

African Urban Population: An Overview

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African Urbanization in Global Context

Despite the photogenic image of herds of animals in spacious savannas, already 40% of the total population in Africa is living in urban spaces as of 2010, according to the estimate of the United Nations (2012). The urban population rate of Africa was the world's lowest (14%) in 1950, but it surpassed South-Central Asia (including India) around in 1960, and grew almost 3 fold in 60 years. However, considering the population explosion during the same period, the number of people living in urban areas in Africa has grown as much as 12 fold, from 33 million to 401 million.

Probably due to the lower population density of the continent and slower economic growth, the size of the largest cities in Africa is not as significant as in other regions. Comparing the world's largest agglomerations in Asia and Latin America, such as Tokyo (37 million), Delhi (22 million) or Mexico City (20 million), the size of African cities is still modest. Cairo, the largest city in Africa, with a population of 11 million, or the second largest city of Lagos with 10.8 million, are ranked as 18th and 20th among the world's cities.

Comparing the urban population rate in 2010 across the globe (Fig. 1), the African continent remained modestly urban. It is especially the case in East Africa, where the rates are relatively lower.

Urbanization is a global phenomenon which is taking place in all parts of the world, and often urbanization is considered to be synonymous with modernization. However, whether urbanization happens in parallel with economic development is a matter for discussion. In the case of Africa, urban growth and economic growth seem to be independent. Fig. 2 shows that from 1950 to 2010, the urban population rate increases steadily regardless of economic growth, stagnation, or decline.

A strong economy would facilitate urban population growth

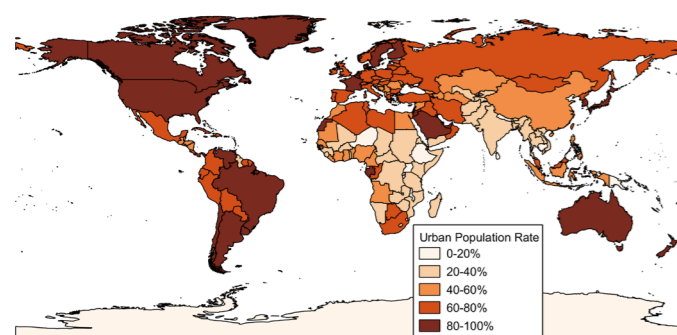


Fig. 1. Percentage of population residing in urban areas (2010). Source: United Nations (2012).

with larger employment opportunities in cities, but even if there is no economic growth, it is possible that the urban population would increase. If the carrying capacity of rural areas is stable with already fixed amounts of land and water resources, the surplus population in rural areas caused by high fertility and low mortality rates can only go to urban areas to look for their livelihood. This might be the mechanism of the constantly increasing African urbanization expressed in Fig. 2.

African Cities at Present

The cities in Africa are well distributed; the largest, Cairo, is in the north, with the second, Lagos, in the middle, followed by Johannesburg in the south. These 3 countries are also the 3 largest economies in the African continent. The third city, Johannesburg needs an explanation. Normally in the list of large African cities, Johannesburg is ranked lower, as the population itself is only 3.8 million. However, within a 30km radius, there are metropolitan municipalities of Johannesburg, Ekurhuleni (3.3 million population) and Pretoria (1.5 million population), forming a conurbation of 8.5 million people, which can be listed next to Cairo and Lagos (Table 1).

Among the cities on the list, Luanda is a notable example of the rapid urban growth seen in Africa in the 21st century. As the capital of Angola, Africa's major oil producer along with Nigeria, this city has grown beyond all predictions. Comparing 2 figures reported by the United Nations, the population of Luanda in 2010 was 3.3 million in the 2005 version, but it has been upgraded to 4.8 million in the 2011 version, a 45% increase. Further, it is estimated that Luanda's population will increase to 9 million by 2025, almost double the current size and one-third of the Angola's total population.

