'S IN CHARGE?

- Local authorities: a way to renew political engagement & public trust
- "If mayors ruled the world..."
- The potential of a 'Local Governance Index'

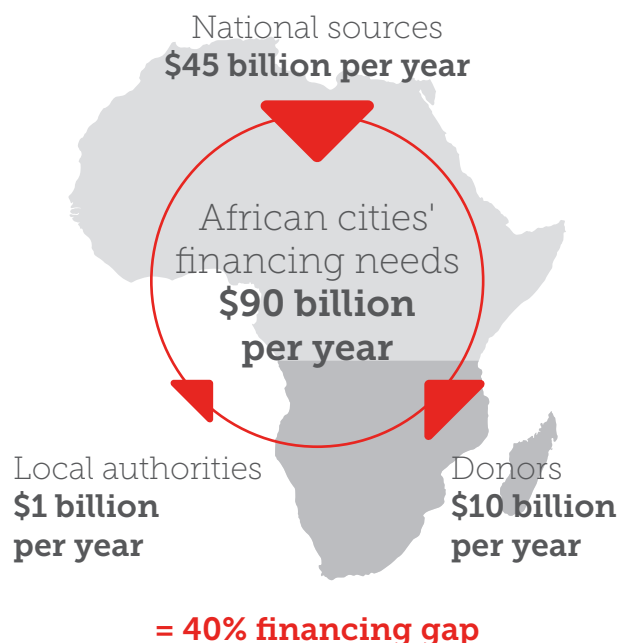
04_Urban Power

FINANCIAL RESOURCES: THE FUNDING DEFICIT

A 40% financing gap

- Africa's urbanisation will increase the importance of the financing of urban issues in public policy.
- \$90 billion per year is required in order to finance the transformation of cities on the African continent.
 - For the time being, about \$45 billion is mobilised annually from national sources, \$10 billion from donors and \$1 billion from local authorities.
 - This means that local authorities are currently only able to mobilise little more than 1% of resources.

Total resources of local authorities in all African countries was estimated to be \$51 billion in 2010 – about \$52 per capita per year.

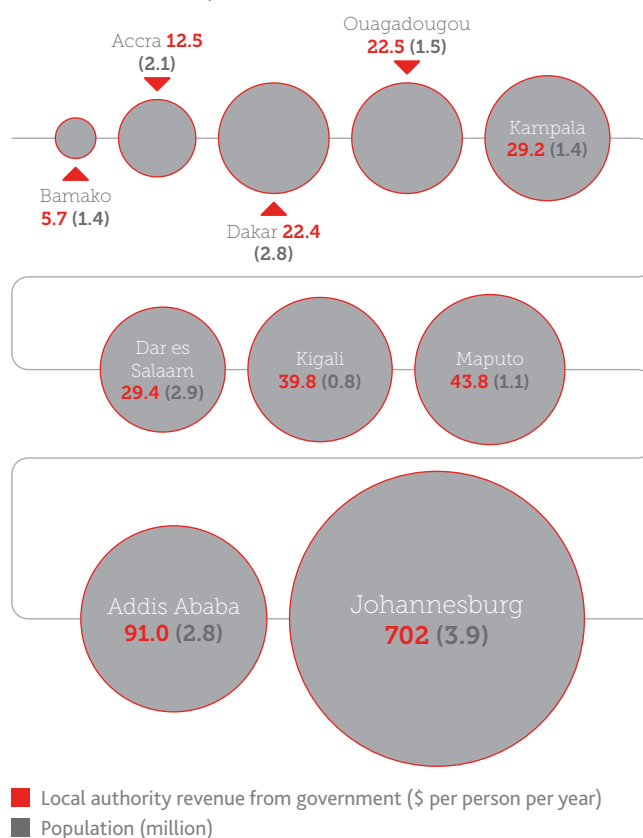


Deprived local authorities

- In most countries, laws or constitutional frameworks bar cities from incurring long-term debt. Therefore most major financial decisions have to be funnelled through central governments.
- Donors are unable to channel funds directly to local authorities.
- Revenue collection in many developing countries is mainly centralised, leaving cities to wait on remittances from their national governments.
- In some countries, the share of revenues obtained from transfers from the national government depends on the size of the municipality.
 - In Mali, the figure ranges from 68% for less than 10,000 inhabitants to 16% for Bamako, which has a population of 1.4 million.
 - In Mozambique transfers account for 70% of the incomes of rural local government incomes, but less than 40% for large cities.
- The timing and amount of remittances can vary depending on the economic situation or politics of the moment. So cities often can't control, let alone predict, their own revenues from year to year.

Excluding South Africa, only a handful of African countries allow sub-national authorities to control 5% or more of the national budget.

Annual local authority revenue from government vs. population, selected African cities, 2014



Bridging the gap: towards greater financial autonomy

- As key and legitimate agents of the welfare, wellbeing and development of a growing majority, providing their citizens with basic and essential services, cities and local government could be entitled to a greater share of central budget resources and donors' aid, as well as to better access to financial markets.
- This will of course need careful leadership and governance, in order to ensure both an efficient balance of powers and the equitable delivery of resources to every one of the country's citizens.

How best to surmount Africa's financing gap?

1. Strengthening the link between financing and its purpose.
2. Focus on domestic finance by increasing government revenues and developing domestic financial and capital markets further.
3. African policymakers should anticipate (or at least identify) the unintended consequences of global financial regulation on Africa and work with global partners to mitigate them.
4. Work with foreign governments and private sector to reduce illicit financial flows.
5. Partner with bilateral, multilateral and private sector

(including philanthropists) actors to get the "non-financial" benefits of financial flows.

6. Reduce the cost of remittances and increase their developmental impact.

Remittances to Africa averaged \$21.8 billion over the past decade – with some countries, including Nigeria and Senegal, receiving approximately 10% of their GDPs in remittances. Yet the costs of sending remittances to Africa are the highest in the world, and transfers within Africa cost even more. Remittances fuel consumption and can be better invested to spur entrepreneurship and development.

Brookings' recommendations, March 2015

Tax revenue & tax administration

- Land and property can serve as important ways of mobilising domestic revenue, improving service delivery and strengthening the social contract between tax payers and the governing authority.
- However, currently, the prevalence of informal systems of land settlement, housing acquisition, vast unplanned slums and informal settlements limits resource collection for land and property.
- Property-related taxes can constitute as much as 4% of national GDP in the developed world but in Rwanda, for example, they amounted to 0.02% of GDP in 2013-2014.

