CHAPTER 9: Best Practices and Building Local Capacity to Address Hazards of Climate Change in African Cities and Towns

Abstract

This chapter looks at the various efforts used to address climate change in Zimbabwean urban areas. This is against the background that climate change risks are increasing as exemplified by the occurrence of hazards such as floods, urban heat islands, sea level rises, heat waves and cyclones. Due to their densities, urban areas are exposed to various climate change risks and disasters and deliberate planning efforts are needed to respond to the hazards. The question raised in this chapter is: What are the key strategies adopted in response to climate risks and disasters in selected urban areas in Africa? The case study approach draws from experiences in urban areas in Southern Africa, West Africa and East Africa. An extensive desk review is used to understand and examine the best practices being implemented by different stakeholders, including public agencies, the private sector, community-based organisations (CBOs), non-governmental organisations (NGOs), civil society organisations (CSOs) and the general public. Emerging from this review is that deliberate response strategies are being implemented by different stakeholders but in an uncoordinated manner. The public sector is often financially constrained but also does not adequately prioritise post-disaster recovery. Other existing sectors such as CBOs, NGOs, CSOs have responses that are more reactive than proactive and this, again, does not reduce the likelihood of future risks from turning into disasters. The existing policies are not specific as to what roles stakeholders play.

INTRODUCTION

Africa is amongst continents that are experiencing urban growth together with increased climate change risks and disasters as a result of hazards such as floods, cyclones, droughts and sea level rises (African Union, 2019). The increasing frequency and intensity of climate-related hazards in Africa will impact the livelihoods, settlements, health and infrastructure in urban centres. Overall, this will negatively impact the socio-economic development of urban areas and the progress towards meeting the sustainable development goals. Despite noting this, the IPCC's Urban

Chapter of the Fifth Assessment Report noted that literature detailing climate change risks and the best response practices remains low and this applies to Africa's urban areas (Fraser *et al.,* 2017).

Risks and disasters in Africa's urban spaces are rooted in deep inequalities, limited adaptive capacities, state fragility, uncontrolled urbanisation and environmental deterioration. Consequently, climate change poses a major threat to sustainable development at the micro and macro levels (Brown *et al.,* 2012; African Union, 2019). While many countries in Africa have made significant development, achievements evidenced by a 4.5%annual growth over the last decades, are significantly threatened by increasing water, weather and climate risks (African Union, 2019). The interaction between climate change risks and deliberate response strategies is critical in fostering development agendas in urban areas in Africa.

As Busayo and Kalumba (2020:1) put it,

> "the urban populace and planning stakeholders are grappling with the challenges of seeking ways to integrate adaptation measures into human livelihoods and planning systems".

African cities are not passive bystanders to climate change risks and disasters, but are active in certain areas that will be detailed in the results section. For instance, there are local authorities that have mainstreamed climate change policies in their development agendas. There are development partners also active in climate change risk reduction in urban areas, for instance, various UN agencies (Fraser *et al.,* 2017).

National governments are also visible through guiding national policies, influencing decentralisation and devolution policies to increase control over resources at sub-national and local levels. African governments such as Mozambique, Senegal and Uganda are investing resources to reduce the risk of natural hazards (UNISDR, 2012). These practices form different spheres depicting that deliberate efforts are being taken to combat the impacts of climate-related risks in urban areas in Africa. This brings in issues that include actors, actions, capacities and ambitions and involved in deliberate practices in response to climate change. The urban context varies in Africa and this influences the practices being implemented (Busayo and Kalumba, 2020). As such, the study looks at best practices at

the sub-regional level, bearing in mind the differences in climate-related disaster contexts.

