CHAPTER 8: Sustainable Urban Management for African Cities

Abstract

There are facts in development and academic literature that reveal that Africa is urbanising faster than any other region of the world. The region is, however, characterised by unplanned urbanisation that reflects through urban problems such as informal settlements, urban poverty, urban sprawl, incapacity institutions and urban sprawl. Specifically, the chapter seeks to proffer a scholarly persuasion and thinking that suggests that effective and sustainable urban management is key in addressing urban dynamics in Africa. Key players such as the state, community, voluntary and the private sectors, are critical towards improving urban affairs. This chapter is based on an extensive literature review that highlights the gaps in effective urban management in Africa. Specifically, the chapter draws from experiences in Cairo (Egypt), Johannesburg (South Africa), Nairobi (Kenya), Dakar (Senegal), Rabat (Morocco), Accra (Ghana), Harare, (Zimbabwe) and Kigali (Rwanda). The roles of different players are interrogated concerning the contribution towards sustainable urban development. Urban management in Africa is constrained by poor fiscal decentralisation efforts, out-dated urban planning and management disconnected urban investments and incapacitated instruments. institutions. Effective and sustainable urban management needs the presence of effective, coordinated and capacitated institutions that addresses both national sub-national and local urban issues. This is achieved through sound policies, plans and regulations that guide urban growth and development. Having urban plans and national goal frameworks that converge with the ultimate outcomes is important and this calls for capacitated institutions at all levels.

INTRODUCTION

Africa is urbanising at a faster rate than most continents due to growth in technological use and globalisation. There are challenges and opportunities that go with urbanisation. If properly managed, such an increase in the absolute number of urban inhabitants in Africa could propel social and economic growth, part of a phenomenon called the "demographic dividend" (UN-Habitat, 2009). However, given the current development pace in the region, most countries might not be able to

harness this urban dividend. Some of the opportunities include investments in infrastructure, industrial and commercial structures. However, to realise these opportunities, deliberate urban management approaches are needed (Andersen, Jenkins and Nielsen, 2015). These have been lacking in many African countries, resulting in cities in the region being characterised as being simply crowded but not economically dense.

The investments in infrastructure, industrial and commercial structures have not kept pace with the concentration of people, nor have investments in affordable formal housing; congestion and its costs overwhelm the benefits of urban concentration. There are costs associated with this and the costs include high costs of living, low investment and many other social and economic challenges (Josse, 2020). The region is characterised by unplanned urbanisation that reflects through urban problems such as informal settlements, urban poverty, traffic congestion and water stress (UN-Habitat, 2009). Specifically, the chapter seeks to proffer a scholarly persuasion and thinking that suggests that effective and sustainable urban management is key in addressing urban dynamics in Africa.

Urban management is defined as the process of taking responsibility for actions to achieve improved urban human settlements (Mattingly, 1995). This responsibility is assumed by three tiers of government: central government, the provincial government and local government. These functions are drawn mainly from various pieces of legislation that include constitutions of respective countries and town planning laws (Josse, 2020). There are several professions involved in urban management and these include town planners, engineers, realtors, architects and economists. These professionals are employed in state and non-state organisations and directly or indirectly perform functions that are related to urban management. Besides these professionals, there are policymakers, elected representatives and politicians involved in urban management through establishing governing laws, policies, vision and ideologies at international, national and local levels (Bolay, 2015). In addition, there are also non-state agencies that support the functions of urban management. In summary, the key players in urban management include the state, community, voluntary and the private sectors, which are critical towards improving urban affairs.

It is widely acknowledged that without appropriate planning and management of urban areas, there are risks that these urban areas will become increasingly chaotic, inefficient and unsustainable (ibid.). In many countries in Africa, urban management tools such as legislation, date back to the colonial era. These legislations are ill-equipped to deal with contemporary urban problems. A shortage of urban planning and management professionals trained to respond to urban complexity with progressive pro-poor approaches, exacerbates urban dysfunction (Africa Research Institute, 2013). The absence of a well-functioning urban management system results in the creation of dysfunctional settlements. The urban management system needs to be well-resourced for it to perform all the duties and responsibilities for a functional urban system (Lall, Henderson and Vernables, 2017). The urban management system comprises the institutions such as central and local governments, urban policies and plans, legislations and human resources. All these components of the system are critical in improving urban land development processes and land-uses. In the absence of a well-resourced and functioning planning system, development fosters deal-making among the influential and financially better-off - rather than compliance with accepted and transparent planning processes (Africa Research Institute, 2013).