Land value capture

- Cities such as New York, London or Paris, and more recently Chinese cities, have made land value capture a major component for financing their urban infrastructure.
 - London raised \$3 billion from land and property tax in 2013-2014.
 - New York raised \$5.6 billion in property tax in 2013.
 - Paris raised \$1.2 billion in property tax in 2014.
- Financing urbanisation through land means the capacity to use the added-value acquired by land, due to its transformation into a developed and constructible land site, so as to finance development works in whole or in part.
- 3 major tools allow local government agencies to recover part of the land added-value:
 - The public authority owns the land, develops it and sells it.
 - Specific tax and duties make it possible for the public authority to invest in development works.
 - The public authority entrusts development to a third party that finances the necessary infrastructure.

Common recommendations: UNECA's Innovative Financing for the Economic Transformation of Africa (March 2015) & IMF Regional Outlook (October 2015)

- The potential to raise more through domestic taxes is high. Several countries are still below the 15% threshold considered necessary for low-income countries. It is below 10% in CAR, Congo, Ethiopia, Liberia, Nigeria and Sudan. **The unexploited tax potential appears particularly sizeable in countries such as Angola, Ghana, Kenya, Nigeria, South Africa and Tanzania.**
- The solution lies in **expanding the tax base, improving tax administration and tapping relatively underutilised sources of taxation, such as land, rather than raising the existing rates.**
- The establishment of independent tax agencies to address capacity issues has been successful in a number of countries (Malawi, Rwanda, South Africa, Tanzania, Uganda and Zambia).
- Improving the public perception of the tax system, namely by strengthening its direct link to service delivery, will also improve tax compliance and cement the relationship between tax authorities and the tax base.
- Strengthening real estate terms, minimal in many countries, offers high potential.

04_Urban Power

Municipal bonds

- Municipal bonds allow the mobilisation of finance from capital markets.
- Cities must be credit rated and have sufficient borrowing capacity to issue bonds of high enough value to be worthwhile.
- Solvent and well-rated cities can get funding at better rates.
- Lagos sold a record \$533 million of 7-year debt in 2013.
- Dakar, Dar es Salaam, Kampala and Windhoek are looking to enter the bond market in the near future.

Johannesburg has, since 2004, launched 4 municipal bonds, mostly used to finance its capital expenditure backlog, estimated at around \$600 million. Johannesburg plans to raise another \$500 million in the next 3 years.

State vs. city: Dakar example

- With \$5.5 million from the Gates Foundation in 2011, the Municipality of Dakar prepared Dakar's finances and fiscal management to make the city a creditworthy "sub-sovereign" borrower.
- In 2012, Dakar paid Moody's to give the city a confidential credit rating, to help with planning a financial road-map.
- In 2013, it finally sought a public credit rating from Bloomfield Investment who gave a rating of BBB+.
- The municipality then proceeded to prepare a 7-year municipal bond, set to carry an interest rate of 6.6%, and expected to raise at least \$40 million.
- This exceeds what the city can raise from commercial banks, a maximum of \$17 million, with many conditions associated with the loans.
- USAID offered to back the bond with a 50% credit guarantee.
- There is an on-going dispute between the municipality, which claims to have the legal authority under Senegal law to go to the bond market on its own, and the central government, which claims liabilities of the city are borne by the state through its budget.
- The \$40 million bond issue will not proceed until disagreements over the authorisation of the bond are settled.

The World Bank: City Creditworthiness Initiative (CCI)

- In 2013, The World Bank established the City Creditworthiness Initiative which aims to provide local authorities with comprehensive, hands-on and long-term support to help them:
 - Achieve higher creditworthiness by strengthening financial performance.
 - Develop an enabling legal and regulatory, institutional, and policy framework for responsible sub-national borrowing through reforms at the national level.
 - Improve the "demand" side of financing by developing sound, climate-smart projects that foster green growth.
 - Improve the "supply" side of financing by engaging with private sector investors.
- It is comprised of 2 primary components:
 - **City Creditworthiness Academies** teach city leaders the fundamentals of creditworthiness and municipal finance, including issues determined by the enabling environment and options for financing: revenue management and enhancement; expenditure control and asset maintenance; capital investment planning; debt management; and scoping out options for financing.
 - The Academies serve as the launching point for **City Creditworthiness Implementation Programs** which are in-depth, multi-year, on-the-job, customised technical assistance programmes to help cities prepare for, structure and close market-based financing transactions.

Every \$1 invested in the creditworthiness of a developing country city through the CCI programme has the potential to leverage more than \$100 in private sector financing for low-carbon and climate-resilient infrastructure.

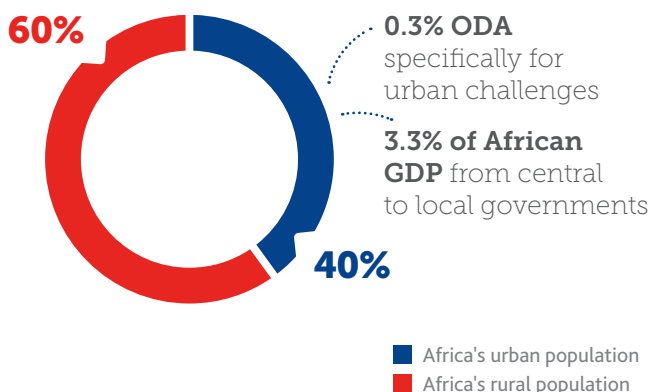
International Financial Institutions (IFIs) & development banks

- Regardless of their explicit or implicit interest in cities, IFIs and development banks provide financing to city projects in 3 main ways:
 - **Sovereign loans:** provided to governments to capitalise urban programmes or lend onwards to municipal and metropolitan governments. These loans are generally repayable over a 10-20 year period, with competitive interest rates.
 - **Municipal lending:** provided through non-sovereign loans to municipalities; though, the amounts involved are modest compared to the IFIs' overall lending portfolios.
 - **Private sector lending and Public Private Partnerships (PPPs):** coordinated with a broad range of financial intermediaries, including commercial banks, micro-credit providers and private equity funds for small-medium enterprises (SMEs) and Public Private Partnerships (PPPs).
- However, as financing options are increasingly presented by other sources, IFIs and development banks can play a more proactive role in helping cities develop the instruments to plan and implement policies.

Overseas Development Aid (ODA)

- In 2012, Africa received \$90 million of ODA specifically for urban development and management projects. This was channelled through central governments.
 - This constitutes 0.3% of \$30.8 billion of ODA received by Africa in 2012, for 40% of the African population.
- The largest amount, almost 80% of the total, was given by the EU (\$69 million) to South Africa for the multi-sector investment programme of eThekweni Municipality.

