

Governance and the Resilience of Cities in Africa

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Abstract

The essay examines resilience in the face of rapid urbanization and heightened vulnerability to climate change and other shocks such as pandemics, disasters, conflict and socio-economic uncertainties in African cities. It emphasizes the significance of resilience in mitigating shocks and stresses, facilitating recovery, and advancing economic and social development. The discussion centres on the vital link between governance and resilience, stressing the need to address social inequalities and vulnerabilities. It explores how effective city governance can stimulate urban resilience, advocating for adaptive governance structures that prioritize community well-being. Additionally, it explores the role of state governance, and strategies for reinforcing frameworks to build resilient urban systems capable of mitigating shocks while withstanding their challenges, converting them into opportunities for growth in the African context.

Keywords: Smart city governance, mitigation and adaptation, Shocks and sustainable Development in Africa

Introduction

The resilience of cities in Africa is intricately linked to governance structures, policies, and practices that shape the ability of cities to respond to challenges and promote sustainable development. City resilience is crucial for addressing the complex challenges of an increasingly complex, interconnected and uncertain world of rapid change, characterised by increasing risks and challenges posed by climate change, natural disasters, health pandemics and socio-economic uncertainties. The Sustainable

Development Goal No. 11 calls on the world to “Make cities inclusive, safe, resilient and sustainable.” COP 21 highlighted the key role that urban areas play, not only in mitigating emissions but also in adapting to a changing climate. While governance is often listed as an aspect or component of resilience, how this can be achieved in low income countries with several constraints is still a subject of debate. The discourse on smart cities holds prospects for clarifying and addressing some of the issues. Perhaps it might hold the possibility of leap frogging into efficient governance in the future for low-income countries.

African nations are currently experiencing rapid urbanization (OECD/UN ECA/AfDB 2022), with the urban population growing significantly from 33 million individuals in 1950 to 548 million in 2018. Projections indicated a further 50% increase to 824 million by 2030 and a tripling to 1,489 million by 2050 (Gunalp et al. 2017). Despite this urban growth, African cities face persistent challenges stemming from technical and financial constraints. The prevalence of expansive informal settlements and marginalized communities heightens their vulnerability to shocks and stresses, underscoring the critical need to address social disparities and enhance resilience planning. According to the United Nations Economic Commission for Africa (ECA), Africa bears a higher risk level (ECA, 2023: 2) with a median score of 4.33, surpassing the global average risk of 4.11, due to high vulnerability and susceptibility indices coupled with limited coping and adaptive capacities. These challenges have been compounded by climate change, the Covid-19 pandemic, the conflict in Ukraine, and political turmoil, hampering progress towards the Sustainable Development Goals (SDGs) and casting uncertainty on the continent's future (ECA, 2023:112).

While the impacts of climate change, economic shocks, and health crises are increasingly prevalent globally, their severity is particularly pronounced in Africa. The impacts of events such as the global financial crisis of 2008–09, the commodity price collapse in 2013, the onset of the Covid-19 pandemic in early 2020, and the ongoing war in Ukraine have had profound effects on the continent. Recovery trajectories have varied across countries, with investments, domestic savings, government revenues, and economic structures remaining largely unchanged. Concurrently, urbanization, population density, and unemployment rates are on the rise across virtually all African countries (ECA, 2023).

The paper focuses on exploring the governance aspect of fostering resilient cities as pivotal hubs for Africa's growing population. It addresses the role of governance in cultivating urban resilience and suggests leveraging adaptive governance to bolster city resilience against climate-related disasters. Adaptive or smart governance can contribute to long-term sustainability and environmental preservation in cities by mitigating the impact on infrastructure, livelihoods, and ecosystems, as a driver of city resilience. It explores ways to build stronger, more adaptive governance institutions for African cities that prioritize the well-being of residents and foster inclusive and sustainable growth, build resilient city systems that can withstand shocks and handle uncertainties in Africa.