LITERATURE REVIEW

Urban areas are the locale for complex networks of activities essential to basic human functions of living and working (Lall, Henderson and Vernables, 2017). There has been a growing complexity in urban problems and the responses to these problems. Initially, urban management functions were more state-led when professions such as town planning, engineering and architecture emerged (UN-Habitat, 2009). The growing complexity of governing in a globalising and multi-level context has initiated a change of focus where more actors, other than the state are merging. In developing countries, the concept of governance has been promoted along with decentralisation and democratisation (Berrisford, Cirolia and Palmer, 2018). Changes in economic and governmental systems, like civil society and the nature and scale of environmental challenges, have all had major impacts on processes of urbanisation and urban growth and socio-spatial dynamics in urban settlements (UN-Habitat, 2009).

Governance is a broad concept covering all aspects of the way a country is governed, including its economic policies and regulatory framework and adherence to the rule of law, acceptance of pluralism and participatory models of leadership selection (*ibid.*). Governance is defined as:

"the provision of the political, social and economic public goods and services that every citizen has the right to expect from their state and that a state has the responsibility to deliver to its citizens" (Mo Ibrahim Foundation, 2019: 17).

Good governance (Figure 1), in terms of transparency and accountability in its operations and decision-making, has been offered as an objective for better urban management. Governance performance is thus indicative of a country's and urban areas' readiness to provide social protection services to its citizens. In Southern Africa, Botswana and South Africa are the top-scoring countries in terms of overall governance (Mo Ibrahim Foundation, 2019) but have been on a concerning downward path since 2015. Angola and Swaziland are at the bottom of the ranking, though they are on a steady path of improvement since 2010.

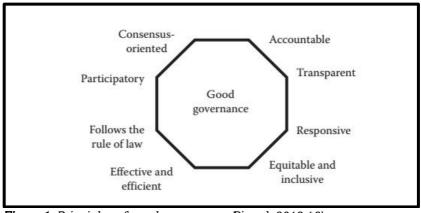


Figure 1: Principles of good governance (Picard, 2013:16)

African cities are expensive to investors, particularly regional and international investment, due to high transaction costs associated with inefficient urban form, e.g. urban sprawl and underdeveloped transport networks (Lall, Henderson and Vernables, 2017). Therefore, steering African urbanisation along more sustainable paths is not only a challenge for Africa, but also requires international cooperation to ensure that resource utilisation is well managed and that African cities develop

sustainable and inclusive economies, societies and environments (Picard, 2013).

Most nation-states in sub-Saharan Africa remain economically fragile and politically weak in terms of democratic accountability and executive capacity, reflected in the continued emphasis on state-based land-use planning practice (DFID, 2015). Traditional forms of governance and resource control are becoming increasingly superseded and fused into so-called 'informal' systems of urban management that are characterised by informal land developments and informal activities access and use (Africa Research Institute, 2013). This is particularly the case in and around the rapidly growing peri-urban areas, where different kinds of 'informal' systems dominate (Andersen, Jenkins and Nielsen, 2015).

Africa's cities are growing fast. This is despite the region being one of the poorest regions in the world. Africa is undergoing a critical demographic transformation. Most of the expected population growth in Africa will be absorbed in urban areas (Picard, 2013). Half a billion people live in Africa's cities and another 800 million are projected to join them by 2050 as the continent shifts to an urban majority (Bolay, 2015). How these cities develop, grow and provide liveable homes for their swelling populations is the key to Africa's future success or despair (Lall, Henderson and Vernables, 2017). Urban management is critical in an urbanising region to enhance the provision of jobs, water, electricity, sanitation and transport. The scale of urban growth being experienced in Africa overwhelms the capacity of governments to provide basic services such as education, health services, housing, potable water, electricity and waste disposal. As such, most urban dwellers in African cities live in overcrowded informal settlements (Africa Research Institute, 2013). Without these services, there are fears that the cities will become places of conflict and insecurity (Berrisford, Cirolia and Palmer, 2018). The creation of jobs and the provision of housing, electricity, water and security is not keeping pace with the volume of people streaming in from the countryside.