GLOBAL AND REGIONAL INSTRUMENTS FOR CLIMATE DISASTER REDUCTION

Africa has a long history of regional political commitment to disaster risk reduction – often acting as a pioneer in recognising the importance of preventive action (UNISDR, 2012). This is shown by several regional policies such as the Africa Agenda 2063 that focuses on developing Africa as a whole. Its main goals are to improve the standard of living, quality of life and well-being of citizens, and living in countries with transformed economies. This can only be achieved with focus on building the capacity for local people and the national and local government (Mhangara *et al.,* 2019). The commitment to global instruments, such as the Hyogo Framework for Action of 2005 to 2015, is also vital in the fight against hazard impacts on people. The Hyogo framework focuses on reduction of disaster risk and prioritises the issue of reducing the impacts of disasters on people. This is seen through the framework's principles of knowing the risk and taking action to combat impact of disaster, being prepared for the risks and being ready to take action when it strikes (Wanner, 2020).

The Sustainable Development Goals of 2015 are also another global instrument utilised in climate change reduction. The goals include goal 13 that seeks to combat climate change and address its impacts. This influences individual countries and continents to work together and reduce the causes and impacts of climate change as it brings about various challenges to the people (Fuso Nerini *et al.,* 2019). The Sendai Framework (2015-2030) seeks to reduce global mortality resultant from disasters, the number of people affected, economic loss and damage to infrastructure. It also seeks to increase availability of access to multiple early warning systems against disasters, in order to ensure people are prepared and take action when disaster strikes. (African Union, 2019; World Bank Group, 2021). These regional instruments seek to, among other things, improve the resilience of settlements to climate change disasters through deliberate planning, resource prioritisation, the establishment of key institutions and inclusion of the locals in the planning and management of sustainable settlements (Busayo and Kalumba, 2020). Africa is committed to the principles highlighted in these global commitments. While these global commitments are not action plans, it is imperative to note that they play a key role in guiding the development of national and local action plans (World Bank Group, 2021).

There are technical and resource constraints in translating these instruments into national and local action policies (Heinrichs, Krellenberg and Fragkias, 2013). African states have to redouble their efforts in mobilising domestic resources to achieve resilience targets. Recent studies point to the need for additional efforts to build the technical capacity of African states to improve practices towards reducing the risks from climate change and disasters (Joshua, Jalloh and Hachigonta, 2014; Godfrey and Tunhuma, 2020; Busayo and Kalumba, 2020). At the regional level, Africa's development is guided by the 50-year Pan African Agenda, the Agenda 2063. This Agenda was adopted in 2003 and is an important ligament that coordinates the implementation of practices for resilience building in the wake of climate-related disasters and risks (African Union, 2019).

LITERATURE REVIEW

Urban areas are being considered as central elements in responding to climate change. This is because urban areas are concentrated places as a result of people and their homes, industries, wasters and physical assets (Godfrey and Tunhuma, 2020). Urban area events that have potential for disasters will likely impact urban areas because of the concentrated densities and concentrated hazards. The urbanisation rates are increasing and current statistics point out that more than half of the world's population (55%) are residing in urban areas (Busayo and Kalumba, 2020). Globally, urban areas consume approximately 75% of the planet's resources despite occupying a small percentage of the planet's space (World Bank Group, 2021). These consumed resources are significant in the emission of greenhouse gases (GHGs) that are key climate change causes.

Confronting climate change will, therefore, depend on the changed habits of urban inhabitants through deliberate policies and actions. Cities are confronted with existing vulnerabilities that can be made even worse by climate change (Heinrichs, Krellenberg and Fragkias, 2013). The existing vulnerabilities, particularly in developing countries, include the following: urban poverty, inequalities, housing deficit, informal activities, deterioration of infrastructure, lack of access to key resources and social exclusion (Godfrey and Tunhuma, 2020). These existing vulnerabilities, coupled with climate hazards, increase the likelihood of climate disasters.
Hazards can be categorised into primary hazards and secondary hazards. Primary hazards may include flooding and secondary hazards will include the contamination of water sources as a result of flooding (Heinrichs,

Krellenberg and Fragkias, 2013). A hazard is defined as the "physical process or event (hydro-meteorological or oceanographic variables or phenomena) that can harm human health, livelihoods, or natural resources" (World Bank Group, 2021: 1). A hazard may not necessarily turn into a disaster. Deliberate efforts can be put in place to contain hazards to such an extent that they do not turn into disasters and this is most important in the era of increasing climate events (Busayo and Kalumba, 2020). A disaster is defined as an event that harms humans and disrupts the operations of society (UNDRR, 2020).

