Urbanisation Dynamics in West Africa 1950–2010

AFRICAPOLIS I, 2015 UPDATE
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Settlement and urbanisation dynamics

Completely re-shaped economic, social and political geography of the region

- **Total population (1950-2010)**: $x^5$ 320 million
- **Rural population**: $x^3$ 180 million
- **Urban population**: $x^{22}$ 130 million
“Urbanisation: The study of urbanisation is the study of an aspect of the problem of density. It is a very important aspect and as such has not received the attention it deserves.

It is probable that no change of so fundamental a nature has ever occurred in the lives of the mass of the people as that which has converted the greater part of the population of industrial communities from country dweller to town dwellers during the last century. It is thus desirable to obtain a measure of urbanisation but it is not an easy matter to do so. The census returns of most countries classify the population into urban and rural, but while these figures are useful for comparing changes in the same country between two dates, they are of little use when comparing two countries. This is so because the classification is based upon very different methods in different countries. Thus, owing to differences in local government between England and Scotland, the figures giving the percentages of urban dwellers out of the total populations are not comparable. Again, those officially classed as urban dwellers often live under what to most people would appear as rural conditions.”
Africapolis

- An inventory of urban agglomerations: **size, evolution, geo-localisation**

- A **homogenous definition** of urban: “A continuously built-up area with less than 200m between buildings and more than 10,000 inhabitants”

- Method combines demographic sources, satellite and aerial imagery and other cartographic sources

- Data is **comparable, independent and verifiable**
Africapolis I – 2015 update

- New census data for 13 countries
- Improved quality and availability of satellite imagery
- Between 2000 and 2010 +48 million urban (60%)
Major contributions of Africapolis

• Identification of cities < 100,000 inhabitants:
  – In 2010, 90% of cities have fewer than 100,000 inhabitants,
  – combined population of 45 million = 34% of total urban
  – 565 new agglomerations since 2000
  – important role in urban systems

• Nigeria:
  – 1,236 agglomerations identified, 1,027 more than 10,000 inhabitants
  – Emergence of large conurbations in Niger Delta region

• Geo-localised data, disaggregated
Nigeria – a special case

- Problem of administrative cartography
- Reliability of pre-1991 censuses
Urban network in 1950

Agglomerations: 152
> 100,000: 8
Level urbanisation: 9%
Urban network in 1980

Agglomerations: 770
> 100,000: 57
Level urbanisation: 27%
Urban network in 2010

Agglomerations 1 947
> 100 000 151
Level urbanisation 41\%
The rank-size distribution
Underrepresentation of secondary towns

Distribution of urban pop by same frequency size classes

- Inhabitants (million)
- 30
- 25
- 20
- 15
- 10
- 5
- 0

Size classes:
- 10 - 30k
- 30k - 100k
- 100k - 320k
- 320 - 1m
- 1 - 3.2m
- 3.2 - 10m
- 10 - 32m
Faster growth of secondary towns

Regression size on growth 1990 - 2010

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Mean Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 99 999</td>
<td>3.0314</td>
</tr>
<tr>
<td>100 – 999 999</td>
<td>3.7028</td>
</tr>
<tr>
<td>&gt; 1 million</td>
<td>3.6666</td>
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</tbody>
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The primacy index and secondary cities

Evolution of primacy index 1980-2010
Morphological approach

• Identify territorial transformation processes which remain poorly measured and explained

• At the core of better understanding complex urbanisation dynamics (sprawl of metropolitan regions, irregular sprawl of secondary cities, merging in high population density areas, formation of meta-urban conurbations, particularly in Nigeria)
Connecting to networks

Linearisation of settlements

Uromi 120 000 inhabitants
From hyper-rural to meta-urban

Scattered urbanisation, rural infill

Onitsha 6.3 million inhabitants 3 200 inhab/km²
Urban imprint - Nigeria

Total surface area covered 14 000 km$^2$ - 46% of population on 1.5% of the national territory.

Source: e-Geopolis - SWAC/OECD 2015
Rural-urban linkages: moving closer together