Management objectives are critical in guiding urban management approaches and the sustainability of the managed urban areas. These objectives are derived mainly from national policies and visions. In most instances, the local experiences are a reflection of the national state of management of affairs (UN-Habitat and IHS, 2018). Some of the international guiding urban management objectives include the Paris

Agreement on Climate Change, the Sendai Framework, the New Urban Agenda and the Agenda 2030 (Josse, 2020). These are, however, localised with varying degrees in African cities (Berrisford, Cirolia and Palmer, 2018).

Urban management in the 21st century calls for creative and innovative urban managers as the societal problems keep evolving (Andersen, Jenkins and Nielsen, 2015). New urban problems are emerging resulting from climate change, diseases, conflicts and increased urban poverty levels and these may require new urban management skills (Berrisford, Cirolia and Palmer, 2018). In addition, production and consumption patterns keep changing and these need to be well managed to meet urban dynamics (Lall, Henderson and Vernables, 2017).

Having up-to-date data is important in guiding decision-making in urban areas. Without access to simple data such as the number of residents or the state of existing buildings, success in public policy-making can only be hit-and-miss (Josse, 2020). This information is essential for detecting people's needs, preventing risks and assessing costs. It could be said that Africa's cities are operating blindly, such as the lack of basic data (DFID, 2015). The lamentable deficiency of good data to assist urban development in Africa needs to be overcome. As noted by Lall, Henderson and Venables (2017), across Africa, opaque and inadequate land databases and information systems distort land prices and availability. Technocratic functions, although they may, in certain circumstances, achieve positive results, are often ineffective, hindered by a lack of political will, technical expertise and adequate data. Data are important in influencing the decision. For instance, problem and solution modelling the dynamic environment are more critical than ever. Without reliable data, urban managers are often accused of producing plans that do not reflect the realities of cities (UN-Habitat, 2009). The other challenge is, however, having data but not accessible to different users due to lack of coordination at the institutional level. Often, useful information may be held by international agencies and research departments but is not accessible to professional urban managers. In administrations that tend to be highly compartmentalised, existing data are rarely digitised and shared between different municipal departments (Bolay, 2015).

Fiscal decentralisation looks at the share or percentage of the government's total expenditure carried out by subnational/local

governments. This is whereby the government gives some of the financial responsibilities to the local government. This has the desired effect of encouraging local participation in issues to do with a local community, because local governments are considered to be closer to the people and, therefore, allows participation to take place. In South Africa, the Constitution of 1996 divides revenue between the national government, the nine provincial governments and the 284 local governments (Ahmad and Tanzi, 2002). Fiscal decentralisation allows local governments to make decisions best suited for their community at a quicker rate than wait for advice from other local governments who may have different problems to them, or same problems but requiring different solutions (Haniff, Wallace and Gago-de-Santos, 2020). Financial decentralisation has also been known to improve the cases of collection and expenditure of domestic tax and non-tax sources of government revenue, and improve on accountability of the government to the local people as seen in the case of Brazil and Indonesia (Yilmaz and Zahir, 2022).

Cities have a broad spread of tax instruments available to them such as levies, business taxes, and fees for exploitation of natural resources and land taxes. The challenges of inaccurate data impact the financial performance of urban local governments, for instance, through the administration of property taxes and development levies. Many governments have been advocating varying fiscal decentralisation that impact the ability of urban managers to meet urban development objectives through increased revenue sources and increased autonomy on financial management. Cities may have good visions and policies but financing these programmes determines the extent of success. Financial sources in local governments are a critical issue that needs to be looked into. If taxation systems remain inadequate in most African cities, it is because political leaders are unable to enact far-reaching fiscal reforms. Fiscal reform is counter-productive in terms of the political calculations that govern the thinking of local leaders and external lenders. Improving the system is an extremely long and involved process and only the drawbacks are ever pointed out, with short-term advantages hard to discern.