Hazards are considered disasters if they occur and affect humans. Humans are at risk of both hazards and disasters. A risk is defined as "the potential for consequences where something of human value (including humans themselves) is at stake and where the outcome is uncertain" (World Bank Group, 2021:1). Climate risk is a result of exposure to a hazard, sensitivity to impact and adaptive capacity. Climate change leads to disaster by altering the frequency and intensity of hazard events, affecting vulnerability to hazards and changing exposure patterns (UNDRR, 2020). Figure 1 presents the connections between climate change causes, effects and outcomes.

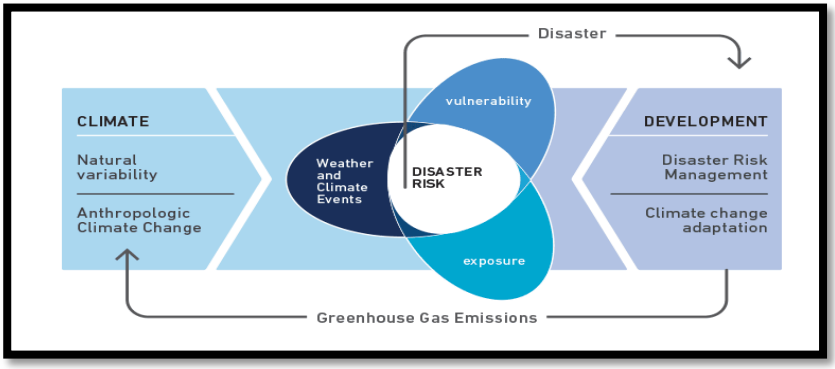

Figure 1: *Climate change causes, impacts and outcomes (*Extracted from UNDRR, 2020:2).

Adequate urban planning and governance are, therefore, needed to enhance the safety of urban areas even in cases of inevitable disaster occurrences (Busayo and Kalumba, 2020). Urban governance

encompasses a wide range of frameworks that include urban policies, laws, administrative structures, decentralisation, room for other actors and the people in urban areas themselves (Heinrichs, Krellenberg and Fragkias, 2013). Collectively, the role of various stakeholders in urban governance is important in fighting against climate-induced disasters in urban areas (Godfrey and Tunhuma, 2020). It is important to mainstream climate change considerations into various urban sectors such as housing, transport, energy, land-use and environment.

Across all regions, local actors are actively involved in climate change mitigation and adaptation practices (Busayo and Kalumba, 2020). Local governments are visible through urban development planning and management projects from their resources and support from development partners (Godfrey and Tunhuma, 2020). In particular, local governments are visible through their participation in environmental policies and practical actions, either alone or in collaboration with ministries responsible for environments (Heinrichs, Krellenberg and Fragkias, 2013). In the global north, in particular, cities launched concrete local policy initiatives to reduce consumption of environmental resources like energy. In the 2000s, issues of climate change risks were being addressed embedded in the sustainability concepts. International development partners, such as UN agencies, have been instrumental in funding climate adaptation and mitigation projects in many countries and urban areas across the globe (Godfrey and Tunhuma, 2020). The private sector,as well the general public, have also been active through household and individual responses (Heinrichs, Krellenberg and Fragkias, 2013). Capacities at the local level and the level of inclusion of climate change into development agendas, determine the level of implementation and success stories of the strategies used.

