



Research Paper

Main characteristics of African cities

Vincent Zoma¹, Yassiya Sawadogo²

¹ Department of Geography, Université Joseph KI-ZERBO, Burkina Faso

² Phd student, Dynamics of Spaces and Societies Laboratory, Université Joseph KI-ZERBO, Burkina Faso

Corresponding Author: Vincent Zoma

Abstract: Africa, which entered late in the urbanization process, is the most rural continent, but one that is urbanizing rapidly. This poorly controlled urban growth leads to disproportionate growth of cities because the increase in the number of African millionaire cities raises increasingly acute social questions, questions of planning and management of spaces. This article, based on documentary research, therefore aims to study the main characteristics of large African cities. Overall, it emerges from this theoretical study that African cities are characterized in addition to rapid urbanization, migration increasingly linked to poverty in rural areas; informality, colonial heritage and especially urban macrocephaly and bicephaly.

Keywords: Cities, urbanization, Africa.

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I. I-Introduction

Urbanization is an irreversible and universal phenomenon on a global scale. In 2007, for the first time in human history, the urban population exceeded the rural population. More than one in two men live in the city, whereas in 1900 there was only one in ten [1]. This situation has significant social, economic, environmental and cultural consequences for societies.

Africa, which entered the urbanization process late, is the most rural continent, but one that is urbanizing rapidly [2]. From 14.5% in 1950, the urbanization rate rose to 25.7% in 1975, then to 38.7% in 2007 [3]. According to the [4], by 2050, Africa is expected to experience the fastest urban growth rate in the world. By this time, African cities should be home to an additional 950 million people. It is estimated that 50% of the African population will live in cities in 2035 and 58% in 2050 [5].

This poorly controlled urban growth results in disproportionate growth of cities [6]. Indeed, the increase in the number of African millionaire cities raises increasingly acute social issues, planning and space management issues [7].

Thus, the present article based on desk research aims to study the main characteristics of large African cities.

II. Rapid urbanization and its implications

Rapid urbanization is one of the major characteristics of Third World countries [8]. Compared to the other continents of the world, Africa is the most rural continent, but one that is rapidly urbanizing [2]. According to the UN-Habitat report entitled, The State of the World's Cities 2008/2009, the rate of increase of the urban population in Africa is the highest in the world (3.3% per year) and the continent is home to 17 of the 100 fastest growing cities. If current trends are maintained, by 2050 more than half of the population in Africa will be urban and African cities will be home to almost a quarter of the world's urban population, i.e. approximately 1.2 billion people [9].

However, urbanization in Africa is not homogeneous. Admittedly, Southern Africa is the most urbanized region of the continent (58.9% in 2011). Central Africa and North Africa are also at 58.53% and 51.5% respectively. On the other hand, West Africa and East Africa recorded the lowest rates on the continent (respectively 44.9% and 21.7%). These two regions are also the part of the world whose population is urbanizing the fastest [5].

There are also significant variations between countries. In Burkina Faso, Burundi, Ethiopia, Malawi, Rwanda and Uganda, 10 to 20% of the total population live in urban areas, while this percentage is 50 to 60%

for Algeria, Botswana, Congo, Cameroon, Morocco, South Africa and Tunisia. In Libya and the coastal states of Gabon and Djibouti, 75-80% of the population live in cities [9]. Cairo (Egypt) remains the largest African city but could be overtaken by Lagos (Nigeria) according to projections [5].

This trend towards rapid urbanization of African countries is observed from independence with the creation of new States which were to set up both a national civil service, replacing the colonial administration, and a development process including the city, and particularly the metropolis, is the centerpiece. There are many reasons for this growth. We can mainly mention the movement of rural exodus, political instability and above all the natural growth of the population [6]. However, the share of the rural exodus in the growth of the African urban population has become negligible compared to what it had been in the last two decades of the 20th century [5].

