

URBANIZATION AND SPATIAL DEVELOPMENT IN AFRICA: SOME CRITICAL ISSUES

by SALAH EL-SHAKHS
and HOOSHANG AMIRAHMADI

Respectively, Professor and Director, School of Urban and Regional Policy, Rutgers University
and Assistant Professor, Department of Urban Planning and Policy Development, Rutgers
University, New Brunswick, New Jersey, U.S.A.

Accepted January 1985

Introduction

Despite its colonial heritage, Africa remains essentially at the frontiers of the processes of urban explosion and spatial transformations witnessed by the rest of the world during the Twentieth Century. Along with South and East Asia, the continent as a whole will have the distinction of being mostly rural in a world where the majority of the population will be living in cities by the end of this century. However, unlike South and East Asia, the continent still has but a few very large cities, which are primarily found in North and South Africa and its population growth rate is still on the increase. It is the only world region where fertility rates have yet to decline.

Thus, excepting North and South Africa, the continent is at the threshold of an urban/spatial transformation of major proportions. Indeed as Anthony M. O'Connor eloquently points out, "the combination of low levels, but high rates of urbanization means that tropical Africa provides almost unparalleled opportunities. . . to see 'cities in the making'". The ingredients for such transformation are minimal levels of urbanization, low degrees of urban concentration, high and increasing rates of population and urban growth, uneven distribution of population and resources, increasing efforts of national integration, and highly centralized political systems. If past experience is any indication, such conditions point to major tendencies toward spatial polarization with increasing urban concentration and widening regional inequalities. Such are the major issues facing African countries over the foreseeable future, now that the political struggle for independence is largely behind them.

Will Africa go down the same path as the rest of the Third World, with the added uncharted dangers of a process much compressed in time? This paper does not pretend to provide an answer but rather attempts to help formulate one. It assesses the major causes and consequences of current socio-spatial development trends, and discusses their planning and policy implications. It also attempts to articulate some alternative orientations in research, policy formulation, and planning.

African Population Growth in a Global Perspective

The 1980 United Nations assessment of population trends puts world population at about 4.8 billion by 1985, and projects a slowly declining rate of growth which will touch zero by the year 2100. At that time the world population is expected to stabilize at 10 billion (Figure 1)². Thus despite the onset of decline in the rate of population growth around the mid 1960's, the global population is estimated to have doubled over the last forty years, and will likely double once more by the middle of the Twenty-first century. Therefore, the global problem of sustaining an ever increasing mass of humans will be with us for the foreseeable future.

*Throughout this paper "sub-region" stands for different parts of a continent such as Eastern and Western Africa, while "region" refers to the continent itself such as Africa and Asia.

An even greater cause for concern, however, is the uneven distribution of such growth over the global space. Ironically, it will correspond inversely to the uneven distribution of current world material resources, production and spatial capacity, and technological and development capability. In particular, population of the Less Developed Regions (LDRs) is growing much faster than that of the More Developed Regions (MDRs). Thus, the present LDRs, which were burdened with 69% of the World Population of three billion in 1960, will have to sustain an even more substantial share (87%) of a much larger world population of ten billion by the end of the next century (Table 1 and Figure 1).

Spatial unevenness in population distribution is likely to become further magnified as we move down the scale within the LDRs, to their sub-regions,* and nation states. Indeed, it is, primarily, at these latter levels that we shall face major spatial and interpersonal inequalities and imbalances between the number of people and the supporting capacity of land, industrial production, technology, environment, and organizational structure³. Thus, of the 3.3 billion total population of the LDRs in 1980, Africa accounted for about 14 percent, Latin America 11 percent and Asia (excluding Japan) 75 percent. By the year 2100, however, drastic changes are expected to occur in this distribution with Asia's share dropping to about 55 percent and those of Latin America and Africa increasing to 15 and 30 percent, respectively.