From the Eco-crisis to Resilience and smart cities

The concept of resilience is closely intertwined with sustainable development in cities, because resilient cities are better equipped to address current challenges and prepare for future uncertainties. The ECA (2023:2) defines resilience as “the capacity to withstand recurrent adverse economic and other shocks and stressors— and to adjust to and learn to live with change and uncertainty, without jeopardizing long-term development prospects”. Resilience entails the capacity to reorganize in the aftermath of crises, persist in learning, evolve while maintaining core identity and functionality, and engage in innovation to lay the groundwork for transformation. This concept stands at the heart of adaptive governance of cities (Boyd and Folke 2012).

City resilience refers to the ability of urban systems to endure, adapt, and transform in the face of diverse challenges like natural disasters, climate change, and socio-economic disruptions. Resilient cities exhibit sturdy infrastructure, efficient governance, social cohesion, and sustainable practices, enabling them to recover from crises and prosper in the long run. These cities can withstand shocks, economic downturns, and social upheavals, ensuring the provision of vital services, promoting social inclusion, economic growth, and environmental preservation. They excel in risk management, crisis response, and innovation, crucial for attaining sustainable development objectives and enhancing the urban dweller's quality of life (OECD 2018).

The “smart city” has become the archetype of the resilient city. It denotes a city that incorporates intelligent management and administration

practices, employing novel approaches to citizen engagement and communication, such as “e-management” and “e-democracy”. Adaptive digital governance plays a vital role in fostering innovation in city resilience by employing digital technologies to streamline administrative processes, implement smart security measures to reduce security risks, protect valuable assets, sensitive data, and individuals, and enhance transparency and citizen engagement. Smart cities leverage Information and Communication Technology (ICT) and digital innovations to address urban challenges, enhance urban governance, improve infrastructure and services, increase efficiency, and minimize resource consumption. These initiatives lead to an enhanced quality of life for residents by fostering innovation and promoting environmental conservation. Smart cities utilize cutting-edge technologies like Big Data and the Internet of Things (IoT) to enhance governance efficiency and functionality. They rely on active citizen engagement, encouraging participation in policy-making and governance processes, supported by appropriate education and a resilient cultural mindset. These cities prioritize knowledge-based growth by continuously generating and disseminating information, fostering innovative planning practices. Smart cities are structured, interconnected, and intelligent entities that exhibit advanced features in economic activities, governance structures, environmental sustainability, community well-being, and transportation systems (Meyer and Auriacombe, 2019).

A smart city utilizes governance and technology to enhance the benefits of urbanization while addressing its challenges for residents. Giffinger *et al.* (2007) define a smart city as one that performs well in a forward-looking manner across six characteristics: smart economy, smart people, smart governance, smart mobility, smart environment, and smart living. Each characteristic has specific factors and indicators for implementation and evaluation. Various indexes have been created to rank cities globally. One recent index is the IMD Smart City Index 2024, developed by the International Institute for Management Development (IMD) in collaboration with the World Smart Sustainable Cities Organization (WeGO). This index evaluates 142 cities worldwide based on resident perceptions of city structures and technology applications over the past three years. It assesses two pillars: Structures which evaluate existing infrastructure, and Technology which describes technological provisions. Each pillar is examined across five key areas: health and safety, mobility, activities, opportunities, and governance. Key factors influencing the transition to smart city development include technological infrastructure, connectivity,

sustainability, citizen participation, and effective governance. Smart cities hold the promise of fostering economic growth, social cohesion, and environmental sustainability, which are key drivers of sustainable development. Cities can address interconnected challenges, such as housing affordability, transportation access, environmental quality, protection of vulnerable populations, enhancement of infrastructure and services by promoting long-term sustainability in the face of rapid urbanization and climate change impacts.

Building resilience in cities requires a governance process that addresses the root causes of vulnerability, strengthens administrative systems, and fosters community engagement. It also includes investing in resilient infrastructure, incorporating climate adaptation measures into land use planning, and enhancing disaster preparedness (UNDP, 2018). These can only happen with strong political commitment, visionary leadership, and clear policy guidelines that can provide the necessary direction and support for implementing resilience strategies.