However, these estimates are fragile. The previous population census

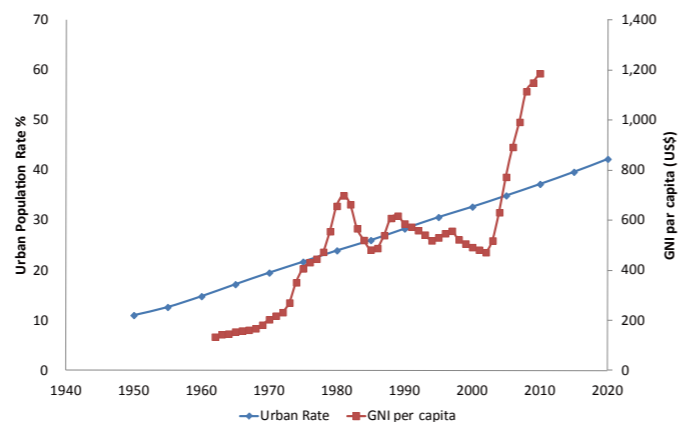


Fig. 2. Trend of GNI per capita and urban population rate, Sub-Saharan Africa (1950-2010). Source: United Nations (2012), World Bank (2012).

in Angola dates back as far as 1970, and the next one is planned for 2013. How can one know the exact population change during a period of civil war with potentially high level of migration? The same problem is found for the figure of Kinshasa, which is ranked 3rd in Table 1 with 8.4 million. The last population census of the Democratic Republic of Congo was in 1984, some 30 years ago, and since then civil war has dramatically sacked the city.

The lack of correct data is one of the problems for African development, as it makes efficient planning impossible. The basics of governance start with accurately counting and registering people. This is the challenge which Africa faces right now.

In general, urban dwellers in Africa are comparatively wealthy and enjoy better social services. According to the Demographic and Health Surveys¹⁾ conducted in countries in Africa, there are much fewer of the poorest households, more children fully immunized and many more literate women in urban areas than in rural areas (Table 2).

UNDP stipulates measuring human development by the level of health, education and economic status. In this sense, the data shows that in Africa, urban areas have attained much higher human development levels than rural areas. This simple fact should not be underestimated.

Table 1. The cities with more than 2 million population in Africa. Source: United Nations (2012).

Rank	Country	City	Population in 1,000 2010
1	Egypt	Cairo	11,301
2	Nigeria	Lagos	10,788
3	D. R. Congo	Kinshasa	8,415
4	Angola	Luanda	4,790
5	Sudan	Khartoum	4,516
6	Egypt	Alexandria	4,400
7	Côte d'Ivoire	Abidjan	4,151
8	South Africa	Johannesburg	3,763
9	South Africa	Cape Town	3,492
10	Tanzania	Dar es Salaam	3,415
11	South Africa	Ekurhuleni (East Rand)	3,284
12	Nigeria	Kano	3,271
13	Kenya	Nairobi	3,237
14	Morocco	Casablanca	3,009
15	South Africa	Durban	2,945
16	Senegal	Dakar	2,926
17	Ethiopia	Addis Ababa	2,919
18	Nigeria	Ibadan	2,855
19	Algeria	Algiers	2,851
20	Ghana	Accra	2,469
21	Cameroon	Douala	2,348
22	Cameroon	Yaoundé	2,320
23	Nigeria	Abuja	2,010

Sustainability of African Cities: Historical Perspective

Çatalhöyük, Damascus and Jericho are often cited as being the world's oldest cities. Those cities are located in the Middle East, not in Africa. Africa is the cradle of humankind, but it seemed that the hunter-gatherers of the continent crossed the Red Sea some 100,000 years ago, and over there in the Middle East, agriculture was "invented" and the world's oldest cities were formed around 7,500 B.C.

The fact that the city of Memphis, the capital of ancient Egypt, emerged as the world's biggest city around 2000 B.C. needs an explanation. Did the people who had decided to leave Africa return for a particular reason, and why were the first cities only founded in the Middle East, and not in Africa? Is there any particular reason which inhibited human urban evolution on the soil of Africa?

This question can be simply answered by saying that there were people moving back and forth between Asia and Africa, and concomitant development of dynasties and cities along the big rivers was just a coincidence of history.

However, some would suggest that the Nubian civilization was older than that of Egypt (Diop, 1981), or that ancient history was re-written from an Euro-centric viewpoint during the end of the 19th century

Table 2. Urban-Rural difference in wealth, health and education, selected African countries. Source: Demographic and Health Surveys¹⁾.

