

## Chapter 7

# Urbanisation Challenges in Kenya

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### 7.1 Introduction

Kenya has witnessed rapid rate of urbanisation (about 6%) since independence in 1963. The independence guaranteed people freedom of movement, which spurred high rate of rural urban migration. Against the rapid urban growth the country has registered deterioration of institutional and physical infrastructure. As a result, Kenyan urban centres are characterised with expansive informal settlements; poor water and sanitation infrastructure and services. Also, the 1990s ushered in increasing incidences of poverty, a situation that threatens to heighten in future. Currently, over 60% of Kenyans live below the poverty line (SID, 2005).

The urbanisation in Kenya is explained in large measure by the growth pole theory. Further, the urban development policies in the country are founded on the theory. Kenyan urban hierarchy is characterised with one metropole (Nairobi city) together with a limited number of major urban centres (Mombasa, Kisumu, Eldoret, Nakuru and Thika). The various strategies used by the government to catalyse urban development have largely failed. Therefore, there is need to rethink urban development strategies to arrest the inevitable crises that are likely to ensure following policy failures and strategies. This chapter explores the following issues: theoretical and policy perspective; demographic profile; planning, infrastructure and services and institutional framework.

### 7.2. Theoretical and policy influence of urbanisation in Kenya

Kenyan urban system is characterised with one dominant metropole (Nairobi city) supported by five other major urban centres (Mombasa, Kisumu, Nakuru, Eldoret and Thika). Other urban centres in the hierarchy of municipality, town, urban, rural and market centres are spread throughout the country. Most of the urban centres are located in the high and medium potential areas, which constitute about 20 per cent of Kenya land. Since independence (1963), the country has witnessed rapid rate of urbanisation averaging 6 per cent, while the national population has been growing at about 3 per cent. Also, the country has rapidly urbanised during the last four decades with urban centres accounting for 7.8 and 27 per cent of the population in 1962 and 1999 respectively (Table 7.1)

It is evident that the country has witnessed a major structural change in urban development during the last 50 years. For example there were 34 urban centres in 1962 compared to 91 in 1979. The colonial rule restricted rural-urban migration, while the successive independent governments have guaranteed free movement of people and thus migration. The country witnessed a very high rate of urbanisation between 1989 and 1999. During that period, the number of urban centres rose from 139 to 276 compared to earlier periods that registered somewhat modest changes (Table 7.2).

The decline in the number of smaller urban centres may be explained in part by the perceived better opportunities that the larger urban centres offer, for example infrastructure and services, employment and market. The larger urban centres increased in number compared with the smaller urban centres (with population less than 10,000). Theoretically, within the framework of the rank-size rule it is expected that the number of urban centres should increase at an increasing rate with the decrease in the size of urban centres. The Kenyan scenario where the smaller urban centres (with population less than 10,000) declined in number during 1989/99 period is indicative of structural failure in our urban development in which few large urban centres dominate the country's urban system. In just about three decades, the urban population has increased by about 250 per cent, indicating that Kenya has generally become more urbanised (Table 7.3).

**Table 7.1. Growth of Some of the Urban Centres, 1969-1999**

Urban Centre	1969	1979	1989	1999
Nairobi	509,286	827,775	1,324,570	2,143,254
Mombasa	383,452	341,148	461,753	665,018
Kisumu	32,431	152,643	192,733	322,734
Nakuru	47,151	92,851	163,927	231,262
Eldoret	18,196	50,503	111,882	197,449
Thika	18,387	41,324	57,603	106,707
Machakos	6,312	84,320	116,293	143,274
Kitale	11,573	-	56,218	86,282
Meru	4,475	72,049	94,947	126,427
Kericho	10,144	-	48,511	93,213
Kisii	6,080	29,661	44,149	65,235
Malindi	10,757	-	34,047	118,428
Karatina	2,436	-	5,554	126,337
Nyeri	10,004	35,753	91,258	101,238
Naivasha	6,920	-	34,519	158,678
Kakamega	6,244	32,025	58,862	74,115
Kitui	3,071	-	9,305	106,873
Bungoma	4,401	-	26,805	73,048
Kangundo	1,540	-	10,880	179,952