In addition to this population growth, the cities of these countries are characterized by extension and sprawl. For example, Cairo, which is the most populated metropolis in Africa, was in the years 1999-2000 stretched over 46 km from north to south and 35 km from east to west. Its current area exceeds 149,200 ha for a density of 108.88 inhabitants/Ha. This observation applies to most African cities: Khartoum (2,214,200 ha), Kinshasa (996,500 ha), Algiers (36,300 ha) and Kampala (19,200 ha) [10].

As for the West African sub-region, the city of Lagos (3,345 km²) is the largest in terms of area. It is followed by Abidjan (2,119 km²). The cities of Accra, Dakar and Ouagadougou cover an area of 3,245 km², 550 km² and 518 km² respectively [11].

This rapid growth of African cities imposes challenges to the various municipalities in terms of management, servicing and equipping with basic socio-urban infrastructure [10]. Among the problems inherent in the demographic and spatial growth of African cities, there are, in the field of housing for example, huge slums that have sprung up across the continent. No urban center has been spared by spontaneous housing and slums (even if Tunisia has relatively eliminated this type of housing in these cities from [3]). The largest and most impressive slum in Africa is that of Kibera in Nairobi, which is home to between 500,000 to one million people. *The International Housing Coalition* notes that in several cities in Africa, *less than 10% of the population* live in viable neighborhoods and decent housing: 74% of city dwellers live in slums in Zambia, 80% in Nigeria, 85.7% in Sudan, 92.1% in Tanzania, 92.9% in Madagascar and 99.4% in Ethiopia [12]. This situation of precarious housing remains worrying, even if the rate of slums has fallen relatively from 20 to 13% in North Africa and 5% in sub-Saharan Africa [3]. In most Arab countries, urban expansion has been accompanied by a proliferation of clandestine housing: 1,600,000 inhabitants in Cairo (20% of the capital's population) and 346,000 in Morocco [13].

In addition, the phenomenon of climatic hazards supported by the rapid urbanization of the continent exposes African cities to natural and sometimes technological disasters. Indeed, urban poverty, the proliferation of precarious neighborhoods and the weak capacity of communities, households and governments to cope with the risks of flooding and the occurrence of disasters, could exacerbate the situation [14].

More than one and a half million people are affected each year in African cities by floods following torrential rains. In 2009, Senegal, Burkina Faso, Ghana, Benin, Niger and Sierra Leone were seriously affected by floods which reportedly claimed 200 lives and seriously affected 770,000 victims in the sub-region [14]. Coastal cities are also affected following the rise in sea level due to climate variability.

In the field of socio-urban infrastructure and services, African countries and cities are victims of their enormous lack of infrastructure and their too limited access to technologies and services. In terms of electrical energy, difficulties in the distribution of electrical current persist, with cuts occurring regularly in no less than 30 countries on the continent [5]. In Dakar, for example, for lack of being able to supply the entire city, certain districts are in turn deprived of electricity for several hours in a row. About ten companies are equipped with generators, but diesel is expensive [15].

Drinking water supply is also very insufficient. Less than 20% of households in Africa benefit from a piped water system and only 40% have access to water within a radius of 200 meters [16]. In Guinea-Bissau, urban centers and particularly the city of Bissau, have low drinking water coverage. This situation would be, among other things, due to frequent blackouts and incessant power cuts [17].

In transport, the network is generally deficient at all levels. Public and private public transport is everywhere very insufficient in number and in services. The costs of road transport are very high and the network itself is very insufficient. African cities are regularly congested [18].

Finally, rapid urbanization presents health and environmental risks for large African cities [19]. Indeed, the evacuation of urban waste poses a real problem and leads to enormous risks to health and the environment in large African cities (photo n°1).



Photo: [20].

Photo n°1: An overexploited and dangerous landfill of Akouédo in the commune of Cocody (District of Abidjan)

Populations (adults and minors alike) do not hesitate to rummage, without any protection, in waste of all kinds involving all kinds of health risks. Moreover, one of the characteristics, once very closely linked to the rapid urbanization of African cities, was migration.