Various institutions in urban areas are incapacitated because of various issues. These institutions are facing challenges in performing their tasks and ensuring their success. Urban planning institutions do not have enough money and ideas to combat or adapt to various issues (Asongu

and Le Roux, 2019). There is financial incapacitation that limits the execution of plans. Plan implementation becomes difficult in the absence of financial resources needed to pay workers and for the tools and equipment needed (Akabuiro, 2022). In countries like Zimbabwe, there may be power outages that limit execution. This answers to the statement that low income and poverty are the major challenges hindering development in Africa. There is also the risk of lack of technical support. Legislation may also be a factor in implementation of best laid plans, as legislature guides the task at hand and without guidance, there are a lot of delays (Fagbadebo, 2019).

METHODOLOGY

This study is based on a systematic review of policy and development literature that is related to urban management and sustainable development. A case study approach has been adopted to elucidate the existing urban management challenges in selected urban areas in Africa, drawing opportunities and lessons for sustainable urban management. Specific cities of focus are Cairo, Johannesburg, Nairobi, Dakar, Rabat, Accra, Harare and Kigali. However, some experiences will be drawn from other African countries as well. Key sources include national policies, visions and programmes, urban policies and plans and academic sources that address issues of urban management. Thematic analysis was used in data analysis.

RESULTS AND DISCUSSION

African countries have adopted key international and regional policies and frameworks that are related to sustainable urban management. The adoption of these policies is a true reflection, at least on paper, of the commitment of African countries towards sustainable urban management (UN-Habitat, 2009). This is considered because development happens at local spheres and the international and regional policies influence national development plans and strategies which then influence local actions. Sustainable urban management at the local level borrows directly from national and regional standpoints. It is consistent with global and regional policy frameworks such as the New Urban Agenda, the Sustainable Development Goals and the Africa Agenda 2063 (Bolay, 2015). The New Urban Agenda stresses harnessing the advantages of urbanisation. These advantages are realised through taping from the role of cities in economic

growth. Cities are viewed as vehicles for inclusive and sustainable economic growth. It leverages urbanisation for structural transformation, higher productivity and inclusive growth, economic diversification, value-added activities and resource efficiency while supporting the sustainable transition of informal to formal economies (Josse, 2020). The sustainable development goals emphasize balancing development between economic, social and environmental goals (UN-Habitat and IHS, 2018). In addition, the SDGs emphasize inclusive cities that accommodate and meet the various needs of diverse societal groups. The African Union's Agenda 2063 undisputedly acknowledges that urban centres substantially contribute to African GDP, generate employment, reduce poverty and can be considered a major driving force in the continent's transformation (Josse, 2020).

Urbanisation is strongest in Africa compared to the rest of other regions in the world (Berrisford, Cirolia and Palmer, 2018). However, this urbanisation is occurring in cities that have low levels of public investments, weak quality of local administration, and lack of social safety nets for citizens and large dependence on external donors (Bolay, 2015). The annual rate of urban growth has been gradually decreasing in Africa over the past decades. This is evidenced by a change from 4.16% in the 1980s to 3.29% in the years 2000-2010 (UN-Habitat and IHS, 2018). However, urbanisation remains high in the region and it is estimated that by 2050, there should be about 1.2 billion citizens, representing 58% of the continent's population (Bolay, 2015). This spatial and demographic expansion and its effects in terms of poverty and urban insecurity should be the foundation of urban management in Africa (Andersen, Jenkins and Nielsen, 2015). Countries like Rwanda have formulated urbanisation policies that are instrumental in guiding urban management.