Country	Wealth		Health		Education		Source
	Poorest %		Children all immunized %		Literate women %		
	Urban	Rural	Urban	Rural	Urban	Rural	
Angola	0.5	49.6			80.7	33.5	DHS2006
Benin	7.9	27.9	54.7	43.0	45.8	15.3	DHS2006
Burkina Faso	0.6	27.1	62.0	41.2	52.7	5.7	DHS2003
Cameroon	3.2	30.2	54.9	42.4	80.6	45.5	DHS2004
Chad	1.5	27.4	20.9	8.9	33.7	6.2	DHS2004
Congo Dem Rep	5.0	31.5	38.7	25.4	79.9	41.4	DHS2007
Congo Rep	0.8	43.2	63.9	41.0	88.9	63.6	DHS2005
Cote d'Ivoire	3.0	35.8	69.6	41.8			DHS2005
Ethiopia	0.3	23.4	49.3	17.9	69.0	28.7	DHS2005
Ghana	1.3	28.3	78.3	79.4	77.0	49.6	DHS2008
Guinea	0.9	26.4	40.3	36.4	37.4	6.4	DHS2005
Kenya	0.3	22.1	62.9	69.9	92.5	82.2	DHS2008-09
Lesotho	0.6	25.9	68.0	67.8	97.7	94.0	DHS2004
Liberia	1.5	39.3	52.5	32.5	61.1	25.8	DHS2007
Madagascar	0.9	21.6	80.5	59.3	94.0	70.5	DHS2008-09
Malawi	5.4	26.7	70.7	63.5	84.0	57.6	DHS2004
Mali	1.5	25.5	53.2	46.2	35.2	7.7	DHS2006
Mozambique	3.6	26.8	80.5	56.0	64.9	21.6	DHS2003
Namibia	0.9	33.5	71.5	66.8	95.1	86.9	DHS2006-07
Niger	1.0	23.3	48.4	25.1	39.6	4.7	DHS2006
Nigeria	2.1	26.7	37.5	16.2	76.6	40.9	DHS2008
Rwanda	6.1	24.2	71.0	75.8	83.7	67.5	DHS2005
Sao Tome and Principe	17.9	30.1	76.1	77.0	85.2	84.5	DHS2008
Senegal	0.4	32.6	58.8	58.7	52.9	22.8	DHS2005
Sierra Leone	2.4	32.1	40.4	39.6	52.8	11.1	DHS2008
Swaziland	0.9	24.7	77.7	82.7	94.0	90.3	DHS2006-07
Tanzania	3.1	26.0	85.6	72.6	87.5	66.1	DHS2004-05
Uganda	3.2	23.5	51.1	45.7	81.4	51.2	DHS2006
Zambia	0.1	28.4	71.2	66.2	81.3	50.8	DHS2007
Zimbabwe	0.0	28.7	58.0	50.2	97.6	87.0	DHS2005-06

(Bernal, 1987). The 2 cultures of the black race in Sub-Saharan Africa and the white race around the Mediterranean were undeniably separated — this is the tacit agreement among the world’s historians, but it is being challenged, though there is not yet enough evidence which would prove that the origin of Egyptian civilization was Black Africa.

Whatever the origin was, the ancient Egyptians who had either black colored skin or white were then replaced or became the Romans and the Arabs, and urban history continued.

As for Sub-Saharan Africa proper, the history of cities is one of the least appreciated in the world. However, it is not that there is no history there. There is history, but it was poorly written or did not attract attention.

So far as we know, there were some 50 or so cities which existed prior to 1900 that had at least 10 thousand people (stars in Fig. 3). Those cities were concentrated in West Africa, the part of East Africa which stretches from present Sudan and Ethiopia, and other cities were scattered along the coast in the Southern part of the continent. They were the capitals of kingdoms or empires. However, towards the end of the 19th century, this cityscape underwent significant transformation. Many coastal towns were created (squares in Fig. 3) by either European colonial powers or Arabic traders, who were well connected with inland local peoples. There are even new cities which were founded or developed in the latter half of the 20th century (triangles in Fig. 3), such as Abuja of Nigeria or Abidjan of Côte d’Ivoire, which have now grown to be prominent African cities.

Altogether throughout its history, Sub-Saharan Africa’s urban population has grown, as shown in Fig. 4, basically monotonically but with stagnation during the 17th century and an explosion after the onset of the 20th century.