Source: Republic of Kenya, Central Bureau of Statistics. *National Population Census 1969, 1979, 1989 and 1999.*

The 20 urban centres with populations of over 99,999, account for 43 per cent of the urban population. The 102 of 276 urban centres with population sizes of over 19,999 account for 92 per cent of the urban population. The three largest urban centres account for 40 per cent (with Nairobi city, Mombasa and Kisumu municipalities accounting for 28, 8 and 4 per cent respectively) of the urban population according to the 1999 National Population Census. However, these have not been accompanied by a corresponding increase in investment in urban institutional and physical infrastructure and service delivery. As a result, the urban centres have been exposed to deteriorating and inadequate urban infrastructure and environmental services with majority (over 60%) of the urban residents living in the informal or slum settlements that fall short of meeting humane habitation requirements. This state of affairs may not be blamed on the urbanisation process per se, but the inability of urban planning and development authorities to cater for basic needs of the increasing population.

**Table 7.2. Growth of Urban Centres from 1948 - 1999**

Population class	1948	1962	1969	1979	1989	1999
Over 100,000	1	2	2	3	6	20
20,000-99,999	1	2	3	13	21	82
10,000-19,999	2	3	7	11	19	18
5,000-9,999	3	11	11	22	32	23
2,000-4,999	10	16	25	42	61	51
100-1,999	-	-	-	-	65	82
Total	17	34	47	91	139	276

Source: Republic of Kenya, Central Bureau of Statistics. *National Population Census 1948, 1962, 1969, 1979, 1989 and 1999*

Like in most countries, theoretically growth of urbanisation in Kenya can be explained by the growth pole theory that was first coined by Perroux (Moseley, 1974). However, the Kenyan urban system suffers from disparities that are typical of developing countries save for extreme spatial structural disparities. Nairobi city strengthened its primate city status soon after independence through heavy local and foreign investment. Further growth of Nairobi city and Mombasa municipality created advantages of agglomeration economies that provide impetus for growth. Industrial development in Thika municipality is explained in large measure by a combination of agglomeration effect of Nairobi city and growth centre policy (Vorlauffer, 1986).

**Table 7.3. Growth of urban centres by actual population size, 1962 - 1999**

<i>Size of centre</i>	1962	1969	1979	1989	1999
100,000	523,079	756,359	1,321,566	2,371,158	3,316,603
20,000-99,999	61,707	79,582	568,099	822,971	3,852,778
10,000-19,999	44,005	685	149,756	257,775	259,564
5,000-9,999	69,862	71,396	154,181	232,259	154,187
2,000-4,999	49,002	81,886	122,094	194,554	170,380
Total	749,651	989,908	2,315,696	3,878,697	7,753,512
% of National total	7.8	9.9	15.1	18.0	27.0

Source: Republic of Kenya, Central Bureau of Statistics. *National Population Census 1948, 1962, 1969, 1979, 1989 and 1999.*

Growth centre policy has been part of the national development plan of Kenya since the 1970s. Government's intention to undertake the policy was first reflected in the national development plan of 1970/74. The policy was aimed at promoting development of small and medium size urban centres with potentials for growth and redirecting urban development away from Nairobi city and Mombasa municipality. The government intended to invest in infrastructure of the designated growth centres to make them attractive for investment and human settlement. The growth centres would then promote development of their hinterlands and absorb rural-urban migrants that would otherwise be attracted to Nairobi city and Mombasa municipality.

Therefore, the growth centre policy would alleviate congestion in the increasingly congested Nairobi city and promote regional development. The implementation of the policy has been carried out in phases. For example, the initial phase of growth centre policy covered the following centres: Kisumu, Kakamega, Nakuru, Eldoret, Nyeri, Thika and Embu, while the second phase included Meru, Bungoma, Kericho and Kisii. However, the growth centres particularly those in arid and semi-arid regions may be ineffective in promoting development because of the excessive number of designated centres, lack of financial and technical resources (Vorlauffer, 1986). In principle, the country's urban and regional development strategies have failed to work to expected potential due to poorly coordinated implementation efforts and weak and or non-existent decentralisation policies.