The state, governance and city resilience

Given the state's pivotal role in managing significant changes related to natural disasters and emergencies, it is crucial to engage the government in these efforts. As Duit (2014: 127) points out, the state remains a fundamental unit for environmental decision-making, management, and policy formulation, even amidst the pressures of globalization. This environmental responsibility requires state institutions to adopt proactive measures to combat environmental degradation and promote conservation initiatives (Lundqvist 2001, Meadowcroft 2005). Such measures include implementing sustainable development practices, encouraging green technologies, and enforcing regulations to protect natural resources and biodiversity.

The concept of an Eco-State underscores the importance of community involvement and participatory decision-making processes to ensure that diverse perspectives are considered and environmental issues are collectively addressed (Duit *et al.* 2016). The Eco-State embodies a transformative governance approach that prioritizes environmental protection, social equity, and economic prosperity in the decision-making process.

Resilience emerges as a result of deliberate choices made by state actors, policymakers, and the populace to manage the impact of disruptions effectively and efficiently. The foundation for such resilience lies in robust institutions (such as governmental efficacy, adherence to the rule of law, and the quality of regulatory frameworks), adequate availability of both public and private resources, and equitable redistributive strategies. These encompass redistributive policies incorporating a social protection system aimed at safeguarding households during economic downturns resulting from unexpected shocks. (ECA 2023: 130).

Adaptive leadership is crucial for fostering a culture of innovation, flexibility, and continuous improvement in government operations, while public organisations take initiative, experiment with new approaches, and learn from failures, fostering a culture of resilience and adaptability. (Heifetz et al., 2009). Governance is required to operate by means of adaptive capabilities to monitor and assess changing environments, identify risks and vulnerabilities, innovate and experiment with new strategies, and collaborate with diverse stakeholders to enhance preparedness and response efforts (Folke et al., 2005). Urban planning and risk management are better done through frameworks that engage and empower communities, strengthen social networks, provide effective communication channels, and empower marginalized groups to respond to crises and support recovery efforts (World Bank, 2017; UN-Habitat, 2016).

Przebylovicz and Cunha (2022) provide three key organizational features essential for efficient and successful smart city governance. These include (a) enhancing citizen engagement through participation, collaboration, and co-creation to facilitate the delivery of services and information, (b) ensuring governmental backing in the form of financial support, technology provision, and the contribution of skilled civil servants, and (c) managing the legal framework along with defining the strategic direction and ensuring alignment at the local government level. Smart governance is characterised by cross-sectoral collaboration and coordination among government agencies, non-profit organizations, private sector partners, and community stakeholders to leverage diverse expertise, resources, and networks in responding to complex challenges (Galderisi and Colucci, 2018).

Thus, city governance for resilience has multiple dimensions: self-regulation, characterized by informal interactions within civil society; co-

regulation involving partnerships between public and private stakeholders; and formal regulation enforced by government institutions. It often includes decentralization to promote inclusive decision-making and service delivery, and entrepreneurship; and democratization that fosters transparent and accountable decision-making (Cities Alliance 2017, Slater and Crispin 2022). Therefore, the efficacy of governance plays a pivotal role in fostering resilience, enabling a city to swiftly recover from shocks and embark on a path towards improved development outcomes by leveraging lessons learned from experiences to enhance governance practices.

Implementing governance reforms is often a crucial step in strengthening cities' ability to withstand shocks, promote inclusive development, and cultivate sustainable and habitable urban spaces (World Bank, 2017). Empowering local residents, fostering social cohesion, and encouraging inclusive participation in decision-making processes are identified as primary catalysts for enhancing city resilience, enabling communities to better respond to crises and facilitate recovery initiatives (UN-Habitat, 2019). Effective governance frameworks should entail clearly defined mandates, coordinated mechanisms, and regulatory structures tailored to address the unique vulnerabilities and complexities inherent in urban settings. It is through such robust frameworks that cities can effectively steer urban planning, disaster risk mitigation, and climate adaptation efforts (UN-Habitat, 2020).