Almost ½ of Africa's population receives limited resources



AfDB's Urban Development Strategy

- The strategy seeks to boost the viability and competitiveness of African cities to ensure that they perform their role as engines of economic growth and social development.
- Anchored on 3 pillars:
 - **Infrastructure delivery:** using infrastructure development as a major strategic vehicle for supporting urban development.
 - **Governance:** strengthening the corporate governance and the managerial capacity of municipal authorities to promote a culture of transparency; strengthen anti-corruption safeguards; and build the capacity for urban planning.
 - **Private sector development:** supporting private enterprises across the full business spectrum from small enterprises to mega enterprises.

Since the 1960s, the AfDB has allocated between 15% and 20% of its total spending to urban development.

- There is a case for greater city involvement in development assistance, as recipients of donor funds.
- Given their responsibility to ensure equitable delivery of essential services (health, welfare and housing), local governments occupy an important niche and must be recognised as valued partners by the development community.
- An important first step to enable local governments to play a worthwhile facilitating role is for both national governments and external donors to recognise them as key and legitimate agents of local development.

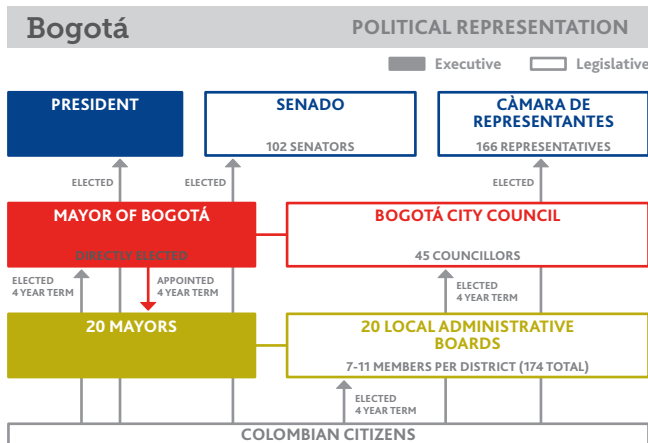
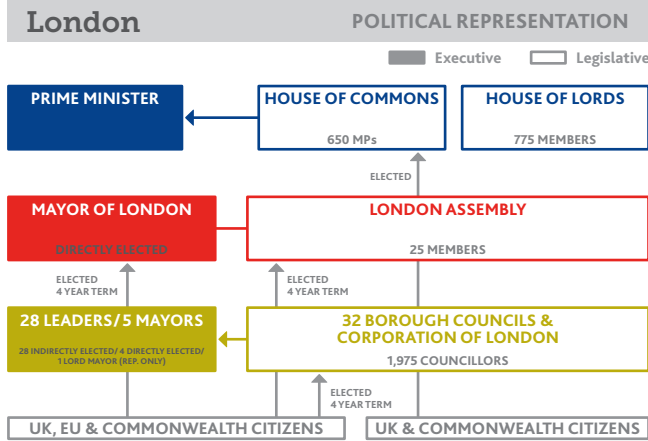
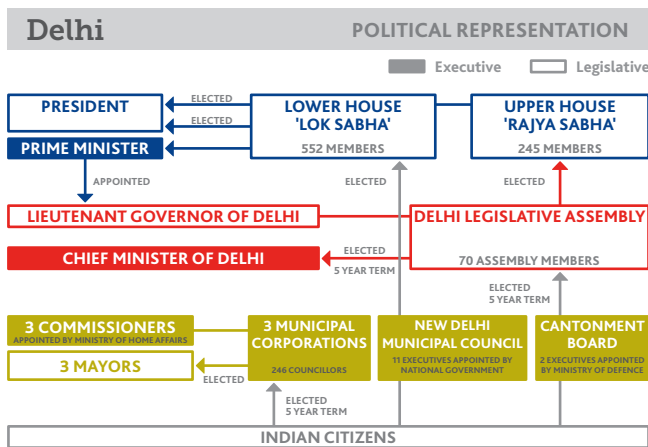
The population of the Greater Cairo area (including suburbs) is 22 million, more than the combined population of Tunisia and Libya. These 2 countries received combined ODA of around \$1.1 billion in 2012.

04_Urban Power

INSTITUTIONS: COMPLEX & OVERLAPPING STRUCTURES

A myriad of models

- Cities can be organised in many different ways and given that Africa is a complex myriad of 54 separate countries, there are multiple urban governance models that have emerged and could be explored within the continent.

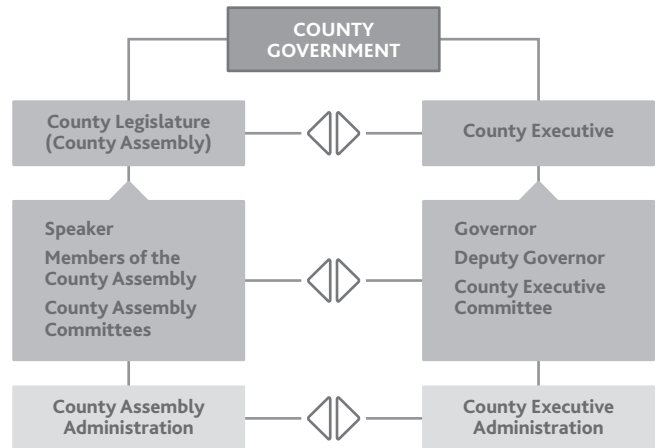


LSE Cities

Devolution in practice: the Kenya experience

- In 2010, Kenya's new constitution established a system of devolved government with 47 lower-level county governments.
- This was operationalised soon after the March 2013 elections, which included the election of county governors, deputy governors and representatives.
- Kenya's newly-formed 47 counties took over from 8 provincial administrations, 175 local authorities and approximately 540 various sub-national administrative bodies.
- They take responsibility for certain functions, previously belonging to the national government, including the provision of healthcare, pre-primary education and maintenance of local roads.
- They receive a share of national revenues, but are also responsible for mobilising their own resources (e.g. through tax).
- Challenges have included generating revenues for all counties and maintaining control over corrupt practices and elite capture that can result from the creation of new bureaucratic frameworks and processes.

Kenya County Government structure



Urban governance data

Global comparative research on urban governance is confronted with a substantial data challenge. Regardless of the ever-increasing availability of information on institutional arrangements in individual cities, knowledge and methodologies to capture and compare the wide spectrum of different urban governance systems is limited.