The implementation of growth centre policy in Kenya has faced many obstacles. Lack of explicit selection criteria makes it difficult to identify urban centres with the best growth potential. In the absence of objective selection criteria, other considerations for example political expedience may result in the choice of wrong centres and inappropriate investment package. Lack of appropriate data on the urban centres and the hinterlands makes it impossible to develop effective selection criteria. Further, haphazard change of boundaries of urban centres makes it

difficult to establish a stable database. This has seen huge parts of the countryside included in the urban boundary that seriously exaggerate the sizes of centres. At the same time, the determination of the correct population of a centre can be very difficult because of the periodic nature of markets of most centres. On market days a significant proportion of economic actors (buyers and sellers) come from outside the town boundary and significantly influences the economic base of the urban centre. Although the population size is usually an important yardstick to determine the urban centres that qualify for growth centre status, the rapid change in population size of these centres makes it difficult to determine a static population size for qualifying centres. Since growth centres are meant to alleviate regional disparities in development, it may be appropriate to determine different population indicators for different regions. This is important because regions differ in the levels of development, population characteristics, resource endowments, types of economic activities, political representation and proximity to hubs of power.

Lack of reliable infrastructure is a major deterrent to the development process in Kenya. This has been blamed on lack of human and financial resources and appropriate institutions. Therefore, provision of infrastructure in the designated growth centres could be important in promoting development of the centres and their hinterlands. It is important to accurately establish the real infrastructural needs of the designated centres. Also, the number of designated growth centres should match the available resources. In the past the number of designated growth centres have been far in excess of the available resources. Unfortunately most development plans are made in anticipation of foreign development loan or grant, which remains erratic and inadequate.

Lack of appropriate infrastructure is more serious in the hinterlands of urban centres and in some cases the hinterlands are inaccessible to the designated growth centres. Provision of infrastructure in the growth centres without opening up the inaccessible hinterlands can greatly limit the growth of the designated growth centres. Therefore, infrastructure development in the growth centres must include opening up the hinterland. Transformation of the economy of the hinterland into a vibrant market economy needs to be an integral part of the growth centre policy in order to avoid creating further disparities. Infrastructural development in Kenya has failed to make adequate provision for operation and maintenance.

It is unlikely that growth centre policy has the resource base to reverse the ongoing deterioration of infrastructure let alone making concrete efforts to open up the hinterland that may eventually be de-linked from the urban economy. The success of growth centre policy depends greatly on the extent to which the government will combat the deteriorating infrastructure and establish an effective infrastructural development policy for both urban centres and their hinterlands.

Growth centre policy must make adequate provision for operation and maintenance of the infrastructure to create stable foundation for long-term development.

### 7.3 The National Population Profile

The current population of Kenya is estimated at about 30 million. The National Population Census shows that the population has increased from 5.4 to 28.7 million in 1948, and 1999 respectively, representing a growth rate of about 3 percent. About 80 per cent of Kenyan population lives in the rural areas and depends mainly on agriculture. Also, about 80 per cent of Kenyan land falls within arid and semi-arid regions. Most of the Kenyan population lives in the high to medium potential areas in Western, Nyanza and Central Provinces and in some parts of Eastern and Rift Valley provinces (Table 7.4). Nairobi province will continue experiencing unprecedented growth relative to other provinces because it is the political and commercial capital of Kenya. To be expected are such challenges as overcrowding and congestion, traffic jams, noise pollution, social decay and increased crime rates. The emerging phenomenon of "over-urbanisation" (more urban workers than urban industrial jobs) often causes economic, social and ecological repercussions that could have far reaching implications on national development. Although the country's 20 per cent of the land continues to accommodate increased population, the semi-arid environment also continues to attract human settlement far in excess of its carrying capacity. Given the fragile nature of the arid and semi-arid environment continued human settlement poses serious risk of environmental degradation.

