

# WEST AFRICAN FUTURES

SETTLEMENT, MARKET AND FOOD SECURITY



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## WEST AFRICAN URBANISATION TRENDS

- 1** A coherent and reliable retrospective of urbanisation
- 2** Larger towns and more towns
- 3** Choosing a numerical definition of urban population
- 4** Large differences in urbanisation rates
- 5** Why has Nigeria's urbanisation rate changed so little?
- 6** Is the slowdown in the urbanisation rate structural?
- 7** Varied stages of evolution in the region's urban systems

West Africa has been experiencing intensive urbanisation for more than fifty years. This urbanisation has affected the region's largest towns and small urban centres alike. The average distance between agglomerations has declined from 111 km to 33 km. However, urbanisation rates vary widely across countries. They are highest in coastal countries that have not been threatened by major socio-political crises. The findings in the Africapolis study<sup>1</sup>, compared to the United Nations data, raise some interesting questions such as: Why has Nigeria's urbanisation rate changed so little? Is the slowdown in the rate of urbanisation since 1980 structural or cyclical?

1 "Africapolis Urbanisation Trends 1950–2020 – a geostatistical approach – West Africa study", Paris, 2009. The Africapolis study was supported by AFD and co-ordinated by researchers at CNRS and Paris Diderot University. The report can be downloaded from: <http://www.afd.fr>

*The opinions and interpretations expressed in this paper do not necessarily reflect the views of the OECD or the SWAC Secretariat.*

# 1 A COHERENT AND RELIABLE RETROSPECTIVE OF URBANISATION

A sound knowledge of population distribution is essential for food policies. Prior to the Africapolis study, the only data available was national data based on different definitions and few and sometimes contested census data published by the United Nations Population Fund (UNFPA). Neither does this data allow for cross-country comparisons nor does it allow

for a thorough analysis of the agglomeration process in the region.

The Africapolis study's retrospective data on West Africa's urban population from 1950 to 2000 corrects this situation and constitutes a major contribution to knowledge of settlement patterns in West Africa. The study explains in detail the methodology used to

obtain reliable data by combining identification, counting, delimiting spatial boundaries and a historical reconstitution of spatial growth of over 2 500 agglomerations (from maps, satellite images and aerial photographs) with census data and other available population counts.

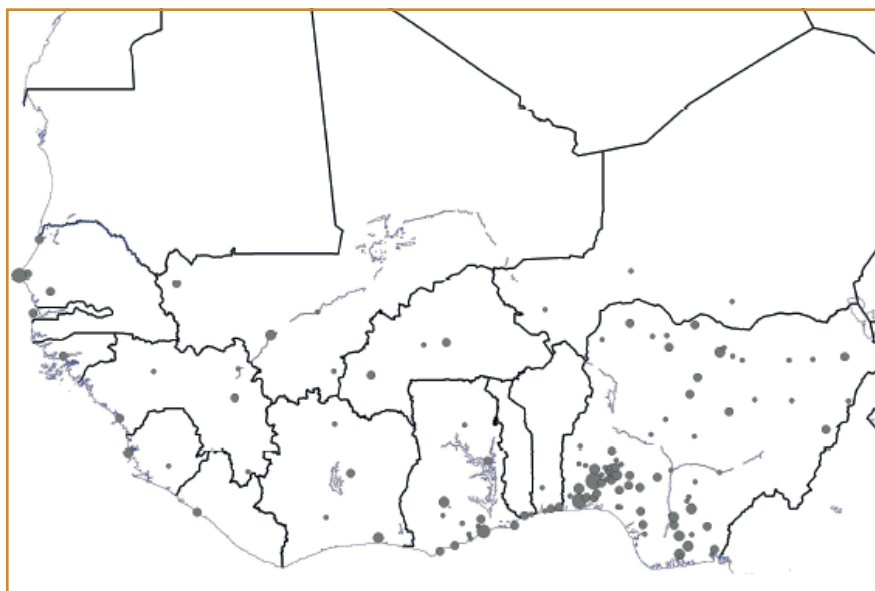
## URBANISATION RATE

Based on the same definitions for urban population, the population data are comparable between countries and have been integrated into an international urban database (e-geopolis).