Due to the occurrence of natural and human-induced disasters, building resilience in Africa has gained momentum on the continent (Heinrichs, Krellenberg and Fragkias, 2013). This resonates with global resilience-building initiatives in many countries as a result of climate change and many other livelihoods and human life-threatening risks such as terrorism, civil wars, emerging diseases and viruses (Godfrey and Tunhuma, 2020). However, building resilience in African cities is a burdensome task because of financial incapacitation that most of the developing countries are facing. The plans are adopted from global initiatives but crippled at implementation due to uncoordinated efforts of various stakeholders in

the countries that may have different agendas. There is the risk of alternatives that plagues African cities as there are few cases of providing alternatives, for instance, where did all the people who had businesses around Mbudzi Roundabout, Harare in Zimbabwe, go? Some people had legitimate businesses, but because there was a greater need for traffic movement, these people were displaced and their benefits altered.

THE DISASTER PROBLEMATIC IN AFRICA

While African countries have experienced large scale disasters, such as the 2011 drought in the Horn of Africa, most disaster impacts are related to smaller, recurrent events with potentially high localised impacts. In 2011, a drought hit Somalia, Djibouti, Ethiopia, Kenya and Uganda as a result of two consecutive seasons of rain interrupted by the strong La Nina over the Pacific. This had a great impact on the people of the mentioned countries such that there were recorded deaths of up to 260 000 people and 9.5 million others affected by the drought. This drought created food and water challenges where animals died of hunger and thirst; especially in some other areas that already received little rainfall.

The Global Assessment Report (GAR)(2011) demonstrates that this is the case in other regions as well. However, available data from countries like Mozambique, which monitor disaster losses due to drought systematically, point towards a higher percentage of losses because of extensive risk in Africa (Godfrey and Tunhuma, 2020). Another important factor behind the levels of vulnerability are the dynamics behind rapid urbanisation in African cities (*ibid.*). In 2013, the Gaza Province of Mozambique was greatly affected by floods that in a day, five were left dead and 30 000 needed to be evacuated to drier land. Chowke and Guija were also affected, with the floods reaching Kruger National Park where tourists were to be evacuated also. There was great destruction of infrastructure such as dwelling units, roads and bridges. With property destroyed, there was also the issue of food, because most of agriculture crops were flooded by the waters. This also posed a threat to the health of the people because flood water is dirty and contaminated, and is the source of various water and vector-borne diseases.

While growing urban populations in Latin America and Asia are partially driven by industrialisation processes, studies show that this economic basis for urbanisation is weaker in Africa. This is one of the possible elements that consequentially lead to insufficient levels of urban planning

and government investments in infrastructure. The high proportion of informal settlements in African cities is one of the factors behind the high impacts of recurrent floods in Nairobi slums, for example (UN-Habitat, 2010). A direct implication of this is the need to address the underlying risk drivers of urban poverty, rapid urbanisation, inequality and environmental degradation in Africa, maybe more than anywhere else, by ensuring basic development, urban planning and infrastructure are in place. Investment in basic infrastructure in urban areas is a critical factor for reducing disaster risk (UNISDR, 2012:2). The problems in Africa's cities point towards the need for specialised practices that respond to climate change and the current urban development problems (Godfrey and Tunhuma, 2020). The strategies will have to address the existing vulnerabilities in Africa's urban areas.

RESEARCH METHODOLOGY

The study focus is Africa and the study will specifically look at practices in sub-regions that are North Africa, Southern Africa, West Africa and East Africa. The study adopts a case study approach of the mentioned areas through document review and analysis as well as from documents from the UN. Best practices, in connection with climate change and resilience building, were reviewed and summaries of sub-regions drawn.