**Table 7.4. The population size by province**

Province	Total population	Area in km <sup>2</sup>	Density
Nairobi	2,143,254	696.1	3079
Central	3,724,159	13,220	282
Coast	2,487,264	82,816	30
Eastern	4,631,779	153,473	30
North-eastern	962,143	128,124	8
Nyanza	4,392,196	12,547	350
R/valley	6,987,036	182,539	38
Western	3,358,776	8,264	406
TOTAL	28,686,607	581,677	49

Source: Republic of Kenya, Central Bureau of Statistics. The 1999 National Population Census

## **7.4 Urban Planning, Infrastructure and Services**

Urban planning, infrastructure and services are generally poor in Kenya due to lack of efficient implementation systems. In addition, very few urban centres have up to date physical development plans. Most of the existing urban physical development plans were prepared in the 1960/70s and very few of them have been revised to cope with rapid urban growth. Most urban growth occurred during the last two decades. Further, the urban growth has occurred mainly outside the planned areas leading to massive growth of slums and informal settlement in all urban centres. In Nairobi for instance, 60 per cent of the residents live in slum settlements, while the level of urban poverty in the country is estimated at 60 per cent. Most of the urban poor live in the slum and informal settlement. The main features of slum and informal settlement are inadequate infrastructure, services and housing (water and sanitation, roads, educational and health facilities). Nairobi city is still guided by the master plan that was approved in 1948. The existing Nairobi city master plan is already 52 years old, 22 years older than the maximum life of a master plan. A master plan should be revised after a maximum of 30 years to provide for the changing circumstances and refocus the future development. The structure plans of Mombasa and Kisumu municipalities were prepared in the 1960s and have never been revised to cope with urban growth and development. This is a clear manifestation of gaps in the planning process and perhaps a contempt for the process within the ruling elite.

Since the 1970s, the government has undertaken a number of policy and strategy measures to develop human settlement infrastructure and services such as: growth centre policy, rural trade and production centre strategy, district focus for rural development and slum upgrading strategy. However, these policies and strategies have had little impact, with for instance the growth centre and rural trade and production centre policies benefiting only a limited number of centres. This is partly because these strategies depend mainly on unreliable donor support for implementation. Further, the developed infrastructure has deteriorated and is in a state of disrepair because they lacked adequate provision for their operation and maintenance. Political interference has been responsible for inappropriate selection criteria for centres and infrastructure development packages. As a result, most of the infrastructure developed through these policies and strategies have failed to stimulate the expected human settlement development as is exemplified today by the congestion in Nairobi city and Mombassa municipality. Estimates indicate that the population within informal settlements has been increasing at a rate of 7-12 per cent annually, compared to less than 3 per cent annually for Kenya as a whole since 1971 (UN-HABITAT and Government of Kenya, 2002).

Generally, Kenya's urban infrastructure has witnessed rapid deterioration during the last two decades especially roads, water and sewerage systems. The existing

infrastructure has not been able to cope with the population growth and is therefore overused or overcrowded and thus unable to guarantee the expected quality life. The services are similarly in pathetic state, for example persistent water shortages, limited sewerage system coverage, uncollected garbage, public health and persistent power failures. Some factors responsible for the above scenario include inadequate and skewed resource allocation for the construction, maintenance and rehabilitation of the facilities; poor contractual work; rapid urbanisation; high population growth and adverse weather conditions.

Water and sanitation could easily pass as the important basic infrastructure for urban development. Sessional Paper No. 1 of 1999 on National Policy on Water Resources Management and Development presently guides water resource management. This was followed with the promulgation of Water Act in 2002. The government has taken concrete steps to implement the Act whose effect is yet to be felt. The overall goal of the national water development policy is to facilitate the provision of water in sufficient quantity and quality and within a reasonable distance to meet all competing users in a sustainable, rational and economic way.