Urban Demographic Characteristics: Fertility and Mortality

Based on the high mortality rate in London during the first half of the 19th century, urban space was considered to be an “urban graveyard” where the lack of hygiene caused frequent infectious diseases such as

cholera and typhoid, and the lost population was amply supplied by the surplus of rural population. In the 20th century, however, this image has changed. Cities grew not only due to immigrants, but also by natural increase within cities, i.e. the excess of the number of births compared to the number of deaths. It has been estimated that 56% of the urban population growth in the world’s developing countries during the 1970’s was due to natural increase, rather than the immigration (Chen *et al.*, 1998). Cities became better and cleaner places, where urban facilities such as safe water and sewage systems are well equipped. People got better education and health care, due to easy access to schools and hospitals. There is nothing which excludes Africa from this trend. The infant mortality rate or under-5 mortality rate is much lower in urban areas than in rural areas in most African countries (Fig. 5)

However, recently a few countries have started to experience urban excess mortality. According to the results from the Tanzania Demographic and Health Survey in 2010, the country’s infant mortality in urban areas is 62.8 per 1000 birth, 5% more than the rate of rural areas, which was 59.5. Kenya has also 7% higher infant mortality in urban areas as of 2008/9. Prior to these surveys, both countries had “normal” infant mortality, which is lower in urban areas and higher in rural areas. The same urban excess mortality is also observed in Mauritania (2000, 2004), Sao Tome and Principe (2008) and Swaziland (2006).

Although the cases of Tanzania, Kenya and Swaziland can be attributed to the higher prevalence of HIV in urban areas, all of the countries (except Swaziland) with higher urban mortality show a higher prevalence in urban areas of basic children’s diseases, such as acute respiratory infection, fever or diarrhea. Also, the health care coverage can deteriorate in urban areas due to rapid population increase and high population density. Immunization coverage for children in Ghana, Kenya, Rwanda, Sao Tome and Principe and Swaziland has been slightly inferior in urban areas compared with rural areas in recent years (Table 2). Poor health care access coupled with poor hygiene causes the higher mortality and morbidity in urban areas and this suggests that the historical urban

graveyard theory has returned.

In all of the African countries, the fertility in urban areas is lower than in rural areas. The lowest urban fertility in Africa is observed in Lesotho, which was 1.9 compared to the national rate of 3.5. Also, if we observe by sub-national divisions, the lowest rate is 1.4 in Addis Ababa, the capital of Ethiopia. The total fertility rate is the average number of children born to a woman, and the replacement level is 2.1, if it is lower than 2.1, the population will decrease. Thus, the Addis Ababa and Lesotho urban areas have become places where native born babies are not enough to sustain the existing population level.

In general, the decline of fertility rates in urban areas compared to rural areas is much more acute than the decline of infant mortality, as shown in Fig. 5. Considering the high population growth in Africa, the lower fertility in urban areas is not a cause of worry, but rather one promising trend for slowing down the population increase. However, emerging urban extra-mortality is an urgent issue to which the international community should pay attention, to avoid the return of the 19th century’s “urban graveyard”.

Migration: One of the Sources of Urban Growth

The enormous and accelerated urban population increase in Sub-Saharan Africa since the latter part of the 20th century can be attributed to 3 factors: natural increase, immigration, and the expansion of urban areas. As stated above, slightly over half of urban population growth was due to natural increase in the 1970’s, and the composition of urban growth in the 21st century seems to be not so different from that of the 1970’s. Using Demographic and Health Survey data, it is observed that in

Table 3. Local and immigrant rate in major urban area of Sub-Saharan Africa. Source: Demographic and Health Surveys¹⁾.