III. Migration increasingly linked to poverty in rural areas

Several authors ([21], [22], [8], [23], [24], [25] & [26]) are unanimous that the primary source of urban growth in Africa has been migration. However, they acknowledge that this source of urban growth is declining [10]. Indeed, migratory flows increased from the 1960s. In the large cities of black Africa, the migratory contribution represented 60% of the numerical growth of the population over the period 1960-1975 to fall to 50% around 1995 [27].

The history of migrations and urbanization in Africa south of the Sahara can be divided into three major stages. From the 17th to the 19th century, the slave trade dominated, between 1880 and 1945, colonial penetration increased the need for labor (forced labor) and led to the establishment of a few trading post towns. Also during the colonial era, certain intra-African migrations were favored in order to accelerate the economic development of certain strategic regions (Senegal, Côte d'Ivoire, Ghana and later Nigeria). Since 1945, and especially since independence, spontaneous migrations have accelerated [28]. In addition, spontaneous migration to African cities (rural exodus) which increased in the aftermath of independence was mainly driven by economic inequality between urban and rural areas, and the search for employment remains a priority.

But, with the crisis that African countries have been going through since the beginning of the 1980s, this exodus is tending to slow down, and even to reverse itself in certain countries [28]. For example, the transformation of the relationship between town and country in the Arab countries during the 1980s led to a slowdown in emigration to the major urban centers. In other words, the large urban centers like Cairo, Casablanca, Tunis, Algiers, which offered integration possibilities to migrants in the 1960s, were no longer able to do so due to a constant increase in a flow of workforce since the end of the 1970s. The slowdown in urban migration is also due to a certain development policy for medium-sized towns and rural areas [10]. This slowdown, which should even regulate the demography of African cities, was unfortunately relayed by the natural growth of city dwellers, which remains high due to still high fertility and the fall in mortality [10].

The main consequence of urban migration is the “bulging” of cities by a poor population that cannot resist the demands of city life. Thus, in the city, integration poses a whole range of problems (access to housing, work, etc.) and the majority of migrants settle on the outskirts, thus engaging in informal activities.

IV. The Informality

Informality, which translates into the “informal” sector, is one of the most striking and recurrent features of African cities [29]. Thus, the economy of most African cities is underdeveloped and essentially based on the informal sector. This leads to a situation of poverty for urban populations [17]. In the largest cities in Africa, industry represents less than 30% of the workforce. This weakness of industrialization explains the rise of the informal sector and the hypertrophy of the tertiary sector [30].

The informal sector occupies an important place in developing countries and particularly in Africa. It represents at least 75% of urban jobs in the Sahelian countries, 80% of job creations of the same nature and

about 50% of national wealth [31]. In Côte d'Ivoire, it is estimated that jobs in the formal sector of the economy occupy only 17.5% of the urban working population. The contribution of the informal sector to GDP is estimated at 20% [32]. The informal sector in Nairobi produces 60% of jobs. In 2011, this sector was responsible for 86% of job creation in Kenya, and grew by 5.5% in Nairobi with nearly 2.3 million workers. The informal sector is the leading "sector" providing employment in Lomé with approximately 210,000 informal production units in this city. In South Africa, more than a quarter of the labor force is out of work, and a growing number (around 2.3 million) are turning to the informal sector to survive [29].

The city of Ouagadougou is characterized by a large informal sector. People's incomes are generally low and they are in a precarious situation. Thus, on average, six out of ten households derive all or part of their income from an informal production unit and 47.3% of jobs in the informal sector are held by women [33].

The causes of "informalization" in African cities are mainly rural exodus, extremely strong demographic growth and the burden of regulations [31]. Moreover, even if informality plays a significant role in integration and social regulation [34], it remains a characteristic problem of African cities for municipal officials. It escapes state control, "ruralizes" cities, accentuates urban poverty and exposes its agents to very precarious living and working conditions. Moreover, while informality has been catalyzed by structural adjustment programs, it partly derives its existence from the colonial heritage, which is also one of the major characteristics of large African cities.