Governance challenges for City Resilience in Africa

In 2024, nine African cities were featured in the IMD index: Cairo ranked 114, Algiers at 124, Rabat at 126, Cape Town at 129, Nairobi at 131, Abuja at 135, Lagos at 136, Tunis at 137, and Accra at 138. These cities have made significant progress in areas such as renewable energy and digital inclusion, exemplified by Cape Town's initiatives. They have also leveraged technology to implement smart grid systems and digital healthcare platforms in Nairobi and Accra, enhanced infrastructure and digital connectivity in Abuja, and promoted smart transportation and digital entrepreneurship in Lagos. Additionally, Tunis and Accra have utilized digital governance platforms and smart energy management systems to tackle complex urban challenges.

Despite these advancements, these cities continue to face numerous challenges, including security concerns, high unemployment rates,

infrastructure deficits, a lack of affordable housing, and inadequate public services. Furthermore, the availability of managerial and technical personnel in nearly all African urban centres significantly falls short of the standards necessary to provide essential services, particularly when considering population density and area. Cities in Ghana, Ethiopia, Uganda, and Mozambique, similar to others in the region, struggle with critical shortages of personnel in vital technical fields such as water supply, public works, waste management, and essential areas like urban planning and financial management (Slater & Crispin, 2022).

In Africa, central governments wield significant influence in policy development, even within federations like Nigeria and Ethiopia, given the comparatively limited financial and political strength of local governments (Habtezion *et al.*, 2015). As adaptation efforts predominantly occur at the grassroots level, a deeper comprehension of the power dynamics between local and central authorities, as well as their interplay with the wider regional and global frameworks, is crucial for fostering resilience. Governance reform occurs in a context of interconnected policies, technologies, applications, and services across various levels - local, national, regional, and international. A resilient city governance model entails the capacity of both government officials and stakeholders to collaboratively adapt and respond efficiently to changing and unexpected threats, while maintaining essential services, ensuring public safety, and driving forward sustainable development goals. The core concept of governance reforms for enhancing city resilience in Africa is centered on mitigation and adaptation through stakeholder collaboration and institutional leadership. It integrates both institutional climate strategies and emerging community-led initiatives into the broader process of achieving sustainable development goals.

The World Cities Report 2022 highlighted that numerous African cities are failing to make substantial investments in climate-resilient infrastructure, resulting in environments that are overcrowded, disconnected, and expensive. These cities frequently suffer from unclear governance frameworks, unresponsive institutions, and opaque decision-making processes, all of which are crucial for effective urban planning, resource allocation, and service delivery. Weak institutional capacity, insufficient financial resources, corruption, political instability, and fragmented governance structures significantly hinder their ability to manage urban growth effectively, generate revenue, and provide essential services to residents.

African cities are notably more fragmented than their Asian and Latin American counterparts, with a fragmentation rate that is 23 percent higher (Grover, Lall, & Maloney, 2022). This fragmentation escalates infrastructure costs and reduces competitiveness, ultimately deterring both local and foreign investment. The institutional fragmentation, characterized by divided powers across various levels of government and the presence of informal governance systems, results in overlapping responsibilities and ambiguous lines of authority. Consequently, this situation leads to coordination challenges, redundant initiatives, complex decision-making processes, uneven urban development, infrastructure deficits, and social inequalities, particularly in informal settlements and marginalized areas within cities.

Meaningful citizen engagement and participation is often trounced by competing interests, patronage networks, and power dynamics, leading to suboptimal decisions, outcomes and inefficiencies in urban governance. Political considerations may override technical expertise and strategic planning, undermine transparency, accountability, and opportunities for public input in decision-making processes. These hinder the inclusivity and responsiveness of governance structures, impeding the effectiveness of urban management initiatives (Meyer and Ariacombe 2019).