The critical position of Africa will be more pronounced over the coming few decades. It is the only world major region where an increasing growth rate is projected up to the year 1990. The continent's average annual rate of population growth for the 1975-1980 period was about 2.90 percent. It is expected to peak at 3.02 percent between 1985 and 1990, with Western and Eastern Africa growing at much faster rates. Thereafter, the rates are anticipated to slowly decline, but remain the highest until the year 2100 and perhaps beyond (Figure 1)⁴. Thus Africa's 1980 population will multiply nearly six-fold before it stabilizes. Such rapid growth will exert unprecedented pressure on an environment where degradation is already widespread⁵.

The pressures of population growth will clearly be unevenly distributed by regions, by age groups, and by settlement types. West and East Africa are expected to face the greatest pressures, with some individual countries within these regions faring even worse. Population age distribution shows that the world population is generally young and is expected to increase faster than school age groups. This will contribute to a higher labor force as well as dependency ratios in the LDRs, and more particularly in Africa⁶ in the coming decades with far-reaching consequences for labor force problems and policies⁷.

African Urbanization

Urbanization has to be ranked among the world's most fundamental and radical changes in the twentieth century. The percent of the world's population living in cities will have jumped from a mere 13% around the turn of the century to over 50% by its end. For the first time in history, the majority of the world population will be living in urban areas (Table 2). The impact of such radical spatial and occupational population shifts will be acutely felt in the LDRs and more particularly in Africa where rates of population growth and of urban growth will continue to be in the highest among major world regions well into the Twenty-first century.

The shares of the world's urban population living in the LDRs, as a group, and in Africa will increase from 56% to 7.5% in 1980 to 68% and 11%, respectively, by the year 2000. The increase in the shares of the LDRs, and Africa in particular, of the world urban population is due to their currently lower levels of urbanization (33% and 32%, respectively in 1985) combined with higher rates of population growth and of rural-to-urban migration. Thus, while Africa as a whole is expected to become only 42% urbanized by the year 2000, its 1985 urban population will double by that time with an average annual growth rate of 4.6% compared to 3.7% for the LDRs and 1.1% for the MDRs (Table 2).

If such trends continue, as they are expected to, the situation in Africa will become particularly critical given that the continent, as a whole, is the poorest among the LDRs and has the least capability to effectively manage a growing urban population and the socio-economic concentration that it entails. Yet, what makes the situation even more alarming is the uneven spatial distribution of the continent's urbanization among its sub-regions and nations, and the fact that the fastest population and urban growth is likely to occur in the poorest areas of tropical Africa (Table 1 and 3)⁸.

Urbanization and Spatial Development in Africa

Whether current projections of the continent's urban growth turn out to be accurate or prove to be underestimated, Africa is moving towards an urban transformation of major proportions⁹. Its spatial impacts and consequences are likely to be highly uneven both among countries and among cities within their urban settlement systems. Indications are that the largest cities will continue to grow faster than medium size and small cities (Table 4). Indeed while the total urban population is expected to double between now and the year 2000, that in cities with one million or more is likely to triple over the same period (the respective increases between 1980 and 2000 are 160% and 323%). Africa is expected to have 64 millionaire cities by the end of the century (Table 5 and Figure 2) many of which will ironically belong to nations classified as "low income economies" by the World Bank¹⁰.

The phenomenon of excessive concentration of urban population in large cities already prevails, with varying degrees, throughout the continent and is likely to intensify by the year 2000. By that time, Africa will have acquired four super-cities with over five million population each (Cairo, Kinshasa, Lagos, and Nairobi). The sheer size, pace of growth, and relative geographical distribution of the major urban concentrations in Africa should underscore major concerns not only for the welfare of their populations but for their economic and political impacts on interactions and inter-dependencies within their countries and throughout the continent.