RESULTS AND DISCUSSION

AFRICA URBAN LANDSCAPE

The African urban landscape is generally composed of cities, municipalities, town councils and local boards. At the regional level, the United Cities and Local Governments of Africa (UCLGA) is the united voice and representative of local government in Africa (Godfrey and Tunhuma, 2020). The degrees of autonomy of local governments in Africa vary from one country to the other. For instance, in countries like South Africa, Tanzania and Uganda, local authorities enjoy greater autonomy and their functions are less conferred by the central government through ministries responsible for local government (UN-Habitat, 2010). In countries like Zimbabwe, local authorities enjoy less autonomy as they perform functions conferred to them by ministries responsible for local government (Chirisa, Mavhima and Nyevera, 2020). Most of the urban landscapes in Africa were developed during the colonial era and the development was influenced mainly by the goals and objectives of the colonial masters. Most African countries still have planning legislation

based on British or European planning laws from the 1930s or 1940s. Many local authorities still use the master and local plans that are largely reflective of colonial urban planning and management approaches (UN-Habitat, 2010). However, the colonial planning approaches had but also control of urbanisation processes and the urbanising population, albeit with racial segregation (*ibid.*).

Though Africa is the least urbanised, it is urbanising faster than any other continent (Chirisa, Mavhima and Nyevera, 2020). Africa's urbanisation is manifest in the growth of its megacities and that of its smaller towns and cities (UN-Habitat, 2010). The local authorities are responsible for the provision and management of local public services. One of the raised issues is that local authorities in Africa are constrained in the provision of enough services for the ever-increasing African urban population (African Union, 2019). The increase in Africa's urban population causes additional strain on existing infrastructure and services (UN-Habitat, 2010). Many local authorities have struggled to meet the increased demands for urban services and infrastructures and this is reflected by the influx of slums, informal settlements and the outbreak of medieval diseases such as cholera and typhoid (Chirisa, Mavhima and Nyevera, 2020).

SOUTHERN AFRICA

All governments in Southern Africa have developed national climate change frameworks and these frameworks guide the development of sectoral and local climate policies and action plans (Heinrichs, Krellenberg and Fragkias, 2013). The national frameworks seek adaptation policies and at the same time promote climate change-resilient, low-carbon economies and societies (Joshua, Jalloh and Hachigonta, 2014). In addition, the National Adaptation Programmes of Action (NAPAs) has been developed as a strategy for operationalizing climate change adaptation at the national level. The involvement of urban local authorities in national climate change practices is minimal in most countries in southern Africa (Busayo and Kalumba, 2020).

In South Africa, frameworks, such as the International Council for Local Environmental Initiatives (ICLEI) and United Cities and Local Governments (UCLG) are key in mainstreaming climate change policies and platforms in the sector (*ibid.*). Two cities, eThekwini (Durban) and Cape Town, for instance, have established adaptation policies and plans that currently guide adaptation actions (Mapfumo, Jalloh and Hachigonta,

2014). Except for South Africa, development policies in most Southern African countries have paid little attention to urbanisation and climate change impacts on the urban sector. In most countries, such as Malawi and Zimbabwe, national initiatives take place largely outside urban local government (Godfrey and Tunhuma, 2020). As a result, urban local authorities are less active in key climate change debates (Mapfumo, Jalloh and Hachigonta, 2014). Many initiatives in the region have also been led and/or financed by international agencies, institutions and NGOs working with regional partners.

Southern Africa's responses to climate change are guided mostly by a sectoral approach reflected in different ministries within a country (Busayo and Kalumba, 2020). The urban areas draw their practices from sector policies and their policies at the local government level. At the national level, there are programmes that governments initiate with support from development partners, for instance, the programmes like the following: Integrated Water Resources Management (Zambia, Namibia, Malawi and Zimbabwe); Improving Community Resilience and Adaptive Capacity (Mozambique, Zambia); and Multi-City Challenge Africa (Zimbabwe) (Africa Development Bank, 2012; UNDP, 2020). The projects were implemented by development partners such as UNDP, African Development Bank and World Bank in conjunction with respective local governments and national governments (Heinrichs, Krellenberg and Fragkias, 2013).