The global Urban Governance Survey – undertaken by LSE Cities in partnership with UN-Habitat and UCLG (Decentralisation and Local Governance Committee), and supported by the MacArthur Foundation – addresses this data challenge and explores new ways of communicating and 'mapping' urban governance for public dissemination, comparative policy and research analysis.

URBAN GOVERNANCE: WHO'S IN CHARGE?

Local authorities: a way to renew political engagement & public trust

Decentralisation: some considerations

Varying local capacities & needs

- In instances where local authorities have little to no tax base, small and/or weak institutional capacity and limited planning and regulatory capacity, it is arguably more efficient and effective for national and regional bodies to take an active role in their governance.

Potential power struggles

- In some cases, both national and local governments are addressing shared issues such as security, health, transport and employment.
- Without a clear partition of both decision-making power and resources, overlapping agendas and priorities are bound to result in some form of power struggle.

Disparate financing

- Local governments differ in their ability to raise revenue, hence the greater reliance on local sources can raise disparities.

Risk of corruption

- Local elites may 'capture' the benefits of decentralisation and are not necessarily more pro-poor than national elites.
- More people have political influence, therefore the risk of corruption is higher.

UN-Habitat: International Guidelines on Decentralisation & Strengthening of Local Authorities, April 2007

Developed to outline the main principles underlying the democratic, constitutional/legal and administrative aspects of local governance and decentralisation. They do not provide a uniform and rigid blueprint applicable to all countries, and may be subject to national adaptations. The 4 key components address:

1

Governance & democracy at the local level

Includes the issue of participation; civil society engagement and partnerships; inclusion of women and youth; transparency and accountability of local officials; and right of citizens to access to information.

2

Powers & responsibilities of local authorities

Includes the principle of subsidiarity (public responsibilities should be exercised by those elected authorities, which are closest to the citizens); local autonomy; capacity building at the local level; participation of local authorities at the regional and national levels; and an experimental and incremental approach to decentralisation to allow for the best course of action.

3

Administrative relations between local authorities & other spheres of government

Includes the role of national legislation in defining scope and responsibilities of local authorities; empowerment of local institutions and authorities; and supervision and oversight mechanisms.

4

Financial resources of local authorities

Includes the capacities and human resources of local authorities; and the need for financial autonomy and resources (including taxes) at the local level.

United Cities & Local Governments (UCLG): a global network

- Founded in 2004, UCLG is a global network of cities, local and regional governments.
- 140 of the 192 UN member countries are represented.
- UCLG Africa gathers 40 national associations of local governments as well as 2,000 cities of more than 100,000 inhabitants. UCLG Africa represents nearly 350 million African citizens.

UCLG main local government responsibilities across the world

- **Services:** such as water distribution, solid waste collection, public transport, street lights, public toilets, pollution control, public/environmental health, registration of births and deaths.
- **Infrastructure:** such as storm and surface drainage, local roads, solid waste disposal facilities, public spaces.
- **Buildings:** building regulation, maintenance of public buildings, regulations for rental accommodation.
- **Urban planning:** land-use management and the application of land-use regulations, plans for the expansion of infrastructure.

04_Urban Power

"If mayors ruled the world..."

- The method by which mayors come to power differs between urban areas.

Cape Town: party nomination

- Each party nominates a candidate for mayor. The winning party of the local government elections then positions their chosen candidate as mayor.

Dakar: indirect election

- The mayor is elected by the municipal council which is itself elected.

Accra: Presidential appointment

- The Mayor of Accra is appointed by the President and approved by the Accra Metropolitan Assembly.
- The Accra Metropolitan Assembly is made up of elected and appointed Assembly members.
- The Mayor can be dismissed by the President of Ghana, or by the Metropolitan Assembly with 2/3 of votes of the members.

From city to state

Lee Myung-bak

Mayor of Seoul ▶ President of Korea

Recep Tayyip Erdoğan

Mayor of Istanbul ▶ President of Turkey

Mahmoud Ahmadinejad

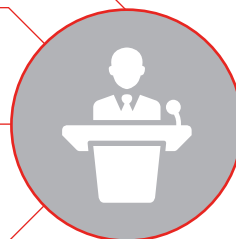
Mayor of Tehran ▶ President of Iran

Matteo Renzi

Mayor of Florence ▶ Prime Minister of Italy

Jacques Chirac

Mayor of Paris ▶ President of France



Elected mayors & the opposition challenge

- For large cities and city-regions especially, models with a directly elected mayor appear to have greater potential to provide a coherent city vision, mobilise coalitions of stakeholders and provide profile and accountability for citizens.
- Providing adequate services in urban areas, where the responsibility has been transferred to sub-national authorities,

can be more complex when the local authorities are controlled by the opposition.

- Such vertically divided authority appears to be a growing trend in Africa, with a number of important cities in the region in the hands of the opposition, including Nairobi, Dakar, Cape Town and Kampala.