Table 2: Urban Population (in millions), Percent Urban and Average Annual Urban Growth Rates; World Major Areas and Regions, 1920 to 2000

	(1) 1920		(2) 1920-1930	(3) 1980		(4) 1975-1980	(5) 2000		(6) 1985-2000
	Urban Population	Percentage Urban	Average Annual Growth Rates	Urban Population	Percentage Urban	Average Annual Growth Rates	Urban Population	Percentage Urban	Average Annual Growth Rates
World	360.0	19.4	2.2	1809	41.0	2.8	3162	51.0	2.8
MDRs	260.0	38.7	1.9	802	70.9	1.4	1010	79.4	1.1
LDRs	100.0	8.4	3.0	1008	30.7	4.0	2152	43.7	3.7
Africa	10.0	7.0	4.1	135	28.8	5.2	350	42.2	4.6
Latin America	20.0	22.4	4.1	238	64.7	3.8	456	75.1	3.1
East Asia	50.0	9.0	2.6	371	32.7	2.8	634	45.1	2.7
South Asia	40.0	8.5	2.2	353	24.8	4.2	818	37.1	4.2

Sources:

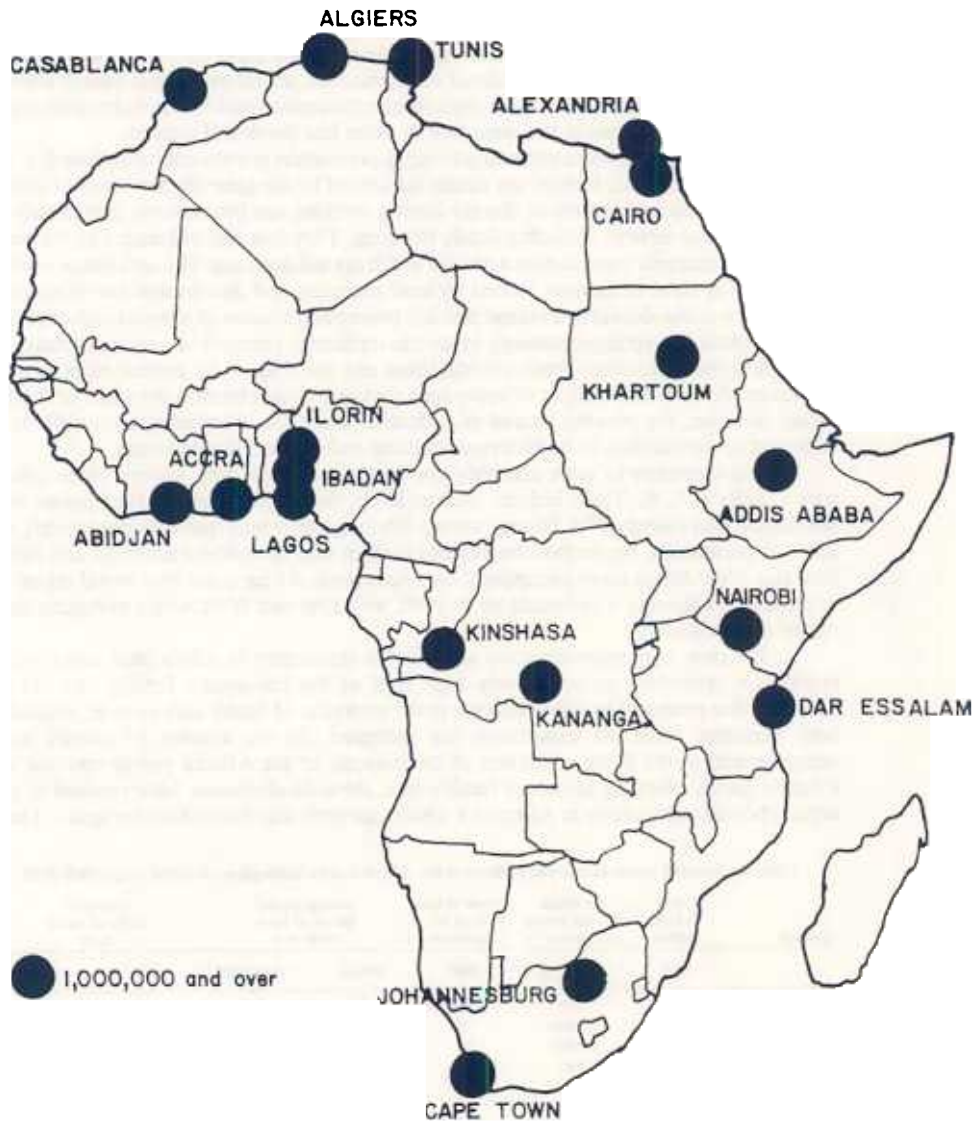
Columns (1) and (2) from P.M. Hauser and R.W. Gardner Hauser, P.M. and R.W. Gardner, "Urban Future: Trends and Prospects." Paper presented at International Conference on Population and the Urban Future, Rome, Italy 1-4 September 1980. The rest of the table from U.N. *World Population Assessment 1980 - Op. Cit.* p. 148 and 150.