**in 1950: 7.5%**

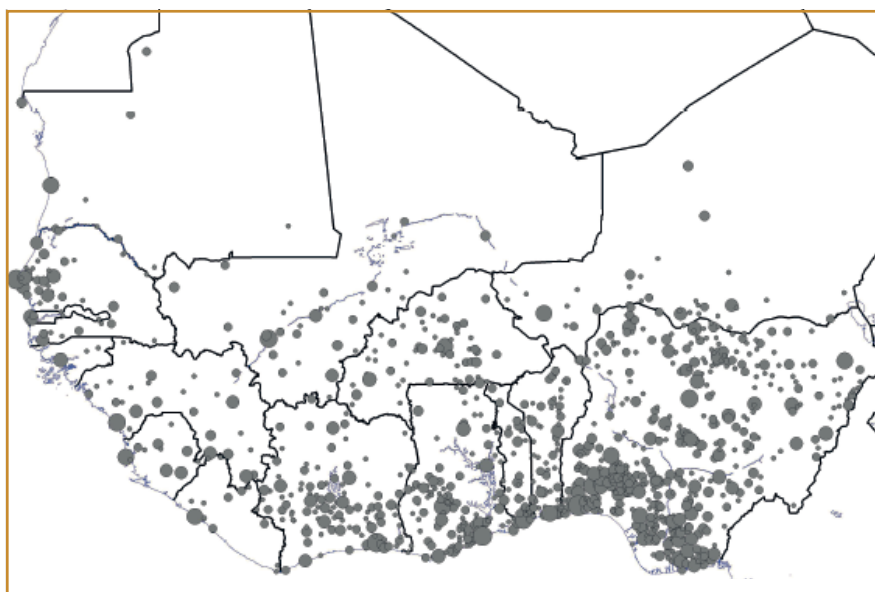
- 125 urban agglomerations
- 4 million urban dwellers

**Urban population trends in West Africa  
(centres with population over 10 000 inhabitants)**



**in 2000: 31%**

- 992 urban agglomerations
- 78 million urban dwellers



Source: Africapolis 2009

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# 2 LARGER TOWNS AND MORE TOWNS

For each country and for the region as a whole, the report gives the same decadal dates (1950, 1960...2000); total urban population and a breakdown of urban centres into population size brackets (10–20 000, 20–50 000, 50–100 000, etc.). This breakdown allows for a “Rank-size distribution of agglomerations in West Africa” graph.

The linear shape of the rank-size distribution and its parallel shifts over time (1950 to 2000) show that urbanisation and urban growth does not only affect the largest cities but also small and medium-sized urban centres, a fact often overlooked.

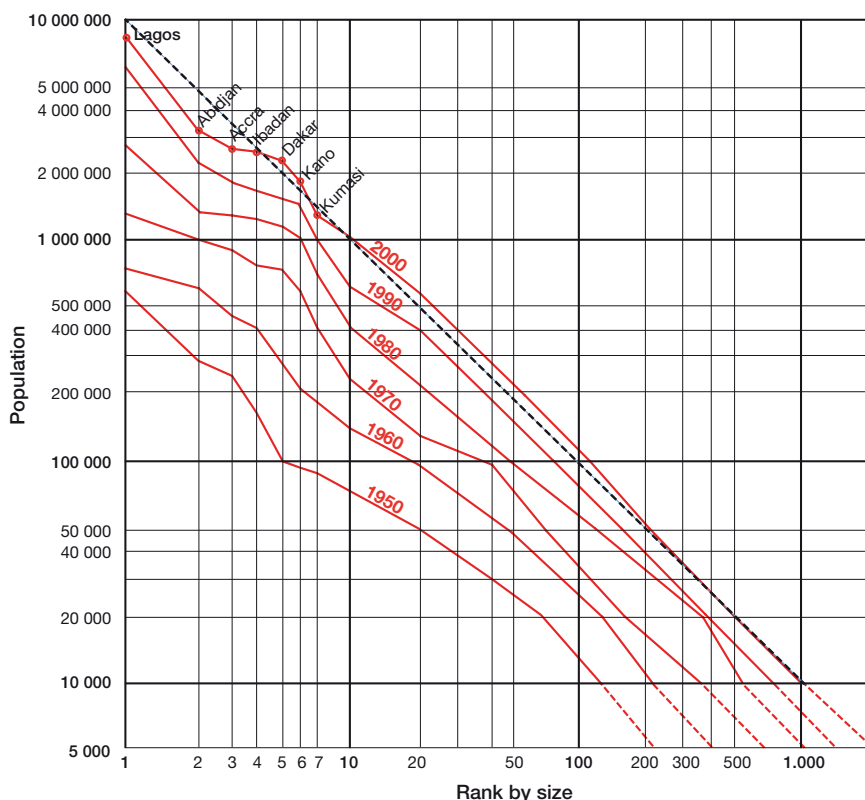
The picture of West African urbanisation that emerges from this study