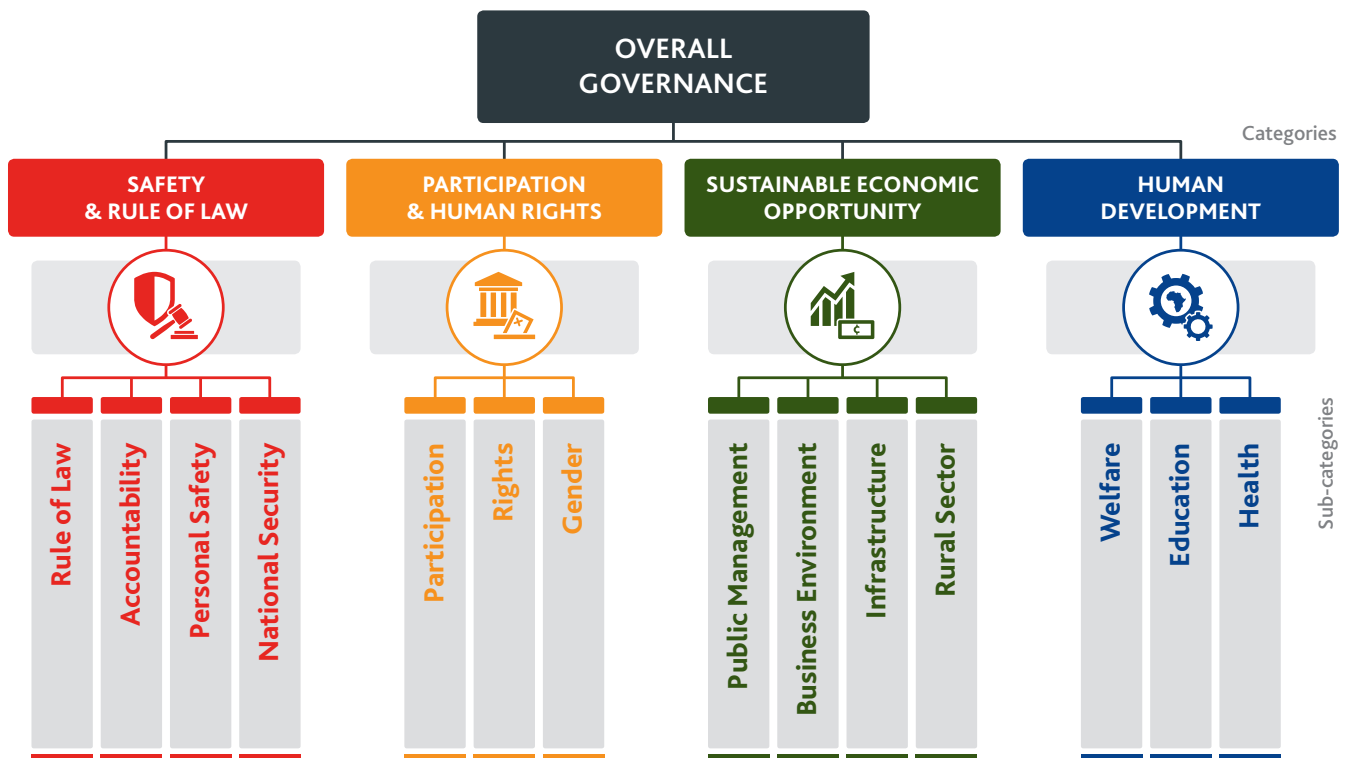
Major cities in control of opposition parties, selected African countries

Major City	Nairobi	Dakar	Cape Town	Kampala
Opposition party in control	Orange Democratic Movement	Socialist Party	Democratic Alliance	Democratic Party
Intergovernmental transfers as share of local expenditure, 2012 (%)	40.1	17.2	34.1	97.6
Expenditure of sub-national governments as a share of central government expenditure, 2012 (%)	3.9	3.1	19.4	27.5

The potential of a 'Local Governance Index'

- The Ibrahim Index of African Governance (IIAG), a national assessment of governance performance, could provide a useful model for a 'Local Governance Index'.
- Parallel to a national governance index, a local governance index would assess the ability of local authorities to deliver a basket of political, social and economic goods and services to their citizens.
- Even if comprised of fewer than the 93 IIAG indicators – in light of the sheer lack of rural-urban disaggregated data and the lesser relevance of some of the national indicators – this dashboard could be organised around the same main categories: *Safety & Rule of Law, Participation & Human Rights, Sustainable Economic Opportunity and Human Development.*

Ibrahim Index of African Governance (IIAG) Framework



THE SUSTAINABLE DEVELOPMENT GOALS: A SUFFICIENT URBAN FOCUS?

“Cities are where the battle for sustainable development will be won or lost.”

- The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda

“Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically. However, many challenges exist to maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources.”

UN Secretary General Mr. Ban Ki Moon



- In September 2015, 193 countries agreed a set of Sustainable Development Goals (SDGs) to be implemented from 1 January 2016.
- There are 17 SDGs and they contain 169 targets, to be achieved by 2030.
- By 2037, over ½ of Africa's population is expected to reside in urban areas. For the SDGs to be relevant to the majority of African people they must therefore be relevant to cities.

- Unlike the Millennium Development Goals (MDGs) the SDGs include a dedicated and standalone urban goal.
- Goal 11 is to accomplish the following: Make cities and human settlements inclusive, safe, resilient and sustainable.
- However, other goals, such as those on poverty, health, sustainable energy and inclusive economic growth, are intimately linked to urban areas. An integrated approach is crucial for progress across the multiple goals.

Meeting the SDGs will cost \$2 to \$3 trillion a year of public and private money over 15 years. That is roughly 15% of annual global savings, or 4% of world GDP.

Goal 11 targets: a broad range of urban objectives

11.1: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

11.2: Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

11.3: Enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

11.5: Significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

11.6: Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

11.7: Provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

11.a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.

11.b: By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

11.c: Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilising local materials.

The 17 Sustainable Development Goals: most are relevant to cities & urban settlements

<p>1 NO POVERTY</p> 	<p>End poverty in all its forms everywhere.</p>	<p>10 REDUCED INEQUALITIES</p> 	<p>Reduce inequality within and among countries.</p>
<p>2 ZERO HUNGER</p> 	<p>End hunger, achieve food security and improved nutrition and promote sustainable agriculture.</p>	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p>Make cities and human settlements inclusive, safe, resilient and sustainable.</p>
<p>3 GOOD HEALTH AND WELL-BEING</p> 	<p>Ensure healthy lives and promote well-being for all at all ages.</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>Ensure sustainable consumption and production patterns.</p>
<p>4 QUALITY EDUCATION</p> 	<p>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.</p>	<p>13 CLIMATE ACTION</p> 	<p>Take urgent action to combat climate change and its impacts.</p>
<p>5 GENDER EQUALITY</p> 	<p>Achieve gender equality and empower all women and girls.</p>	<p>14 LIFE BELOW WATER</p> 	<p>Conserve and sustainably use the oceans, seas and marine resources for sustainable development.</p>
<p>6 CLEAN WATER AND SANITATION</p> 	<p>Ensure availability and sustainable management of water and sanitation for all.</p>	<p>15 LIFE ON LAND</p> 	<p>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	<p>Ensure access to affordable, reliable, sustainable and modern energy for all.</p>	<p>16 PEACE AND JUSTICE STRONG INSTITUTIONS</p> 	<p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p> 	<p>Strengthen the means of implementation and revitalise the global partnership for sustainable development.</p>
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.</p>		

CONTINUING THE DISCUSSION

Over the next few years, key global institutions will be hosting events and producing reports on urban issues and the role of cities in Africa's future. Some of these specifically focus on the urban topic, whilst others are likely to reference it as a key component to their wider debate.