Country	Administrative area	Female (%)			Male (%)			Source
		Local	Immigrant	Age	Local	Immigrant	Age	
Benin	Littoral(Cotonou)	34.6	65.4	15-49	35.1	64.9	15-64	DHS2006
Burkina Faso	Ouagadougou	40.9	59.1	15-49	35.0	65.0	15-59	DHS2003
Cameroon	Douala	42.5	57.5	15-49	25.0	75.0	15-59	DHS2004
Cameroon	Yaounde	29.2	70.8	15-49	17.3	82.7	15-59	DHS2004
Congo	Brazzaville	65.0	35.0	15-49			15-59	DHS2005
Congo	Pointe Noire	50.5	49.5	15-49			15-59	DHS2005
DRC	Kinshasa	70.5	29.5	15-49	64.4	35.6	15-59	DHS2007
Ethiopia	Addis Ababa	38.5	61.5	15-49	45.1	54.9	15-59	DHS2005
Gabon	Libreville	39.1	60.9	15-49	23.4	76.6	15-59	DHS2000
Gabon	Port-Gentil	46.0	54.0	15-49	33.8	66.3	15-59	DHS2000
Ghana	Greater Accra	22.3	77.7	15-49	21.7	78.3	15-59	DHS2008
Guinea	Conakry	47.0	53.0	15-49	36.2	63.8	15-59	DHS2005
Kenya	Nairobi	20.7	79.3	15-49	12.3	87.7	15-54	DHS2008
Liberia	Monrovia	45.9	54.1	15-49	43.5	56.5	15-49	DHS2007
Mali	Bamako	49.3	50.7	15-49	51.6	48.4	15-59	DHS2006
Mozambique	Maputo Cidade	33.4	66.6	15-49	42.7	57.3	15-64	DHS2003
Niger	Niamey	49.9	50.1	15-49	41.3	58.7	15-59	DHS2006
Nigeria	Lagos	14.8	85.2	15-49	13.3	86.7	15-59	DHS2008
Rwanda	Kigali Ville	14.4	85.6	15-49	13.7	86.3	15-59	DHS2005
Senegal	Dakar	44.9	55.1	15-49	40.9	59.1	15-59	DHS2005
Sierra Leone	Western Area Urban	14.4	85.6	15-49	14.9	85.1	15-59	DHS2008
Tanzania	Dar es Salaam	11.7	88.3	15-49	37.3	62.7	15-64	DHS2004
Tanzania	Town West	21.1	78.4	15-49	51.9	48.1	15-64	DHS2004
Uganda	Kampala	17.4	82.6	15-49	5.3	94.7	15-54	DHS2006
Zimbabwe	Bulawayo	51.5	48.5	15-49	56.7	43.3	15-54	DHS2005
Zimbabwe	Harare	48.7	51.3	15-49	53.2	46.8	15-54	DHS2005

Note: The administrative area is defined by each country and the areas which more than 80% households are urban are selected. Not all capitals of Sub-Saharan countries are listed as some of the capitals are included in larger administrative area which largely includes neighboring rural area, or there is no question regarding migration status, or simply the survey is not conducted.

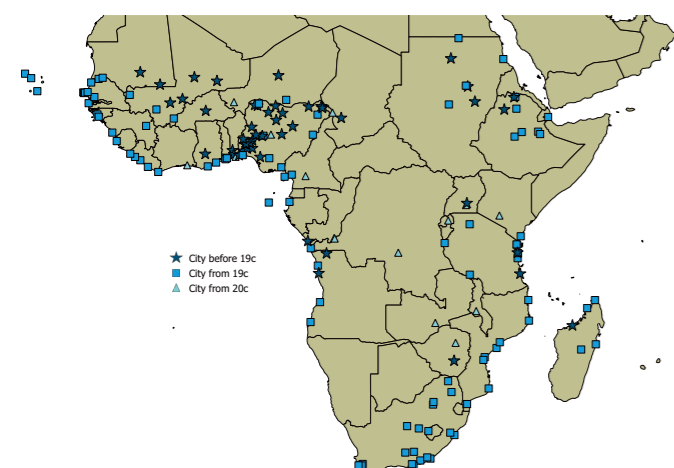


Fig. 3. Historical transition of cities in Sub-Saharan Africa. Source: Chandler (1987), Lahmeyer (2006), United Nations (2012).

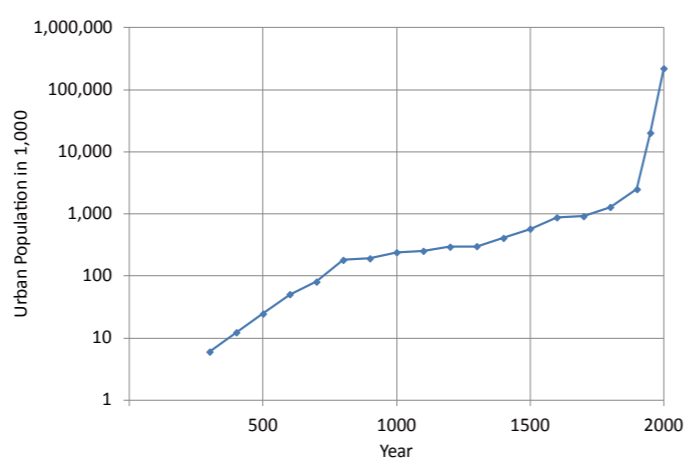


Fig. 4. Urban population change from 300 to 2000 in Sub-Saharan Africa. Source: Chandler (1987), Lahmeyer(2006), United Nations (2012).