is not substantially different from the one established (up to 1990 and with less precision) by the West African Long-Term Perspective Study “Preparing for the Future: A Vision of West Africa in the Year 2020” (WALTPS) produced by the Club du Sahel in 1998. In particular, the Africapolis study confirms that the region’s urban population increased 10 fold between 1950 and 1990 (and 20 fold between 1950 and 2010) and that the number of urban centres with populations above 10000 has grown continuously, from 125 in 1950 to over 1000 today. The average distance between urban centres of over 10 000 inhabitants has declined from 111 km to 33km. This has driven and considerably improved the integration of rural areas in the market economy.

## RANK-SIZE DISTRIBUTION OF URBAN AGGLOMERATIONS

This figure presents a ranking (in decreasing order of size) of all agglomerations identified by Africapolis on a logarithmic scale. Each centre is identified by its place in the ranking order (horizontal axis) and its population  $P_n$  (vertical axis). From the graph obtained, we can assess the extent to which the distribution deviates from Zipf’s law, which links a centre’s population to its rank by the relationship  $P_n = A/n$ , represented by the black dotted line. It shows the trend of this distribution from 1950 to 2000.

In 2000, the largest city, Lagos, was several times larger than the next four cities: Abidjan, Accra, Ibadan and Dakar, but it has not achieved “primatial” status (i.e. having a population five or more times larger than the next largest city). This is a sign of the regional market’s gradual integration without total domination by its largest city.