In summary, the projects seek to strengthen the resilience of urban settlements through sufficient water resources, reduced disasters related to flooding; and mainstreaming climate change in central budgets and planning, sectoral investments and the private sector (Africa Development Bank, 2012; Godfrey and Tunhuma, 2020). Several other development partners are implementing projects, particularly in the water, sanitation and health(WASH) sector and this is important in response to climate change impacts that may disrupt the water supply (Godfrey and Tunhuma, 2020). These programmes are important as they address issues of capacity gaps existing in most local authorities in Southern Africa (Rhodes, Jalloh and Diouf, 2014). While local governments provide the administrative functions of the programmes, the development organisations are responsible for funding and any other technical support for programme implementations, such partnerships are very important in localising climate change global and regional policies and instruments (Busayo and

Kalumba, 2020). The Multi-City Challenge Africa, for instance, is funded by the UNDP in partnership with Mutare, a local authority in Zimbabwe. The programme required researchers and individuals to submit proposals for improving informal settlements' resilience to floods. The UNDP will select the best proposals and offer financial support for the implementation of the selected proposals.

Most of the research on climate change in Southern Africa have focused on rural areas, despite the economic importance and associated vulnerabilities of urban areas (Heinrichs, Krellenberg and Fragkias, 2013). In urban areas, adaptation to climate change is weak because of weak institutional coordination, limited support to local government practises and the use of old and un-updated urban planning and management tools that have not captured issues of climate change (Mapfumo, Jalloh and Hachigonta, 2014). The initiatives by international, multilateral and bilateral organisations in championing operational climate change programmes are, therefore, at the heart of climate change response programmes in most parts of Southern Africa.

WEST AFRICA

Most West African countries have climate change policies. However, the countries do not have specific policies that address climate change risk and disaster reduction in urban areas and adaptation policies in general (Busayo and Kalumba, 2020). What is existing in the countries in the sub-region is climate change policies, climate change frameworks and NAPAs as in many other countries across the African continent. Countries such as Ghana, Nigeria and Senegal have dedicated climate change adaptation plans, strategies and frameworks (Heinrichs, Krellenberg and Fragkias, 2013). These plans, strategies and frameworks influence the development and implementation of urban policies and plans towards climate change mitigation and adaptation. In urban areas, climate risks and disasters are somehow addressed in the climate change or environmental plans of action at the level of provinces or states, for instance, in Lagos, Bayelsa and Ondo States in Nigeria (Busayo and Kalumba, 2020). Ghana has made significant strides in mainstreaming climate change policies into urban planning policies (Godfrey and Tunhuma, 2020). This is evidenced by the country, through the National Climate Change Policy Framework, which later developed into the Ghana National Climate Change Policy 2012, addressed issues to do with improved city planning and a more modern

public transport system based on high occupancy buses running in dedicated lanes.

West African urban areas are home to approximately 40% of the population in the sub-region. However, the majority of urban dwellers in Western Africa reside in settlements located in coastal areas and are, therefore, exposed to flooding, coastal erosion, high tides and sea-level rise and many cities in the region have low adaptive capacities to water stress (Rhodes, Jalloh and Diouf, 2014). To reduce the effects of climate change on freshwater sources, some strategies have been adopted across cities and these include the following: construction of infrastructure to collect, supply and store water; protection of aquifers and reservoir sites; improvement and stabilisation of watershed management and capacity building to understand surface water cycles (Godfrey and Tunhuma, 2020). The key players in these strategies are local authorities, CBOs, government ministries and the general public. In coastal cities, there are weak response strategies (Busayo and Kalumba, 2020). For instance, during flooding in the Alajo community in Accra, community members responded through individual and uncoordinated responses that included temporarily moving away from the area to stay with friends and family; creating raised walls of stones and keep valuables at the top of the wall; and putting property on top of wardrobes and in the small spaces between ceilings and roofs (Heinrichs, Krellenberg and Fragkias, 2013). These local and individual responses expose the incapacity of state and local governments to devise sustainable climate change response strategies.