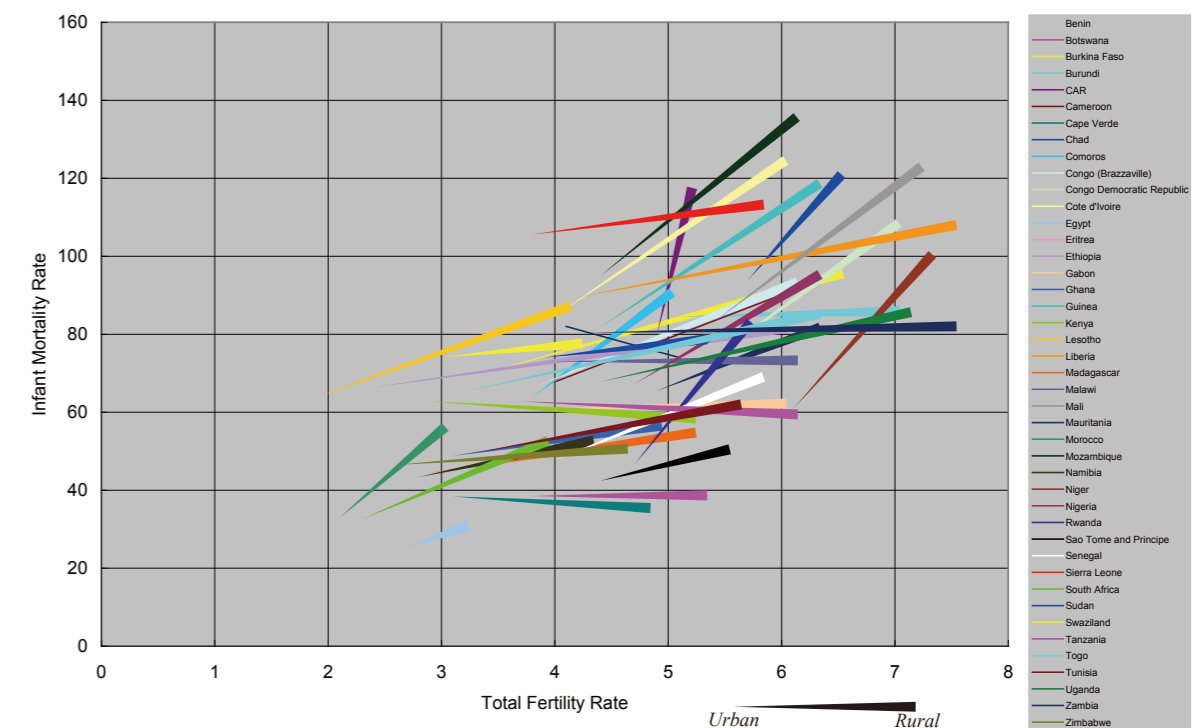


Fig. 5. Urban-rural difference in total fertility rate and infant mortality rate. Source : Demographic and Health Surveys¹⁾.

26 urban administrative areas which are national capitals and/or mostly (more than 80%) urban, the rate of population who are always living in the same place (hereinafter referred to as "immobility rate") varies from 5.3% (in Uganda, male, 2006) to 70.5% (in Kinshasa, DRC, female, 2007), mostly within the range of 10 to 50% (Table 3).

In Table 3, the immigrant rate is calculated as 100% minus the immobility rate. The "immigrant" defined here includes those who moved within the area or those who are born locally, moved out and came back.

Whichever figures we look at, either the immobility or immigrant, the variation between the countries is not negligible. With the exception of Zimbabwe, Tanzania and Liberia, urban areas in English speaking countries such as Kampala (Uganda), Nairobi (Kenya), Accra (Ghana) or Lagos (Nigeria) tends to show very high immigration rate in comparison to the urban areas of French speaking countries (Fig. 6).

In 24 areas where both female and male data are available, 15 areas show higher immigrant rate for men. Normally women move with marriage, and that should push up the immigrant rate, but it can be said that the men's mobility is even higher in the African context.

The immigrant rate evolves through age. For example, in the case of Littoral (Cotonou) of Benin, the immobility rate decreases with age for both women and men (Fig. 7). Along with age, migration happens and people depart from the place of their birth and move to a new place.