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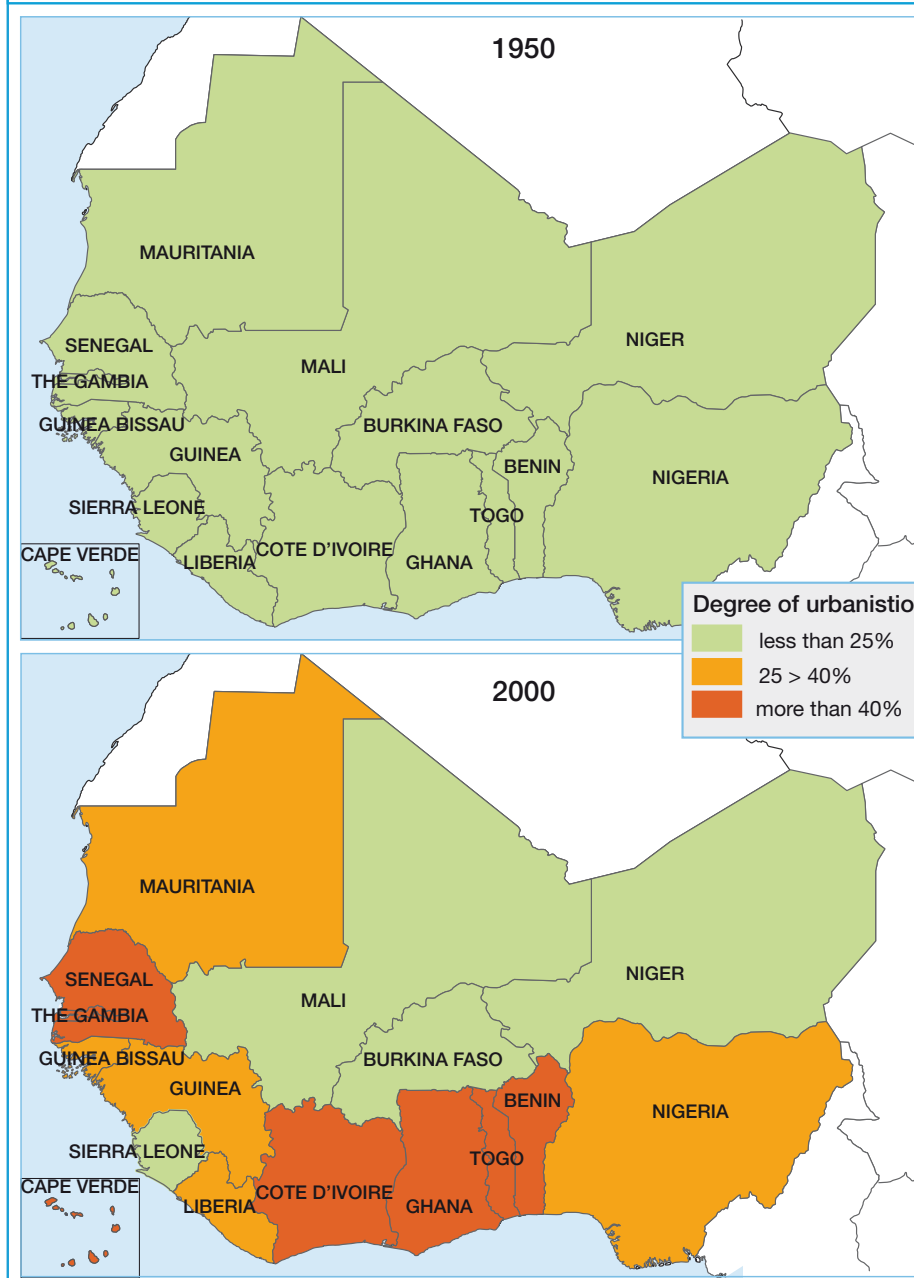
### 3 CHOOSING A NUMERICAL DEFINITION OF URBAN POPULATION

Comparing urbanisation trends over time and across countries requires the definition of some numerical threshold. Yet no definition of an urban area based on numbers (agglomeration of 5 000, 10 000 or 20 000 people) is fully satisfactory. An agglomeration of 5 000 inhabitants in a sparsely populated area can be characterised as a “town” whereas another of 10 000 inhabitants in a very dense rural area may be characterised as a “large village”. The authors of Africapolis have opted for a threshold of 10 000 inhabitants to define an urban area, regardless of its economic functions and administrative boundaries.

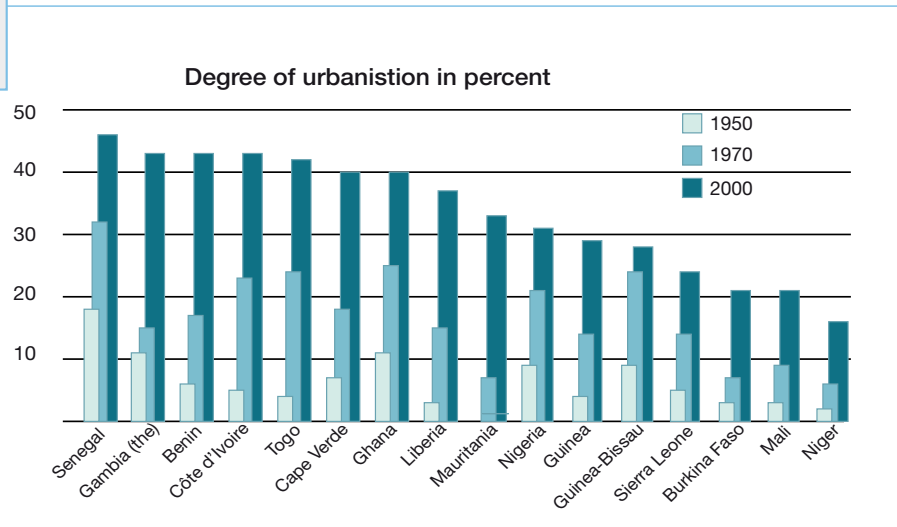
The linear shape of the rank-size distributions also suggests that the threshold of approximately 5 000 inhabitants (used by WALTPS) would increase the number of urban centres and hence urban population and urbanisation rate at each date by the same amount as the 10–20 000 bracket (see dotted lines). The relative trend in this data over time would not be significantly affected; what matters is to keep to the same numerical threshold over time.