V. Colonial heritage

The existence of cities is a very old phenomenon in Africa. The African continent had long been dotted with trading towns (Saint-Louis, Gorée, Porto-Novo and Libreville), trade centers, such as Aoudaghost, the capital of Ghana (in present-day Mauritanian territory), Gao, Timbuktu, Djenné, Mopti, Koumbi-Saleh, Kano, Zinder, Mogadishu, Aksum, Malindi and Zanzibar, and on the other hand, Arab-Muslim cities in the north such as Kairouan (Tunisia), Cairo (Egypt) and Marrakech (Morocco). In addition, most of these cities were also historic cities like the pyramids of Meroe and the remains of the Kush empire along the Nile, the ruins of Greater Zimbabwe, the royal palaces of Abomey and Ouagadougou [35], [36]. Furthermore, in Central Africa, pre-colonial towns are few in number and have an ephemeral existence due to its climate and its central position [37]. However, the ancient cities of Africa certainly did not meet the current criteria of urbanization, in particular the demographic and architectural criteria; but they were above all the seat of power and housed important non-rural activities [38].

If it is true that the city is not something new for Africa, it is nevertheless colonization which imprinted its current characteristics. The current large cities were founded on sites chosen according to considerations linked to the needs of the colonizer (establishment of military posts, mining, agricultural and forestry development, involving administrative and economic management structures, points of collection of products, export ports, communication routes) [36]. Seaports were generally favored. These include Dakar, Abidjan, Lagos, Luanda, etc., and the location of large urban centers remains marked by this extroversion. From that time onwards, investments were concentrated in the capitals where most of the senior executives of the colonial administration resided [28]. Consequently, the new States do not put an end to the colonial urban planning policy, but are part of its continuity.

Heir to the colonial urban model, the African city is "dual". A socio-spatial segregative dualism between the "legal" (or European) city, the one that falls under Western standards and participates in the world-economy, and the "illegal" (or indigenous) city, that of informal settlements, and where a subsistence and survival economy is developing [35]. Most African cities are confronted with these strong inequalities. At the top of the list is South Africa. This situation partly reflects the legacy of more than a century of institutionalized racial segregation (apartheid) [3], [39]. One can also cite as many examples. First, cities like Abidjan, Dakar, Brazzaville have their "Plateau" (Central Business District or business centers), with airy and drained streets, unlike precarious housing areas for natives (Adjamé, Medina, or Poto-Poto) [35]. Then, urban informality and slums in Nairobi stem directly from these exclusionary practices in the planning policies of colonial regimes [29]. In addition, during the era of colonization, most Arab towns in North Africa became two-headed. Around the medina was built a "European" city, with its avenues, its squares, its buildings symbolizing the power of the colonizers (government palace, barracks, churches). The European city became Arabized, but in general it retained the organs of command, while the medina entered a process of social differentiation, marked by the appearance of renovated blocks, tourist districts and occupied spaces by slums [13]. Also, the choice of Kigali as the capital is reflected first and foremost by the colonizer's desire to place the imperial residence in the center of the country in order to facilitate accessibility to heavy goods arriving from the coast, but also the administration as opposed to the posts. Soldiers who were located on the periphery of the territory [6]. Finally, in Burkina Faso on the eve of independence, the city of Ouagadougou was made up of 9,500 plots with basic servicing. She was dual. The center housing the settlers corresponds to the planned city with specialized neighborhoods and 50 m wide boulevards grouping together most of the equipment and socio-economic

infrastructure. On the other hand, the periphery devoid of facilities where the “African” populations lived [40]. This dichotomy still persists today. Thus, the city center which corresponded to the oldest European district, today brings together most of the administrations and shops, and has the highest percentage of permanent housing (more than 90% according to the 1996 census) [41].

If at the city scale, the colonial heritage is mainly reflected in large African cities by a typology of neighborhoods (residential, popular, spontaneous and/or slums), it is translated at the national scale by an urban macrocephaly or primacy.