Selected events & reports:

01 Africities Summit 7



Host Organisation: United Cities and Local Governments of Africa
 Location: Johannesburg
 Date: 29 November – 3 December 2015
 Topic: Shaping the Future of Africa with the People: The Contribution of African Local Authorities to Agenda 2063 of the African Union

06 VITICAD Summit



Host Organisations: African Union Commission, the World Bank and United Nations
 Location: Nairobi
 Date: 2016
 Topic: Tokyo International Conference for African Development

02 COP21



Host Organisation: United Nations Environment Programme
 Location: Paris
 Date: 30 November – 11 December 2015
 Topic: United Nations Framework Convention on Climate Change

07 71st UN General Assembly



Host Organisation: United Nations
 Location: New York
 Date: 13-26 September 2016
 Topic: 71st Session of the UN General Assembly

03 UN Statistical Commission



Host Organisation: United Nations Statistical Commission
 Location: New York
 Date: 8-11 March 2016
 Topic: 47th Session of the UN Statistical Commission

08 Habitat III



Host Organisation: UN-Habitat
 Location: Quito
 Date: 17-20 October 2016
 Topic: Conference on Housing and Sustainable Urban Development

04 2016 African Economic Outlook



Host Organisations: African Development Bank, Organisation for Economic Co-operation and Development and United Nations Development Programme
 Location: Paris
 Date: Spring 2016
 Topic: Sustainable cities and structural transformation in Africa

09 COP22



Host Organisation: United Nations Environment Programme
 Location: Marrakesh
 Date: 7-18 November 2016
 Topic: United Nations Framework Convention on Climate Change

05 UN-Habitat reports



Host Organisation: UN-Habitat
 Location: Global release
 Date: 2016
 Topic: The State of the World's Cities report, including the 2016 State of African Cities report and Global Report on Human Settlements

10 World Urban Forum 9



Host Organisation: UN-Habitat
 Location: Kuala Lumpur
 Date: 1 January 2018 (TBC)
 Topic: TBC

Glossary

Term	Definition
Agriculture, value added (% of GDP)	The value of the gross output of agriculture (forestry, hunting, fishing, cultivation of crops, livestock production), minus the value of intermediate goods and services consumed in production.
Biomass	Any plant matter used directly as fuel or converted into other forms before combustion. Included are wood, vegetal waste and animal materials/waste.
Bus Rapid Transport	A bus-based mode of public transport operating on exclusive right-of-way lanes.
Capital markets	Markets where securities such as shares and bonds are issued to raise medium- to long-term financing, and where the securities are traded.
Carbon bank	Carbon finance scheme which grants "carbon points" with a cash value to households for reducing their consumption of electricity, gas and drinking water.
Carbon footprint	The total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tonnes of carbon dioxide.
Climate finance	The flow of funds toward activities that reduce greenhouse gas emissions or help society adapt to climate change's impacts.
Credit rating	An evaluation of creditworthiness.
Creditworthiness	An assessment of an entity's current and future ability to honour debt obligations.
Decentralisation	The transfer of authority and responsibility for public functions from the central government to intermediate and local governments.
Demographic and Health Surveys	Nationally-representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health and nutrition.
Demographic dividend	Accelerated economic growth that may result from a decline in mortality and fertility rates and the subsequent change in the age structure of the population.
De-urbanisation	The decrease in the proportion of the population living in urban areas.
Economic structural transformation	The reallocation of economic activity away from the least productive sectors of the economy to the more productive ones.
E-waste	Any appliance using an electric power supply that has reached its end-of-life.
Gini coefficient	The extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution.
Green bond	A fixed income, liquid financial instrument used to raise funds for climate-mitigation, adaptation and other environment-friendly projects.
Green economy	The growth in income and employment driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency and prevent the loss of biodiversity and ecosystem services.
Green revolution	The increase in the amount of crops produced, such as wheat and rice, in several developing countries in the 1960s and 1970s, due to improved scientific methods of farming.
Illicit financial flows	Money that is illegally earned, transferred or utilised. These funds typically originate from 3 sources: commercial tax evasion, trade misinvoicing and abusive transfer pricing; criminal activities, including the drug trade, human trafficking, illegal arms dealing, and smuggling of contraband; and bribery and theft by corrupt government officials.
Industrial Revolution	The rapid development of industry that occurred in the United Kingdom in the late 18 th and 19 th centuries, brought about by the introduction of machinery.
Infant mortality	The probability (expressed as a rate per 1,000 live births) of a child born in a specific year or period dying before reaching the age of 1 year old.
Informal economy	Activities and income that are partially or fully outside government regulation, taxation and observation.
Informal employment	Comprised of own-account workers, contributing family workers, employees holding informal jobs, members of informal producers' cooperatives and own-account workers engaged in production of goods for own consumption.
Informal settlements	Residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing; 2) the neighbourhoods usually lack, or are cut off from, basic services and city infrastructure; and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas.
Intergovernmental transfer	Transfers of funds from 1 level of government to another. This may be to fund general government operations or for specific purposes.
Intermediate-sized cities	Medium-sized cities with fewer than 1 million inhabitants.
Invisible underemployment	Individuals who are unemployed in low-productivity jobs.
Labour force participation rate	All persons of working age who supply labour for the production of goods and services as a percentage of the working age population.