Reorganising City governance for city resilience

The Sendai Framework for Disaster Risk Reduction 2015-2030 represents a significant milestone in global efforts to enhance resilience, reduce disaster risk, and promote sustainable development. It emphasizes the importance of understanding risk, strengthening governance, investing in resilience, and enhancing preparedness. The framework provides a comprehensive roadmap for building more resilient and sustainable societies. Strengthening governance underscores the need for effective multi-stakeholder governance mechanisms to coordinate disaster risk reduction efforts across sectors and scales. It calls for the integration of disaster risk considerations into policies, plans, and programs, as well as the engagement of local communities, civil society, and the private sector in decision-making processes (UNDRR 2015).

The African Union (AU) has embraced the Sendai Framework and committed to its implementation to address the unique challenges and vulnerabilities faced by the continent. It has advocated for the integration of

disaster risk considerations into development policies and plans to enhance resilience at both national and regional levels with specific targets. But the mid-term review of performance in the governance of Disaster Risk Reduction (DRR) shows that national authorities in the region have shown a strong commitment to enhancing disaster risk management structures by establishing national platforms for Disaster Risk Reduction (DRR) and improving resources for civil protection agencies. While national DRR strategies aligned with the Sendai Framework have been developed, there are shortcomings in inclusivity, coordination among DRR, environment, and climate programs, and support for decentralized DRR structures at the local level. The involvement of women, local communities, and vulnerable groups in their implementation has been poor (UNDRR 2023: 71).

Fragmented governance systems can be addressed by institutional reforms that foster multi-level governance arrangements, strengthen coordination frameworks and mechanism among government agencies, and streamlining decision-making processes can help address fragmentation and improve governance effectiveness over the long term considering the political processes involved in the establishment of local governments and the intricate nature of restructuring territorial boundaries (O'Farrell et al 2019). In the short term, states or middle level governments can establish cooperative frameworks among local governments to collectively address urban challenges, instead of the prevalent trend of encroaching upon the functions of local governments. Integrated governance frameworks can help overcome siloed approaches and foster holistic solutions to urban challenges (Aiyede, 2024). It is also important for African leaders to pursue greater economic and political integration in place of bilateralism. Recent global shocks offer an opportunity to accelerate global cooperation because they have shown that climate change risks are equally catastrophic, and pandemics do not discriminate poor and rich regions, regardless of where they begin (ECA 2023: 140).

Sharing best practices, building local capacity, and fostering knowledge exchange among cities can accelerate the adoption of resilience strategies and promote learning across diverse contexts. There is need to invest in training programmes, knowledge sharing initiatives, and technical assistance to build the skills and capabilities of local government officials, civil servants, and urban planners to effectively manage urban challenges and implement sustainable development strategies. Community engagement and empowerment are fundamental aspects of city governance

for resilience in Africa. African leaders have to encourage and promote multi-stakeholder engagement, participatory decision-making, and inclusive governance processes in cities to enhance their capacity to respond to shocks and stresses, adapt to climate change, and promote sustainable development (Berkes and Ross, 2013).

Incorporating traditional knowledge and practices like farming methods, terracing, agroforestry, weather forecasting, and early warning systems can help urban communities become stronger and more united. It encourages local people to take part in building resilience and helps use local knowledge for better, fitting solutions. Training and sharing knowledge are important for improving how cities are managed, including developing skills, building institutions, and learning how to adapt for city officials, disaster management teams, and other important groups. (Slater and Crispin, 2018).

Transparency and accountability should underpin effective city governance in Africa. Openness in decision-making, access to information, and mechanisms for public oversight are essential for ensuring that governance processes are fair, just, and responsive to the needs of city residents. Inclusivity, transparency, and citizen participation can make governance systems to be more responsive, accountable, and equitable (Pelling & Blackburn, 2014).

Conclusion

Africa's cities are increasingly exposed to natural disasters due to weak governance and inadequate management of rapid urban growth. As sub-Saharan Africa's socioeconomic systems become increasingly integrated into global systems, and in the absence of effective cross-border governance mechanisms, systemic risks is an increasing concern for the region.