The quality of the water supply service has regularly deteriorated during the last ten years as a combination of insufficient investment for rehabilitation and extension of the distribution systems and inadequate commercial and financial management. Intermittent water supply has become the rule and households and businesses have to rely on costly substitutes, such as individual boreholes, tankers and water vendors. The poor, comprising about 60 percent of the total population and mostly living in informal settlements, are the most affected by this situation. Finally, recurrent drought in Kenya should be a cause of concerns about the reliability of existing water sources for Nairobi. In addition, results of various studies, notably the Participatory Poverty Assessment of 1995, have identified a strong link between poverty and lack of access to quality water. For instance, a poor person was sometimes defined as someone lacking access to potable water. Over 60 per cent of the urban population lives in slum settlements with poor or no water supply services resulting in high incidence of diseases.

Only 30 per cent of the gazetted urban centres in Kenya have sewerage systems. This has posed serious environmental and health problems. Where they exist, most systems suffer from constant breakages or leakages, and inadequate capacity to handle their full sewage load. A number of factories and enterprises are known to discharge effluents to mainstream rivers and valley depressions causing high pollution levels. Effluent pollution makes rivers, streams and dam water unsafe for domestic and livestock consumption. Management of solid wastes in urban areas is increasingly becoming a major concern. Human activities, particularly in water catchment areas have increasingly threatened forest cover and in some areas have resulted in diminishing water availability.

Kenya's road network consists of over 63,000 km of the classified road system and about 87,600 km of unclassified road system. The classified road network has grown by 51 per cent from 41,000 km at independence to 63,291 km in 2000, with the tarmacked road length increasing from 1,811 km to 8937 km over the same period. Urban road network covers approximately 10000 km or 7 per cent of the total road network with a carrying capacity of over 70 per cent of all the vehicles in the country. Kenya's urban road network has been characterised by heavy traffic congestion during peak hours, overloaded passenger transport, stiff competition for limited road space, few parking spaces and inadequate supply of public transport. Ineffective urban transport management systems, poor physical planning and inefficient management of traffic have compounded these problems.

The government has been unable to provide adequate resources for development and maintenance of roads due to critical financial constraints, misappropriation of the road levy funds, dubious road construction contracts, failure to enforce quality control in road construction, and poor zoning regulations for heavy and light vehicles. As a result, the poor state of the road infrastructure has caused high vehicle operating costs, high fares charged for public transport and unstable delivery schedule. These have resulted in high production costs, uncompetitive exports, high costs of imported inputs and capital goods and low productivity, which constrain economic development.

Kenya's energy sector is largely dominated by imported petroleum for the modern sector and wood fuel for the rural communities, the urban poor and informal sector. The current domestic demand for petroleum fuels accounts for about 25.7 per cent of the total import bill. Wood fuel, petroleum and electricity provide about 68, 20 and 10 per cent respectively, of the energy requirement while other alternative sources account for 2 per cent. Hydro sources account for 624.5 MW (62 per cent) of the total installed capacity while geothermal, thermal and imports from Uganda provides 57 MW (5 per cent); 410.8 (35 per cent); and 30 MW (3 per cent), respectively. The effective capacity under normal hydrological conditions is 1000 MW. The power demand is expected to grow from 843MW in 2002/3 to 1202 MW in 2007/8 while energy demand is expected to rise from 4632 GMH to 6713 GMH representing a 6.4 per cent mean growth per annum. Future fuel wood strategies will have to reconcile the potential conflict between socio-economic realities and environmental conservation. Wood fuel is projected to remain the dominant source of energy for domestic use in the foreseeable future- obviously contributing to land degradation and both in-door and out-door air pollution.

## **7.5 The Institutional Framework for Urban Planning and Management**

Principally two Acts of parliament guide urban planning and management in Kenya. The Physical Planning Act of 1996 provides the statutory framework for the planning and management of all physical development in the country. The Act provides for the preparation and implementation of local and regional physical development plans. The Act bestows the responsibility to plan and enforce development control on the respective local authorities. The Local Government Act empowers each local authority to plan and ensure orderly development of all land under its jurisdiction.