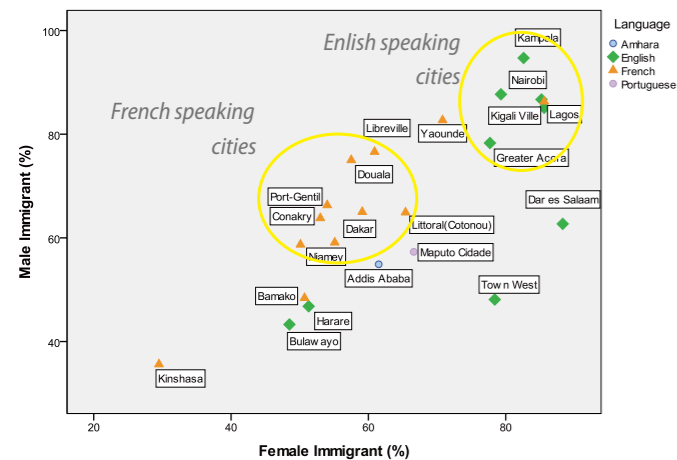


Fig. 6. Distribution of rate of immigrant (Female-Male, %). Source: Demographic and Health Surveys¹⁾.

But also, apart from this age effect, there can be the period effect. Fig. 8 shows the age specific immobility rate for Lagos, Nigeria. Especially for females, the rise of immobility rate is clearly observed from the age group of 35-39 and older. As the survey was conducted in 2008, the age 35-39 corresponds to people who were born from 1969 to 1973. For those who are older, or who were born before, there are more and more people who always lived in Lagos. One can imagine that a strong migration started from the 1970's onwards in Nigeria.

In Demographic and Health Surveys, people are asked where they lived before moving to their present location. Fig. 9 through Fig. 11 show the population composition according to the former place of living in Dakar, Lagos and Nairobi.

As Ravenstein put it as early as 1885, the law of migration is still alive; migration occurs in steps. In Dakar and Lagos, the previous place lived by immigrants is mostly smaller cities or regional capitals, rather than rural areas. The proportion of people who came from rural areas accounts at most for 20%. People move hopping from countryside to towns, towns to cities and cities to capital, in steps.

The demographic outlook of urban population can be further elucidated with existing data to better understand the evolving social change in Sub-Saharan Africa.

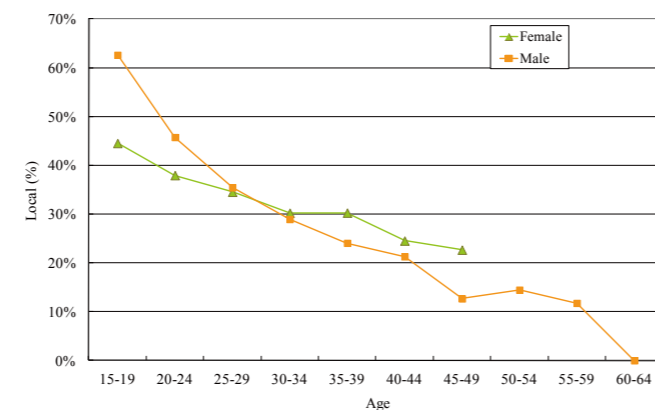


Fig. 7. Rate of "local" according to the age, Littoral (Cotonou), Benin (2006). Source : Demographic and Health Survey¹⁾.

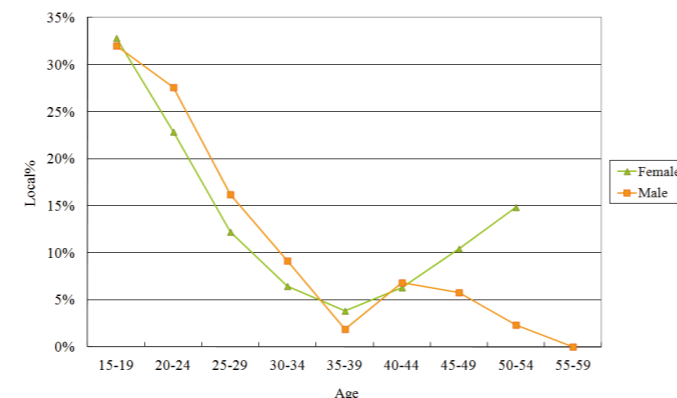
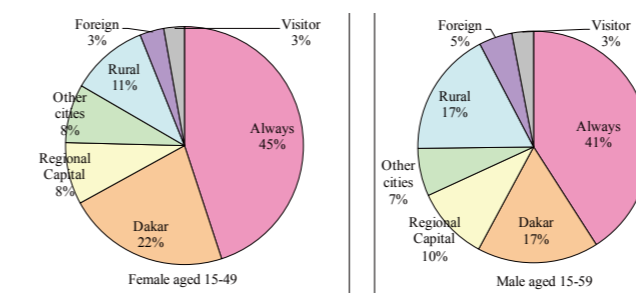


Fig. 8. Rate of "local" according to the age, Lagos, Nigeria (2008). Source : Demographic and Health Survey¹⁾.