Rapid urbanisation in Africa is simply not matched by the job creation required to secure livelihoods and public intervention is not keeping pace with the demand for shelter and land (Lall, Henderson and Vernables, 2017). Most urban master plans do not take into account the informality of urban life, either social, economic, property, or land-use (Bolay, 2015). These dimensions of the life of the poor must be reinstated in urban management. This process begins in training curricula of future

professionals (engineers, architects, urban planners, realtors, etc.) as in their practice, once they are at the command posts (Mattingly, 1995).

Table 1: Percentage FDI received by African regions from global regions (2003-2016) (UN-Habitat and HIS. 2018)

ĺ	Central Africa	Eastern Africa	Northern Africa	Southern Africa	West Africa
ŀ	15	20	4	12	22

Foreign direct investment (FDI) in cities reflects the level at which cities are competing to attract investment. This investment is a key determinant of the sustainability of cities especially in the era of globalisation and urbanisation (Berrisford, Cirolia and Palmer, 2018). As people continue migrating from rural to urban areas in Africa, they need sustainable economic opportunities (UN-Habitat, 2009). Cairo holds first place in Africa in terms of volume of FDI attracted, followed in by Johannesburg, Tangiers, Lagos, Casablanca, Algiers, Cape Town, Nairobi, Abidjan and Dakar, in that order (UN-Habitat and HIS, 2018). Cairo is at the top in terms of FDI because it is a vibrant city with well-developed infrastructure and road networks, availability of skilled workers, a conducive foreign investment environment and ease of doing business which makes it a desirable location for investment (*ibid.*)). The FDI in selected Africa countries is presented in Table 2.

Table 2: The 2016 FDI rank of African cities (UN-Habitat and HIS 2018)

Cities	African Rank	Country	Region	Total (USD millions)
Cairo	1	Egypt	Northern Africa	13716
Johannesburg	2	South Africa	Southern Africa	13211
Nairobi	8	Kenya	Eastern Africa	5978
Dakar	10	Senegal	Western Africa	4775
Rabat	11	Morocco	Northern Africa	4737
Accra	13	Ghana	Western Africa	4066
Harare	41	Zimbabwe	Southern Africa	415
Kigali	27	Rwanda	Eastern Africa	2302

Despite Cairo and Johannesburg doing well in attracting FDI, at the global level, no African city is found within the top10 FDI recipient cities of the world (*ibid*.). The key lesson for urban management drawn in countries with high FDI is that business and industrial clusters are catalysts for

industrial growth in Africa because they help firms overcome growth constraints and also enable governments to address multiple constraints holistically (Lall, Henderson and Vernables, 2017). Planning and managing these land-uses is important in sustaining cities and fighting the current urban challenges such as poverty, unemployment and informality in cities such as Harare and Nairobi (Josse, 2020). Clusters promote knowledge sharing between firms, common infrastructure and services, pools of labour and raw materials and providing a larger market (UN-Habitat and HIS, 2018). The cities of focus in this study (Cairo, Johannesburg, Nairobi, Dakar, Rabat, Accra, Harare and Kigali) have, in common, discontinuous territorial development, dispersed in the periphery and with low land occupancy, whose influence extends continuously further in the suburbs and farmland, thereby causing shifts (Andersen, Jenkins and Nielsen, 2015).

There are similarities in the institutions and actors involved in urban management across African cities. What differs, however, are the levels at which these actors are involved in urban management functions. Across all urban areas of focus in this study, one of the most fundamental and critical challenges faced is the crippling weakness of institutions of urban development planning and management (ibid.). Coordination is limited amongst public institutions and this creates bureaucracy in the operation and management of development objectives. In many instances, central government policies are formulated and implemented (at sector ministry), yet the implementation of these policies will cut across sectors (Africa Research Institute, 2013). Even at the local level, there are still coordinating gaps between local governments and related institutions such as those responsible for regulating the environment. Since the 1970s and 1980s, urban management process began to involve, admit of and be affected by a wider variety of participating actors, including from the government (central, state/regional and local levels), community and neighbourhood associations and other civil society stakeholders and interest groups (UN-Habitat, 2009).