Like in Southern Africa, the international, multilateral and bilateral organisations, in partnership with local governments and respective central governments, are instrumental in the implementation of climate change mitigation and adaptation measures that reduce the risks and hazards of climate change (Godfrey and Tunhuma, 2020). The dominant organisations in the sub-region include the UNDP, th World Bank, the Global Environment Facility (GEF), the World Food Programme and the United Nations Environment Programme (UNEP) (Busayo and Kalumba, 2020). Many initiatives in the region have also been led and/or financed by international agencies, institutions and NGOs working with regional partners. Despite all the initiatives cited for West Africa, the sub-region still faces operational constraints that stem from dysfunctional institutional structures, lack of technical and institutional capacities in some local

governments and the existence of local competing needs such as security challenges in the sub-region (Rhodes, Jalloh and Diouf, 2014).

EAST AFRICA

Consistency with other countries in sub-regions in Africa, countries in East Africa have developed their NAPAs and demonstrated commitment towards the Initial National Communications (INC) (*ibid.*). These international commitments, together with national climate change documents, focus on the following climate change issues: agriculture and food security, water resources, forests, disaster response, livelihoods, health, energy and coastal zones (Joshua, Jalloh and Hachigonta, 2014). In addition to that, some countries such as Tanzania, Uganda and Kenya have set up task forces that are geared towards the formulation of climate change adaptation policies (Mubaya, Jalloh and Mogaka, 2014).

Like in Southern and Western Africa, international organisations and development partners are instrumental in enhancing the implementation of direct climate change mitigation programmes (Godfrey and Tunhuma, 2020). For instance, in 2011, the UN-Habitat and the UNEP had a programme on enhancing energy efficiency in urban areas. The Water and Sanitation Initiative is a collaborative effort between UN-Habitat, Kenya, Tanzania, Uganda and the East African Community (EAC) (Heinrichs, Krellenberg and Fragkias, 2013). The locals have also their local and household ways of addressing the risks and hazards of climate change. For instance, when confronted with floods, residents in the slums of Nairobi and Kampala employ the following practices such as constructing water barriers at doorsteps, placing children in higher and safer places for periods, constructing temporary structures such as dykes and trenches around the house, using bags of sand to stop water from filtering into the house and gigging trenches around houses before and during floods (Busayo and Kalumba, 2020). These local practices are key in ensuring the safety of citizens, bearing in mind that these are responses that are directly linked with the immediate effects of disasters. However, these approaches are mostly short-term in nature and long-term approaches are needed to complement them and sustainably address the underlying problems (Rhodes, Jalloh and Diouf, 2014). However, the overall picture of local and best practices in addressing climate change through city-level codes and standards is limited. There are also urban food security systems that have developed in many urban areas in East Africa (Godfrey and Tunhuma, 2020). Food production in the urban areas of the region has

grown, not only for subsistence, but also as a major form of income for the urban poor, especially women.

State and local governments should take the lead and formulate policies that address unsustainable use of resources, shortage of technical competence, unsustainable growth, uncontrolled environmental degradation and bad governance (Busayo and Kalumba, 2020). Emerging from the existing literature is a dichotomy between governing institutions and networks of local capacities. Leveraging on the initiatives by development partners in localising climate change, adaptation and mitigation measures will go a long way in creating climate change resilient settlements (Mubaya, Jalloh and Mogaka, 2014). The actors involved in research and policy-making on climate change adaptation in urban areas include international, multilateral and bilateral organisations, the different tiers of government, grassroots groups and local communities, private enterprises and institutions, non-governmental and civil society organisations, networks and individuals (Heinrichs, Krellenberg and Fragkias, 2013).

CONCLUSION AND POLICY OPTIONS

The chapter presented practices that are currently being implemented in Southern Africa, West Africa and East Africa in response to climate change risks and disasters. It emerged from the study that through there are weal connections between local authority practices and national climate change policies, there are international, multilateral and bilateral organisations that are actively participating in reducing the disasters and hazards as a result of climate change. Opportunities for the development of sustainable adaptation strategies exist through collaboration with various actors and partners. The study recommends that state and local governments take a leading role in the development of communities. The state and local movements are, therefore, needed to give a platform for all other actors and stakeholders.

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