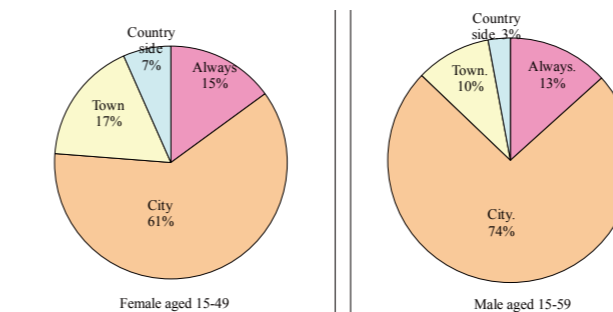
The Urban Development for a Sustainable Future

Although there are a few countries which have started to exhibit urban excess mortality, in general, urban dwellers enjoy better health care, education and wealth. The concentration of people requires much less investment for the delivery of social services (health centers and schools) per person and larger markets enhance business profitability together with an easier financial environment and higher qualified people. Urbanity can play an important role in the millennium development goals in view of sustainable development. Often, in the framework of African



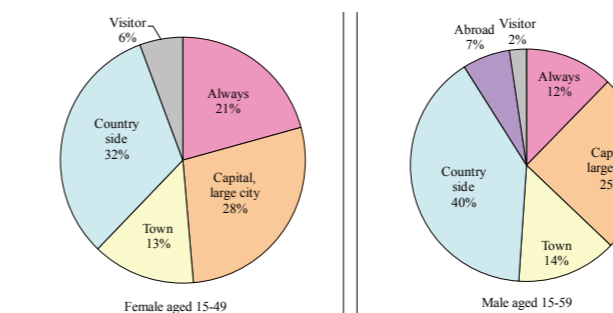
Notes: "Always" signifies those who has been living continuously in the present location in Dakar region. Other designations (Dakar, Regional capitals, Other cities, Rural area, Abroad) are the previous place lived. Average percentage for women aged 15-49 and men aged 15-59.

Fig. 9. Migration status of the population of Dakar, Senegal (2005). Source: Demographic and Health Survey¹⁾.



Notes: "Always" signifies those who has been living continuously in the present location in Lagos region. Other designations (City, Town, Countryside) are the previous place lived. Average percentage for women aged 15-49 and men aged 15-59.

Fig. 10. Migration status of the population of Lagos, Nigeria (2008). Source: Demographic and Health Survey¹⁾.



Notes: "Always" signifies those who has been living continuously in the present location in Nairobi Province. Other designations (Capital, large city, Town, Countryside, Abroad) are the previous place lived.

Fig. 11. Migration status of the population of Nairobi, Kenya (2008-9). Source: Demographic and Health Survey¹⁾.

development, urban development was rather neglected due to the slower urban growth compared with Asia and Latin America. Coming into the 21st century, African urban development would and should become an important agenda item for the international community.

It is estimated that the population of Sub-Saharan Africa will become 3.6 billion by the year 2100, comprising 35% of the world's total population. One in three world citizens will be Africans in 90 years. Africa is the birthplace of homo sapiens, and considering that early humans were all African, it won't be so odd to have so many Africans in the near future on this planet. Africa is a large continent with 30 million km², 23% of world's surface area. Right now, the population size is a humble 15% of the world total, and population density is merely 33.7 persons/km². This figure will grow further to 72.3 persons/km² by 2050 and 117.9 persons/km² by 2100. At that time, Africa will be the third most densely inhabited region after South Central Asia (268.2 persons/km²) and South East Asia (153.1 persons/km²), where megacities already flourish. The Asian megacity experiences will certainly contribute to African development. Global synergy is the key for the future.

Notes

1) Demographic and Health Surveys are conducted by each country assisted and funded by the U. S. Agency for International Development (USAID) and other donors, implemented by ICF International (<http://www.measuredhs.com/>).

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