Major actors involved in urban management in Africa are urban planners, engineers, surveyors, realtors and architects who are technocrats performing technical urban management services (Mattingly, 1995). These technocrats are employed in public institutions (central and local government) and private institutions. There are also financial players such as banks and building societies which are critical in financing urban

development and management. Civil society is emerging as a key player in urban management through social accountability strategies that demand feedback on services being provided and also collaborating with service providers (UN-Habitat, 2009). The sectors are instrumental in making sure that urban policies are formulated and implemented in response to the current and future urban problems (DFID, 2015). Yet, experiences in African countries show that there is a disconnection between a plan on paper and plans at the implementation phase (Andersen, Jenkins and Nielsen, 2015). These gaps expose the weak coordination of actors involved in urban management.

Decentralisation and devolution have resulted in increased responsibility for local governments in African countries. Despite the tendency of national governments to resist relinquishing responsibilities and the pervasive anti-urban bias, both the functions local authorities are meant to perform and the overall area and numbers of people they are meant to serve, have grown rapidly (DFID, 2015).

One of the forms of decentralisation, fiscal decentralisation has, however. been lacking and this has resulted in many operational challenges. Constrained fiscal decentralisation, on the other, has limited the resources available to African urban authorities to fulfil these expanding functions and to address urban growth. Resources to invest in capital development (i.e. long-term infrastructure investments) have been particularly lacking (Africa Research Institute, 2013). Due to the diversity of African cities, trends in income and expenditure are difficult to determine. Experiences in Harare, Accra, Dakar and Nairobi indicate that local governments often focus on operational expenses (such as salaries) and have little surplus to invest in the capital; significant revenue flows are captured by national state-owned entities (such as utility companies) and are thus not reflected on local government balance sheets; direct lending to local governments for infrastructure is minimal; and local revenue collection (for example, property tax collection) tends to be inefficient and not maximised (Berrisford, Cirolia and Palmer, 2015). Local authorities are, therefore, limited in terms of pioneering their development objectives and managing these development options.

In many cases, plans were created for many cities of Africa, but with no convincing results (Bolay, 2015). One of the key explanations for this failure lies in the lack of available basic data about cities and their

inhabitants. The data exist but are not managed or exploited. Data in urban management are needed for policy ad plan preparation. For instance, data on population projections, land and property use registers and tax systems based are needed for the operation and financing of urban systems and the provision of services (Africa Research Institute, 2013). These data are required across all departments at the local government level. Digital investments in data management have been minimal in Cairo, Nairobi, Dakar, Rabat, Accra, Harare and Kigali. Johannesburg has made significant strides in data management through collaborations between the city, private institutions and universities (Josse, 2020).

Land registers, with accurate and up-to-date management of land-use, are essential for proper planning as they make it possible to identify all the plots that together make up the city. But land-use is not controlled in Africa: structured neighbourhoods sit alongside informal ones, flood-risk zones are built on and so on (Lall, Henderson and Vernables, 2017). This creates challenges, especially in the advent of emergencies such as COVID-19 and climate change (Josse, 2020). Without information, it is impossible to build a land registry system and without a land registry, it is impossible to collect the taxes needed to finance shared services.

Sustainable urban management at the local government level stems from global and regional frameworks such as the SDGs, the New Urban Agenda and the Africa Vision 2063 (Bolay, 2015; Josse, 2020). These policies influence national and local policies. For instance, the SDGs were adopted by all eight countries of focus in this study. Local governments have made deliberate efforts to localise the SDGs. One of the urban challenges in the 21st century is urbanisation and its management in urban areas. Current urban problems in cities like Harare, Kigali, Nairobi and Johannesburg are a result of uncontrolled urbanisation. Urban managers need to find sustainable ways of positively managing urbanisation to attract FDI and enhance industrial development (UN-Habitat, 2009).

CONCLUSIONS AND RECOMMENDATION

Major urban challenges of the 21st century include the rapid growth of many cities and the decline of others, the expansion of the informal sector and the role of cities in causing or mitigating climate change. With these challenges, the effectiveness of urban managers for dealing with the unprecedented challenges facing 21st-century cities and for enhancing sustainable management is called for. Better management of human