Table 4: Africa: Population of different size classes of cities, total, as percent of urban populations, and as percent of total population, 1960-2000.

Size class of city	1960	1980	2000
5,000,000 +			
Total population (in millions)	0.0	7.5	58.3
As percent of urban population	0.0	5.6	16.9
As percent of total population	0.0	1.6	7.2
1,000,000 +			
Total population (in millions)	7.5	36.5	154.6
As percent of urban population	15.2	27.4	44.7
As percent of total population	2.8	7.9	19.0
100,000 +			
Total population (in millions)	26.9	86.2	249.1
As percent of urban population	54.3	64.8	72.0
As percent of total population	9.9	18.7	30.6
20,000 +			
Total population (in millions)	36.3	95.5	251.5
As percent of urban population	72.9	71.0	72.7
As percent of total population	13.2	20.7	30.9

Source: Derived from various Tables given in Hausser and Gardner, *Op. Cit.*

Figure 2



MAJOR CITIES IN AFRICA
(1980)

Table 7: Selected Demographic and Social Indicators for Africa and its Subregions, Selected years 1960-2000

	(a) Total fertility rate		(a) Life expectancy at birth		(a) Infant mortality rate (per 100)		Secondary school enrollment as % of age group		Thousand population per physician	
	1982	2000	1982	1982	1960	1982	1969	1981(b)	1960(b)	1980(b)
Africa	6.3	5.6	51	51	156.6	109.5	5.0	21.1	31.0	18.0
Eastern	7.1	6.5	49	49	158.0	116.0	2.3	9.2	41.6	25.5
Middle	6.1	5.9	50	50	166.3	118.5	2.4	25.4	46.5	22.6
Northern	6.0(c)	4.7(c)	55(c)	55(c)	156.5(c)	103.2(c)	8.8	38.2	11.2	4.6
Southern	5.5	4.8	58	58	114.5	76.5	9.0	17.0	12.8	18.6
Western	6.6	6.1	45	45	187.6	133.2	2.4	15.8	42.6	19.7
Range of variation among countries	highest 4.6	7.6 3.0	63 38	63 38	235.0 92.0	190.0 55.0	10.0 1.0	69.0 2.0	143.3 2.2	58.5 0.7

Notes:

- a. Calculations do not include countries with less than one million population
- b. For a few countries, the dates are different
- c. Includes Lesotho and S. Africa only

Sources: See Table 6

natural increase is higher in Eastern and Western Africa than in the continent's other sub-regions, much higher in the rural areas than in urban places, and still higher in the large urban centers than in the small and medium size cities. This latter phenomenon may be accounted for by the fact that the large urban centers receive massive rural migrants and that they have a sizable poor population (between 70 to 90 percent of the population in the large cities) whose fertility rates are the highest.