Governance structures are crucial to the resilience of cities worldwide. Strengthening a country's ability to withstand shocks necessitates the enhancement of capacities to design development plans that anticipate potential challenges and devise proactive response measures (ECA 2023: 136). It is essential to strengthen and integrate governance frameworks at local, national, regional, and global levels, promote policy coherence, and invest in stakeholder engagement and capacity building to foster resilience in Africa.

Embracing adaptive, responsive, and innovative measures within urban governance is vital to unlocking the potential of African cities as centres of innovation, trade hubs, and drivers of productivity, science, and culture. These cities play pivotal roles in stimulating economic growth, promoting social well-being, and protecting the environment. The transformation of city governance should aim to empower urban areas to turn risks and shocks into opportunities for growth and development (Robert, Zongo, Ragan et al 2022).

Governance fragmentation has to be tackled through collaboration and communication. As such, effective dialogue among stakeholders is crucial. The dialogue could be multisectoral and targeted towards promoting the awareness of interdependence among stakeholders as a basis for collaboration. Financial support for organizing meetings that support exchanges between stakeholders and the joint drafting of policy documents are essential. Donors should provide funding for activities that generate knowledge, nurture exchange, enhance stakeholders' competencies and create mutual understanding.

Financial constraints can be mitigated by ensuring that the mandates of city governments are adequately funded. This can be achieved through tax reforms that provide municipalities with greater taxing authority, establishing public-private partnership arrangements, or facilitating transfers from higher levels of government to local authorities. In countries like South Korea and Japan, the redistribution of tax revenues to Seoul and Tokyo, aimed at compensating for the costs associated with urban sprawl, has proven to be a significant relief. However, such measures must be accompanied by transparency and a strong culture of accountability, with an emphasis on community participation and local ownership (Markovits, 2018). Additionally, it is essential to improve financial systems and revenue-generating capabilities that are necessary for the growth of African cities.

Considering the uneven development of various urban areas, it is essential to focus on disadvantaged regions that require targeted improvements in physical infrastructure and social policies, including health, education, job creation and housing. Evidence-based approaches are crucial to this process. Many cities struggle with insufficient staffing and financial resources, limited knowledge and expertise, a lack of trust in the data produced by existing city systems, and outdated or incompatible data collection and analysis methods (Bloomberg Philanthropies, n.d.). The

African Union (AU), the United Nations (UN), and other donors must acknowledge these issues as vital areas for intervention.

Incorporating traditional knowledge and practices—such as indigenous farming methods, terracing, agroforestry, weather forecasting, early warning systems, and the role of traditional institutions—can significantly enhance resilience in urban communities. By empowering residents to engage in resilience-building initiatives, Africa can strengthen social cohesion, foster trust, and improve resilience across various dimensions. This approach facilitates the integration of local knowledge, promotes community ownership, and leads to the development of culturally appropriate, context-specific, and sustainable resilience strategies.

Moreover, capacity building and knowledge sharing are essential for reinforcing governance structures. This includes enhancing technical expertise, institutional capacity, and adaptive learning capabilities among city authorities, disaster management agencies, and other stakeholders.

The African Union should enhance its urban resilience initiative by partnering with the African Development Bank to promote collaboration among stakeholders in urban areas and national governments. This partnership is vital for the development and enforcement of regulations, as well as for implementing effective strategies to manage informal sectors. The AU should embrace a whole-system approach that incorporates three essential components: eliminating siloed perspectives on risks, bridging geographical gaps in risk and hazard management, and cultivating the capacity to identify risks in areas that have previously gone unrecognized.

Governance frameworks should evolve from merely addressing specific hazards to conducting comprehensive assessments of all potential vulnerabilities and their underlying causes, supported by robust early warning systems. To achieve this, the World Bank, the UN system, and the AU must work together to build capacity by investing in individuals who are prepared to tackle the challenges associated with enhancing urban resilience.

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