Term	Definition
Land value capture	A public financing mechanism which 'captures' a part or all of the increases in private land values that result from new public investment, by imposing a tax on the property or requiring an in-kind contribution, such as land or improvements.
Large informal	Firms that meet most of the formality criteria, but do not generally maintain formal accounts and understate income.
Load shedding	Temporarily reducing the supply of electricity to an area in order to prevent the failure of the power system.
Long-term debt	Loans and financial obligations lasting over 1 year.
Manufacturing, value added (% of GDP)	The value of the gross output of manufacturing, minus the value of intermediate goods and services consumed in production.
Master plan	Urban development strategy.
Matatu	Private minivan services that operate in Kenya.
Megacity	A metropolitan area with a total population of more than 10 million people.
Micro-credit	Distribution of small loans to low-income sections of society.
Multidimensional poverty	Several factors that constitute poor people's experience of deprivation, such as poor health, lack of education, inadequate living standards, lack of income, disempowerment, poor quality of work and threat from violence.
Municipal bond	A debt security issued by a municipality to raise capital.
Non-agricultural sector	Industry and services.
Peri-urban	Rural areas with higher than average population densities considered to be in a transition between rural and urban.
Population in severe poverty	Percentage of the population with an intensity of deprivation score of 50% or more, as assessed by the Global Multidimensional Poverty Index.
Population of concern	Refugees, those in a refugee-like situation, asylum seekers, internal displaced persons, returned internal displaced persons, returned refugees and stateless persons.
Population vulnerable to poverty	Percentage of the population at risk of suffering multiple deprivations (intensity of deprivation score of 20-33%), as assessed by the Global Multidimensional Poverty Index.
Poverty headcount %	Percentage of the population living on less than \$1.90 a day at 2011 international prices.
Price-to-income ratio	Ratio of the median free-market price of a dwelling unit and the median annual household income.
Primate city	The leading city in the country or region, disproportionately larger than others.
Principle of subsidiarity	The principle that responsibility for the provision and management of services should be vested in the lowest level of authority best positioned to deliver these services in an official and cost-effective manner.
Production cities	Cities that have a sizeable share of labour producing tradable goods such as manufactured goods.
Protracted refugee	Refugees who have lived in camps for more than 5 years.
Public Private Partnerships	A long-term contract between a private party and a government entity for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.
Re-classification of urban areas	Revision of the definition of "urban" by a country.
Remittances	Transfers from migrants to resident households in their country of origin.
Rent-to-income ratio	Ratio of the median annual rent of a dwelling unit and the median annual household income of renters.
Rural growth rate	Average annual growth of the rural population.
Rural nonfarm economy	Activities associated with waged work or self-employment in income-generating activities that are not agricultural but located in rural areas.
Satellite town	Smaller metropolitan areas that are located near to, but are mostly independent of, larger metropolitan areas.
Secondary town	Urban areas with a population of 500,000 or less.
Slum household	A group of individuals living under the same roof lacking 1 or more of the following conditions: access to improved water, access to improved sanitation facilities, sufficient living area, structural quality or durability of dwellings, security of tenure.
Small informal	Firms that may have fixed workplaces and be registered but rarely meet any of the formality criteria.
Solid fuels	Includes biomass fuels, such as wood, charcoal, crops or other agricultural waste, dung, shrubs and straw and coal.
Sovereign loan	A loan to a national government.
Tax base	The amount of money or property that can be taxed in an area.
Time-related underemployment	The proportion of employed persons who work less than a specified threshold of hours and are willing and available to work more hours in all their jobs, as a percentage of total employment.

Glossary

Term	Definition
Total fertility rate	The average number of children a hypothetical cohort of women would have at the end of their reproductive period if they were subject during their whole lives to the fertility rates of a given period and if they were not subject to mortality. Expressed as children per woman.
Total growth rate	Average annual growth of the total population.
Total natural resource rents (% of GDP)	The sums of oil rents, natural gas rents, coal rents, mineral rents and forest rents. The estimates of natural resources rents are calculated as the difference of the price of a commodity and the average cost of producing it.
Umuganda	Mandatory community service in Rwanda.
Under-5 mortality rate	Probability (expressed as a rate per 1,000 live births) of a child born in a specific year or period dying before reaching the age of 5 years old.
Unemployment rate	The number of persons who are unemployed in a given time period as a percent of the total number of employed and unemployed persons (i.e. the labour force).
Urban agglomeration	The population contained within the contours of a contiguous territory inhabited at urban density levels without regard to administrative boundaries. It usually incorporates the population in a city or town plus that in the suburban areas lying outside of, but being adjacent to, the city boundaries.
Urban density	The number of people inhabiting a given urban area.
Urban working population	The population living in urban areas aged 15-64 years old.
Urban youth population	The population living in urban areas aged 15-34 years old.
Urbanisation	The process by which towns and cities are formed, or grow in number and size, as an increasing percentage of the population begin living and working in central areas defined as urban.
Vector-borne diseases	Illnesses caused by pathogens and parasites in human populations.
Vulnerable employment	The sum of contributing family workers and own-account workers as a percentage of total employment of the relevant group.
Wealth quintile	Income distribution split into 5 different parts: the poorest 20% in quintile 1, the second poorest 20% into quintile 2; the middle 20% into quintile 3; the second wealthiest 20% into quintile 4; and the wealthiest 20% into quintile 5.

Acronyms

100RC	100 Resilient Cities	ODA	Official Development Assistance
AAPS	Association of African Planning Schools	OECD	Organisation for Economic Co-operation and Development
ACC	African Centre for Cities	OPHI	Oxford Poverty and Human Development Initiative
AfDB	African Development Bank	PPP	Public-Private Partnerships
BALA	Botswana Association of Local Authorities	PwC	PricewaterhouseCoopers
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung	SAIC	Safe and Inclusive Cities
BRT	Bus Rapid Transport	SDGs	Sustainable Development Goals
C40	C40 Cities Climate Leadership Group	SMART	Specific, measurable, achievable, realistic and time-framed
CAR	Central African Republic	SME	Small/Medium Enterprise
CCI	Clinton Climate Initiative	TBC	To be confirmed
CCI	City Creditworthiness Initiative	TICAD	Tokyo International Conference for African Development
CCID	Central City Improvement District	UCLG	United Cities and Local Governments
CCTV	Closed-circuit television	UK	United Kingdom
CO ₂	Carbon dioxide	UN	United Nations
COP21	21 st Conference of Parties	UNDP	United Nations Development Programme
COP22	22 nd Conference of Parties	UNECA	United Nations Economic Commission for Africa
DfID	Department for International Development	UNEP	United Nations Environment Programme
DRC	Democratic Republic of Congo	UNFCCC	United Nations Framework Convention on Climate Change
DTP3	Diphtheria-tetanus-pertussis	UNHCR	United Nations High Commissioner for Refugees
Eq. Guinea	Equatorial Guinea	UNISDR	United Nations Office for Disaster Risk Reduction
EU	European Union	UNODC	United Nations Office on Drugs and Crime
EY	Ernst & Young	USA	United States of America
FAO	Food and Agriculture Organization of the United Nations	USAID	United States Agency for International Development
GDP	Gross Domestic Product	VPUU	Violence Prevention through Urban Upgrading
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	WHO	World Health Organization
GPS	Global Positioning System		
GW	Gigawatts		
H.E.	His Excellency		
HFA	Hyogo Framework for Action		
ICLEI	International Council for Local Environmental Initiatives		
ICT	Information and Communication Technology		
IDRC	International Development Research Centre		
IFI	International Financial Institution		
IGAD	Intergovernmental Authority on Development		
IIAG	Ibrahim Index of African Governance		
IIED	International Institute for Environment & Development		
IMF	International Monetary Fund		
JFA	Joint Financing Arrangement between IGAD and Pooled Fund Partners		
kWh	Kilowatt-hour		
LPG	Liquefied petroleum gas		
LSE	London School of Economics		
MDGs	Millennium Development Goals		
MPI	Global Multidimensional Poverty Index		
MW	Megawatts		
NGO	Non-governmental organisation		