The second source of rapid urban growth, i.e. rural to urban migration, has also been increasing (Table 9). Prior to the 1970s, such flow was basically circulatory and accounted for less than 50 percent of urban growth in Africa¹¹. Since then, however, net migration has approached over 70% percent in a number of large urban centers¹². Rapid rural population growth coupled with the shortage of available land and its uneven distribution (both among African nations and among social classes) clearly influenced the rate and direction of rural to urban migration. Furthermore, the unequal exchange between rural and urban areas, which has historically developed under colonial exploitative policies and favoritism of large urban centers, continues to be perpetuated by unfavorable terms of trade, pricing policies, distribution of services, and the impact of import substitution on industrialization practices. The net effects have been further transfer of wealth to large urban centers, deterioration or rural economies and erosion of their agricultural base, and widening the gap between large cities and their hinterlands.

Consequences and Critical Issues

If rapid urbanization in Africa continues along its current path, the already high spatial and social disparities within the continent as a whole and within its constituent units will probably intensify. The obvious consequences of such trends would range from retarding fertility decline and increasing poverty to accentuating population/resource imbalances, particularly in critical areas and in large urban centers and heightening conflicts and political instability. Africa's natural regions have artificially been dissected by political boundaries which created effective barriers against regional economic integration and traditional spatial adjustment through the force flow of population movement¹³. Historically,

Table 9: Sources of Urban Growth in Africa, selected countries, selected years, 1950 to 1975

Countries	Period	Natural increase as percent of urban growth	Migration as percent of urban growth
Nigeria	1970-75	36.0	64.0
Tanzania	1970-75	36.0	64.0
Ghana	1960-70	57.6	42.4
Morocco	1960-71	63.0	37.0
South Africa	1951-60	57.4	42.6
	1960-70	74.4	25.6
Egypt	1966-1975	73.1	26.9

Sources:

Compiled from data given in various U.N. documents; A.A. Laquin, "Issues and Instruments in Metropolitan Planning." *Papers presented at the International Conference on Population and the Urban Future*, Rome, Italy 1-4. September 1980; Henderson, J.V. (1981) "A Framework For International Comparisons of Systems of Cities." Urban and Regional Report No. 80-3. Urban and Regional Economics Division, Development Economic Department, Development Policy Staff, The World Bank.

resent the two extremes in the settlement system where the greatest proportion of the poor seems to be concentrated as a result of the dynamics of the migration process. Their lot in life is not being helped by the generally declining proportion of government's expenditure on social development (Table 11). Thus large African urban centers are generally burdened with a high proportion of the urban poor (up to 70 percent), unemployment and underemployment (up to 40 percent), squatter and slum settlements (up to 70 percent as in Casablanca and Kinshasa), and predominance of the informal sector (which accounts for about 60 percent of the labor force).

In addition to familiar problems of congestion, overloads on services, and degradation of the urban environments, such development results in depressed wages and decreases in purchasing power and effective demand for a large proportion of the population, which hinder market expansion and socio-economic development. This is further exacerbated by the deteriorating terms of trade of African countries as a result of the changing international demand for African products. While Africa's population is growing faster than the rest of the world, its economy is getting relatively poorer.

The foregoing analysis points to certain critical issues in Africa's socio-spatial transformation. Whether current trends and imbalances would reverse themselves is hard to foretell. If past experience is any indication, however, an automatic reversal is highly unlikely to occur in the foreseeable future. Yet, Africa is not necessarily doomed to replicate the type of socio-spatial development patterns witnessed in Latin America and parts of Asia today. To the contrary, it could be argued that Africa still has a good chance to reverse or at least mitigate such alarming trends if certain changes are effected in the directions of research strategy, planning approaches, and development policies. In particular, African researchers have to advance beyond their present positivist methodology by adapting a critical research strategy, African planners have to complement the present adaptive planning with more innovative planning approaches, and African governments have to devise better cooperation mechanisms between countries and means of curbing further internal concentration of wealth and power by introducing certain radical redistributive and decentralizing measures.