### 4 LARGE DIFFERENCES IN URBANISATION RATES

Degree of urbanisation in West Africa: results of the Africapolis



Africapolis study



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Source: Africapolis 2009

The study calculates an urbanisation rate for each country and for the region as a whole. Comparing urbanisation rates rather than nominal size of urban population is more informative in terms of settlement transformations in a region where countries differ widely in population size (from Cape Verde's 500 000 to Nigeria's 100 million plus).

The average weighted regional urbanisation rate (32%) is greatly influenced by Nigeria as it accounts for half the region's total population.

Compared to the regional average in 2000 (32%), urbanisation rates in the region range from 16% in Niger to 46% in Senegal.

- Seven countries have urbanisation rates close to or above 40%, all being coastal countries;
- Four countries have urbanisation rates below 25%, which include the landlocked Sahelian countries (Burkina Faso, Mali and Niger) already the least urbanised in 1950 and Sierra Leone, among the most highly urbanised in 1950 but has been through a long socio-political crisis;
- Five countries have an urbanisation rate between 25 and 40% all being coastal countries. However, three countries (Mauritania, Liberia and Guinea) had low urbanisation rates in 1950 and two countries (Nigeria and Guinea-Bissau) were among the most urbanised.

# 5 WHY HAS NIGERIA'S URBANISATION RATE CHANGED SO LITTLE?

The fact that its urbanisation rate places Nigeria today among the moderately urbanised countries raises some questions. In 2000, Nigeria's per capita GDP was no different from those of Ghana, Côte d'Ivoire and Senegal. Its urbanisation rate should therefore not greatly differ from theirs, or even be higher given the size of its population and therefore size of its domestic market.

► *A special paper will be dedicated to the demographics of Mali and Nigeria.*

This atypical situation is worth closer examination. It should be seen in relation to the difference between West Africa's urban population according to UN data (used to calculate per capita GDP) and according to Africapolis. There is a discrepancy between the two; 18 million (urban) people in 2000 of which 75% (14 million people) can be attributed to the difference in assessing Nigeria's population (see table below).

**Urban population in 2000: UN and Africapolis data (in thousands)**

Country	Urban population			
	UN (1)	Africapolis (2)	Deviation (1) - (2)	% deviation from (1)
Benin	2 770	2 757	13	0
Burkina Faso	1 971	2 403	- 432	-22
Côte d'Ivoire	7 423	6 980	443	6
Ghana	8 856	7 201	1 655	19
Cape-Verde	234	171	63	27
Gambia (The)	639	546	93	15
Guinea	2 547	2 274	273	11
Guinea-Bissau	407	330	77	19
Liberia	1 666	1 041	625	38
Mali	2 787	2 145	642	23
Mauritania	1 026	836	190	19
Niger	1 801	1 667	134	7
<b>Nigeria</b>	<b>53 048</b>	<b>38 769</b>	<b>14 279</b>	<b>27</b>
Senegal	4 200	4 294	-94	-2
Sierra Leone	1 605	1 231	374	23
Togo	1 974	1 921	53	3
<b>West Africa</b>	<b>92 954</b>	<b>74 566</b>	<b>18 388</b>	<b>20</b>

Chad is one of the countries covered by SWAC but does not figure in the table because it was not included in the Africapolis study.