Urban planning and management have not been effective to offer solution to the increasing urban decay and environmental crisis. Weak institutional frameworks conflicting interests and inadequate capacities are major constraints. Physical development plans prepared by the Physical Planning Department are usually left at the whims of respective local authorities to implement, through their development control mandate. However, local authorities have inadequate capacities (personnel and focuses) to implement these plans.

The physical development planning in Kenya falls below expectation. The country lacks the capacity to effectively plan and ensure orderly development of the urban centres. Both the Director of Physical Planning and the Local Authorities lack the requisite human resources and quality planning data. Save for Nairobi city all the local authorities depend on the Director of Physical Planning for planning and development control. The Directorate of Physical Planning lacks personnel to discharge the enormous responsibility of physical planning and development control in both rural and urban areas. In addition, the local authorities lack financial resources to establish effective town planning departments.

It is impossible to undertake proper physical planning of the urban centres in the absence of quality planning data. Both the Director of Physical Planning and Local Authorities lack financial resources to acquire and update planning data. As a result, most urban centres are either not planned or rely on outdated plans. For example, the development of Nairobi city is still guided by the plan that was approved in 1948. Essentially, urban growth has occurred in the absence of development plans, which has significantly compromised the aesthetic value of Kenya's urban centres. Further, urban planning institutions as presently constituted cannot provide the basis for efficient urban planning and development control. Therefore, weak institutional framework presents one of the major challenges facing urbanisation in Kenya. Inefficiency has on the other hand led to poor and substandard infrastructure and services exemplified by the rapid growth of informal settlements, with their myriad problems like lack of space for sewer systems and other essential public utilities. Rapid rate of urbanisation in Kenya against weak financial and human resource base has made it difficult to

cope with increased demand for infrastructure and services. The costs of these challenges are often reflected in the emerging quality of the environment and human well-being.

Efficient infrastructure and services depend on effective institutional framework. The country has over the years failed to build institutional framework for the development of infrastructure and services in the country. The rapid growth of informal settlement, slum and squatter settlements in virtually every part of the republic is a demonstration of weak and inefficient institutional infrastructure. Also, inadequate human and financial resources have contributed to the poor infrastructure and services. Kenyan local authorities have weak revenue base and inadequate qualified personnel in core areas (engineering, planning and finance) to develop and manage human settlement infrastructure and services.

## **7.6 Conclusions and Recommendations**

Kenya has experienced rapid rate of urbanisation (6 per cent) and population growth (3 per cent) during the last four decades. With only one metropole (Nairobi City) dominating the urban system, urban decentralisation policies have generally failed to decongest urban population away from the main urban centres. Similarly, the country has witnessed rapid deterioration of institutional and physical infrastructure and urban service delivery.

Since it is possible to expect high rates of urbanisation in the major urban centres during the next two decades with serious ramification on urban infrastructure, service delivery and environmental effects, it is important for the country to rethink its urban development strategy. First, the collapsed growth centre policy, rural trade and production centre policy and other related urban development policies should be revived and repackaged with adequate and reliable funding mechanisms. The growth centres should be designated against efficient selection criteria. Secondly, the local authorities should be streamlined and empowered to effectively function as viable urban entities. Thirdly, serious attention should focus on Nairobi city and a few other major urban centres to enable them cope with rapid rate of urbanisation and environmental degradation. It is expected that these urban centres will continue to register rapid rate of urban growth and accommodate the largest proportion of the urban population.

Finally, there is need to localise agenda 21 in most urban centres in Kenya, especially chapter 28 that calls on local authorities to consult, develop and implement a local agenda for their communities. This can promote urban governance by supporting broad-based environmental action plans, and context specific aspects of municipal planning and management. More information on this approach can be found on the United Nations Habitat web site.

## 7.7 Sample Questions

- i. Discuss the theoretical and empirical impact of urbanisation in Kenya.
- ii. Critically examine environmental effects of urbanisation in Kenya.
- iii. Discuss strategic options for sustainable urban development in Kenya.

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