A critical research strategy would help incorporate empiricism within a historical/logical framework, analyze urbanization as a system of infinite elements and linkages both internal and external to the phenomena, and uncover their dynamics within specific local settings and temporal dimensions. Such knowledge is essential for the effective control, management, and possible reversal of current trends in African socio-spatial development. It would help planners and policy makers to identify and reformulate planning issues objectively. Unlike the currently widespread use of planning as an adaptive or indicative tool, innovative planning approaches would aim to transform, rather than modify, the nature of development problems and would not forego crucial equity objectives for the sake of economic efficiency. It recognizes that it is not simply a question of "trade-offs" but of interconnectedness. Such planning cannot be simply technical, partial, or incremental.

Presently, most African governments do not seem to favor a critical research strategy or an innovative approach to planning. This, however, has to change if Africa is to avoid certain socio-spatial and, consequently, political disasters. Most African policies, instead, encourage imbalances and consciously or unwittingly discriminate against certain sectors of the society. In particular, defense and certain types of industries receive a higher priority than agriculture and social services; property and income distribution is highly unequal in favor of the rich; the development process is urban-centered; and the more backward regions are most often neglected. In addition, African political systems are largely highly centralized and allow for little if any local participation. Thus a new African development policy should be concerned with sectoral and spatial balance, interpersonal equity in living standards, and political participation. Finally, given the African countries interdependencies and their dependence on the international market, a realistic change in trends requires a greater cooperation within Africa and a simultaneous change in the international economic order. The African countries must genuinely work for both.

NOTES AND REFERENCES

- 1 Anthony M. O'Connor, *The African City*. (London: Hutchinson, 1983) p. 16
- 2 United Nations, *World Population Prospects: An Assessment in 1980*. (New York: Population Studies, No. 78., 1981)
- 3 Salah El-Shakhs and H. Amirahmadi, "Population, Urbanization and Third World Spatial Development: Trends and Prospects." *Journal of Asia-Pacific and World Prospective*. (Summer 1985, forthcoming).
- 4 World Bank. *World Development Report 1984*. (Washington D.C.: The World Bank, 1984) pp. 184-185
- 5 *Earth Watch* (1984) p. 2
- 6 *The Global 2000 Report to the President*. (New York: Penguin, 1982); *People* Vol. 2, No. 1 (1984)
- 7 International Labor Organization (ILO). *Labor Force 1950-2000*. Second Edition, Vol. 5. (Geneva. ILO, 1977).
- 8 World Bank. *World Development Report 1983*. (Washington D.C.: World Bank, 1983) pp. 184-185.
- 9 *Ibid.*
- 10 *Ibid.*
- 11 J.C. Caldwell, *African Rural-Urban Migration: The Movement to Ghana's Towns*. (New York: Columbia University Press, 1964).
- 12 J.I. Clarke and L.A. Kosinski (eds.) *Redistribution of Population in Africa*. (London: Heinemann, 1982); K.C. Zachariah and J. Conde. *Migration in West Africa: Demographic Aspects*. (New York: Oxford University Press, 1981); and I. Masser, and W.T.S. Gould. *Inter-Regional Migration in Tropical Africa*. (London: Institute of British Geographers. 1975.)
- 13 A.E. Akintuyi, "Economic Integration, Development and Growth in Africa: An Overlapping Regional Grouping Approach." (New Brunswick: Rutgers University. Unpublished Ph.D. Dissertation, 1974).
- 14 N.O. Addo, "Government-Induced Transfers of Foreign Nationals" in J.I. Clarke and L.A. Kosinski (eds.) *Redistribution of Population in Africa*. (London: Heinemann., 1982) p. 31.
- 15 J.I. Clarke and L.A. Kosinski (eds.) *Redistribution of Population in Africa* (London: Heinemann, 1982) p. 31.
- 16 G. Navikoff, "Desertification of Overgrazing," *Amibo*12:2. (1983).
- 17 P.M. Boffey, "Spread of Deserts Seen as a Catastrophe Underlying Famine," *Science Times* (January 8, 1985)