Source: Africapolis (2009)

## 6 IS THE SLOWDOWN IN THE URBANISATION RATE STRUCTURAL?

The authors of the Africapolis study observed that urbanisation in the region – the rise in the percentage of urban population in total to rural population – after rising rapidly until 1980 has slowed almost continuously since then, despite the continued emergence of small agglomerations (see table). They concluded that the region's urbanisation will stop and urban population should level out at around 50% of the total population, favouring a structural interpretation of the observed trend.

This interpretation seems to consider urbanisation as an autonomous process advancing independently of the socio-political and economic context. However, some analyses have shown that urbanisation is linked to economic growth. The example of Ghana supports this view. Ghana was hard hit by the oil price shock and the drop in agricultural raw material prices but recovered faster than other countries. Urbanisation slowed markedly between 1970 and 1980, but picked up again from 1980, although by 2000 it had not returned to the pace of the 1950s–70s. However, the acceleration since 1980 seems to suggest that the slowdown in urbanisation in West Africa may not be structural.

The urbanisation of Africa is lagging far behind the rest of the world. However, there is no reason why the process should not continue as it has everywhere else reaching in the long-term a rate of 75% or more. Pace and regularity are the only elements that differ in urbanisation processes, both closely linked to political and socio-economic contexts.

The World Bank's 2009 World Development Report, Reshaping Economic Geography, highlights the relationship between urbanisation and economic growth.

The urbanisation projections in Africapolis to 2010 and 2020 should therefore be examined in-depth, notably through an analysis of the socio-political and economic context of the 1950-2000 and by taking the most recent population census data into account. Most countries in the region experienced serious economic problems between 1975 and 1995: falling commodity prices, oil shock, financial crisis, structural adjustment, etc. However, since 2000 economic growth has strongly accelerated (5% and more) in several West African countries. This has certainly given a boost to urbanisation.

### Slowdown in urbanisation in West Africa

	1950	1960	1970	1980	1990	2000
% of total population living in towns	7,5 %	12,9 %	18,8 %	23,1 %	27 %	31,8 %
<b>Decadal growth coefficient</b>	<b>1,7</b>	<b>1,5</b>	<b>1,23</b>	<b>1,17</b>	<b>1,15</b>	

Source: Africapolis (2009)

### Slowdown and recovery of urbanisation in Ghana

	1950	1960	1970	1980	1990	2000
% of total population living in towns	10,6 %	17,4 %	25,2 %	27,2 %	31,4 %	39,1 %
<b>Decadal growth coefficient</b>	<b>1,64</b>	<b>1,45</b>	<b>1,08</b>	<b>1,15</b>	<b>1,24</b>	

Source: Africapolis (2009)

# 7 VARIED STAGES OF EVOLUTION IN THE REGION'S URBAN SYSTEMS

The authors of Africapolis highlight an increase in the number of small and medium towns and the proportion of total urban population they account for. In this they see the foundation of an urbanisation process, emphasising different stages of urbanisation across countries: an initial stage characterised by a small number of agglomerations; then, the emergence and growth of secondary towns until the urban network is dense enough

for the pool of rural migrants to start drying up; and finally, simultaneously with completing the demographic transition, the number of urban centres and urban population stabilise, some urban centres declining in favour of others.

From a food security perspective, one should analyse how the evolution of the region's urban systems relates to the rise in the ratio of non-food-producers

(consumers) to food-producers. This trend contributes to the spatial organisation of supply and demand and must be taken into account in food security policies and strategies.

► **A special paper** will be dedicated to urbanisation rates and its consequences on the ratio between agricultural and non-agricultural producers.

## Glossary

### → Urban population

Population living at a given moment in centres defined as urban by the size of their populations (agglomerations)

### → Urban growth

Increase in the population defined as urban

### → Urbanisation rate

Share of the population living in urban areas at a given moment in total population

### → Urbanisation

Process by which the percentage of urban population within total population increases

### → Rate of urbanisation

An increase in the ratio of urban to rural population (equal to the differential between urban and rural population growth)

### → Primatial

Classification of the largest city if it is at least 5–7 times the size of the second-largest.



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**Your comments are welcome!**

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