List of cities included in the report

AFRICAN CITIES

Algeria	Algiers, El Djelfa, Oran, Tamanrasset
Angola	Huambo, Kilamba, Luanda, Lubango
Benin	Abomey-Calavi, Cotonou, Parakou, Porto Novo
Botswana	Gaborone
Burkina Faso	Bobo-Dioulasso, Ouagadougou, Sabcé
Burundi	Bujumbura
Cameroon	Bamenda, Douala, Loum, Mbouda, Yaoundé
CAR	Bangui
Congo	Pointe-Noire
Côte d'Ivoire	Abidjan, Bouake, San Pédro
Djibouti	Djibouti
DRC	Bukavu, Bunia, Goma, Kinshasa, Lubumbashi, Mbuji-Mayi, Tshikapa, Uvira
Egypt	Alexandria, Cairo, Ismailia, Tanta
Ethiopia	Addis Ababa, Mekele
Gambia	Banjul
Ghana	Accra, Kumasi, Sekondi Takoradi, Tamale
Guinea	Conakry, Nzérékoré
Kenya	Eldoret, Mombasa, Nairobi, Narok
Lesotho	Maseru
Liberia	Monrovia
Libya	Misratah, Sebha, Tripoli
Madagascar	Antananarivo, Toamasina
Mali	Bamako, Gao
Mauritania	Nouadhibou, Nouakchott
Mauritius	Port Louis
Morocco	Agadir, Casablanca, Fés, Marrakech, Ouarzazate, Rabat, Tangiers
Mozambique	Maputo, Pemba, Quelimane
Namibia	Walvis Bay, Windhoek
Niger	Agadez, Niamey, Zinder
Nigeria	Abakaliki, Abuja, Enugu, Ibadan, Ikorodu, Kano, Lagos, Lokoja, Nnewi, Ogbomosho, Okpogho, Onitsha, Port Harcourt, Umuahia, Uyo, Warri, Zamfara
Rwanda	Kigali
Senegal	Dakar, Saint-Louis
Sierra Leone	Freetown
Somalia	Berbera, Bossasso, Burao, Hargeysa, Merca, Mogadishu
South Africa	Cape Town, Durban, Johannesburg, Kayamandi, Port Elizabeth, Rustenburg, Witbank
South Sudan	Juba
Sudan	Al Qadarif, Bur Sudan, Khartoum, Nyala
Tanzania	Arusha, Dar es Salaam, Mbeya, Moshi, Mwanza
Togo	Lomé, Sokodo
Tunisia	Tunis
Uganda	Jinja, Kampala, Lira
Zambia	Kitwe, Lusaka
Zimbabwe	Harare

NON-AFRICAN CITIES

Brazil	Brasilia, Rio de Janeiro, São Paolo
China	Chongking
Ecuador	Quito
France	Paris
India	Delhi, Lavasa, Mumbai
Indonesia	Jakarta
Iran	Tehran
Italy	Florence
Japan	Tokyo
Malaysia	Kuala Lumpur
Turkey	Istanbul
United Kingdom	Birmingham, London, Manchester, Newcastle, Sheffield
USA	New York, Washington D.C.
Vietnam	Ho Chi Minh City

The Facts & Figures report is based on the latest possible updates and data from various sources. A large range of sources have been used in the creation of this document (see references at the end of the report). Many of the facts and figures have been reprocessed by the Mo Ibrahim Foundation. Data were correct at time of research. In some instances, the numbers may not add up to the total due to rounding.

Any data attributed to the years before 2011 are based on the former configuration of the African continent (53 states). Data that are attributed to the years 2011 or later may represent the current configuration of Africa (54 states, including South Sudan). Composition of regions varies according to source.

Dollars are US dollars unless indicated otherwise.

Data for Morocco may or may not include Western Sahara depending on the source.

It is advised that users take into consideration the impact of different countries using different definitions of 'urban'.

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01 THE URBAN LANDSCAPE

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- Infographic: Year in which urban population is ½ of total population, by region: MIF based on World Urbanization Prospects and Citylab data
- Map: Population residing in urban areas, 2015 (%). MIF based on World Urbanization Prospects data
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Sheer numbers vs. percentage of the population: 2 different challenges

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Both the rural & urban populations in Africa will continue to grow

- Graphs: Population growth rates (%): MIF based on World Urbanization Prospects data
- Graph: The rural-urban population growth path: MIF based on World Urbanization Prospects data
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A LATER START, A QUICKER PACE

Africa has the world's fastest urban population growth rate...

- Graphs: MIF based on World Urbanization Prospects data
- Table: Top 10 countries in the world with the highest urban population growth rate: MIF based on World Urbanization Prospects data
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04 URBAN POWER

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Organised crime is a growing challenge in many African urban areas.

Host to over 25% of Nairobi's population, Kibera slum is often regarded as a no-go zone for state security forces.

Chad hosts 34 refugees per 1,000 inhabitants.

The Dadaab refugee settlement in Kenya is the world's largest, & Kenya's 3rd largest 'city'.

Bamako local authority revenue from government is estimated at \$5.70 per capita per year.

Africa's population will become over 50% urban 20 years later than Asia & 80 years later than Latin America & the Caribbean.

Africa's cities need \$90 billion per year in financing.

Only 0.3% of ODA is directly assigned by donors to urban challenges.

3.7 million refugees live in sub-Saharan Africa.

Ethiopia is the 5th largest host country of refugees, following Turkey, Pakistan, Lebanon & Iran.

Between July 2012 & June 2013, 392 residential buildings collapsed in Egypt, 52% of them due to a lack of government regulation.

In Bamako, 87% of women walk for virtually all trips.

Only 38% of Africa's urban population is connected to piped water networks.

In the last 25 years, the number of urban Africans without access to improved sanitation has increased by 134 million.

In Nairobi's Kibera slum, 1,000 people share 1 toilet.

In Monrovia's Clara Town slum, 3,400 people share 1 tap.

Between 2010 & 2030, the cost of climate change to Alexandria could reach \$1.7 billion.

2/3 of the 78 floods that have hit large cities in sub-Saharan Africa since 1988 have occurred in the same areas.

Land value capture & property-related taxes could become key resources for cities.

Lagos sold a \$533 million 7-year debt in 2013.

Among the 17 new SDGs, Goal 11 relates specifically to cities & human settlements.

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