VI. Urban macrocephaly and bicephaly

Unlike the developed countries of Europe and North America, urban macrocephaly or bicephaly characterize urbanization in Africa. They result in the predominance of one city or two cities (in particular the economic capital and the political capital) in the urban framework of the countries. However, even if polycephalic urban systems, even megalopolises exist, the urban structure of African States remains dominated by a macrocephalic city or bicephaly which monopolize the essential economic and administrative functions.

A macrocephalic system characterizes most African countries, especially the coastal countries. Most of the already highly urbanized coastal countries, such as Gabon, Senegal, Côte d'Ivoire and Benin clearly recognize the pre-eminence of a city, generally the capital city [28]. Abidjan in Côte d'Ivoire, for example, concentrates 20% of the population, 50% of domestic production, 50% of industrial jobs, 80% of tertiary jobs in the country. The small towns, Bouaké, Abgenville, Dimbokro, are withering before the macrocephaly of the metropolis which absorbs most of the functions and investments available [30]. However, moving the capital to Yamoussoukro could have a decisive influence on the urban structure of the country in the future.

Within the continent there are the cases of Kigali (Rwanda) and Ouagadougou (Burkina Faso). Already in 1990, according to [6], the city of Kigali alone concentrated 61% of the country's urban population, 30% of civil servants in the public sector, 75% of bank deposits, 60% of cars and trucks, 52% government telephone lines, 76% of private telephones and 60% of industrial enterprises. This pattern of Kigali macrocephaly is steadily increasing. In 2007, Kigali housed 44% of civil servants in the public sector and gathered more than 50% of wholesale trade and almost all industrial activities (more than 70%). In 2008, Kigali was home to 4 of the country's 6 public higher education institutions.

Also, Ouagadougou is a macrocephalic city in the urban framework of Burkina Faso. First city of Burkina Faso and state capital, Ouagadougou combines the function of political, economic and service command. It concentrates about half (46.4%) of the country's urban population in 2006. The bicephaly that has long marked the country has now disappeared and Bobo-Dioulasso has ceased to play rivals, leaving Ouagadougou to take first place. Indeed, the population of Ouagadougou is currently about 2.71 times that of Bobo-Dioulasso, the country's second city [42], [43], [44].

In addition to macrocephaly, bicephalic systems develop on the continent such as in Morocco, Cameroon and Egypt. Morocco has a two-headed urban network, with a political capital (Rabat) of acceptable size and an economic capital resulting from colonization (Casablanca). But the country also has dynamic inland (Fez, Marrakech) and coastal cities [13]. Then in Cameroon two regions were structured, dominated by Douala (the coast) and Yaoundé (the southern forest). Yaoundé only hosts 25% of state officials, but Douala controls most of industry (2/3 of large companies), head offices (57%), and trade in Cameroon [30]. Finally we have Cairo (largest African city) and Alexandria in Egypt.

Moreover, since independence, the governments of African countries have developed strategies to rebalance the urban structure through the creation of new towns and in some cases, the displacement of the capital, such as the cases of Côte d'Ivoire, Nigeria and Tanzania [35]. The colonial segregative dualism and the massive exodus to the big cities in the aftermath of independence are the main motives for urban macrocephaly or bicephaly in Africa.

VII. Conclusion

In sum, large African cities are characterized by their growth, urban macrocephaly, informality and colonial heritage. Such characters are sources of enormous difficulties in the management of these cities. It is above all the growth of these cities, both demographic and spatial, which is the main characteristic, thus leading to the others.

In Africa, it is above all the capital cities that jointly concentrate the political and economic functions of the countries. In the urban framework of African countries, when we exclude the capital cities, we see that Africa remains a more or less rural continent. Urbanization is therefore concentrated only in metropolises, leading to major urban challenges.

The management of large African cities must necessarily go through a drastic mastery of the spatial extension of metropolises and their decongestion through the creation of new dynamic cities. This would require real decentralization which involves a certain number of actors.

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