The 'Concept Urban Resilience': Contextualising to Zimbabwe

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Abstract

This paper is an attempt to systematically conceptualise urban resilience with an intent to decipher how the meaning(s) apply to the Zimbabwean context. The paper draws from a gap that exists in literature regarding urban resilience and spatiality, in general, and with particular reference to Zimbabwe. Methodologically, the paper hinges on thematic and content analysis. Urban resilience proves to be the main tool in safeguarding development in urban areas where there is a greater concentration of people. This rapid urbanisation escalates the pressure on critical services and infrastructure in cities, which also increases their exposure to shocks and long-term stresses. While shocks and stresses are sometimes unavoidable, urban resilience thinking demands that cities be planned holistically so that they are prepared for any vulnerabilities. To deal with challenges facing urban areas, governments and policy-makers, should have the responsibility of building city resilience, and operationalise the resilience-building process.

Keywords: *context, policy, resilience, urban management, relevance*

INTRODUCTION

With a greater concentration of people and assets in urban areas, cities need to address an increasingly complex range of shocks and stresses to uphold development gains and hasten poverty reduction (Sanderson, 2000). Managing disaster risk and the impacts of climate change have long been an important focus of urban resilience. However, recent examples show how economic crises, health epidemics, and uncontrolled urbanisation can also affect the ability of a city to sustain growth and provide services for its citizens; hence the need for a new approach to resilient urban development becomes imperative.

The vulnerabilities, hazards, lack of local capacities, power imbalances and underlying risks faced by the poorest and most vulnerable people in urban areas is vital in recognising holistic strategies for enhancing their resilience to disasters, climate change and conflict in Africa's urban environments

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(Cannon and Muller, 2010). Research shows that there is an interconnection between conflict and disasters, and that amid other factors, rapid and dynamic urbanisation as well as associated urban sprawl will increasingly shape this disaster/conflict interface. Burgess (2008) notes that the world is undergoing the largest wave of urban growth in history. More than half of the world's population now lives in towns and cities; and by 2030 this number will swell to about 5 billion. Much of this urbanisation will unfold in Africa and Asia, bringing huge social, economic and environmental transformations. With Africa's urban population rising rapidly, one out of five of the fastest-growing cities globally are in Africa, with smaller and intermediate cities are experiencing the highest growth (Cohen, 2004). This urban growth is partly because of rural to urban migration. However, it is also increasingly being driven by natural population increases considering that many people are moving to the urban areas in search of employment. These migrants are engaging in informal employment activities such as vending and other odd jobs which call for the need of resilient cities, as informal employment is often associated with unsustainable activities.

Mehmood (2016: 410) notes that resilience is fast becoming an omnipresent and disputed concept in present-day planning and policy discussions and practice. It is often related with the notion of resisting any change and bouncing back to the initial state. In emergency planning, it is associated with security measures and responses to shocks and risks such as severe weather and sporadic pandemics. However, the idea of restoration to a past state of existence following a crisis or trauma is misleading. This is evident from a number of paradigms elaborated by Jones and Mean (2010) on resilience thinking. First is the notion of equilibrium which presupposes that people (communities) and nature (ecosystems) react in a sequential and predictable manner to disturbances, such as change in the environment. Second is the non-equilibrium approach that considers the role of external elements such as episodic events and climatic variability to the effect that responses from society and nature are less predictable in the face of interruption and change. The third view factors the evolutionary and integrating role of society as well as nature in thwarting undesirable changes before ecological thresholds are reached, while building, maintaining or enhancing the resilience of the particular social and ecological systems (Mehmood, 2016). The ability to restore back from past existence following a crisis is important in safeguarding development in Zimbabwe. This is crucial especially after Cyclone Idai in 2019 which hit settlements in eastern Zimbabwe like Chimanimani.

Urban resilience is defined as the measurable ability of any urban system, with its inhabitants, to sustain continuity through all shocks and stresses, while positively adapting and transforming toward sustainability (Welsh, 2014). According to Leichenko (2011: 164), "urban resilience studies are grounded in a varied collection of literature, which can be largely arranged into four categories: (a) urban ecological resilience; (b) resilience of urban and regional economies; (c) urban hazards and disaster risk reduction; and (d) promotion of resilience through urban governance and institutions". There is much overlap among these different sets of literature, each emphasising different facets of urban resilience, and focusing on different components of cities and urban systems (Leinchenko, 2011; Jabareen, 2013). Therefore, each component should be understood and examined how it fits in different urban contexts.

Zimbabwe has experienced a number of unprecedented environmental, economic and political shocks and stresses since independence. These shocks and stresses will have lifelong impact. Zimbabwe is facing serious challenges such as poverty, food insecurity, malnutrition and environmental degradation. The concept of resilience has emerged as a credible framework among humanitarian and development actors and governments to be a longer-term and more cost-effective strategy for substantially improving regional or local capacity to withstand shocks and stresses, ultimately leading to a reduced need for humanitarian response (Mude *et al.* 2007). Interest in resilience building approaches to respond to vulnerability, shocks and stressors in Zimbabwe is apt (Jiri *et al.* 2017). Adger (2006) notes that building the resilience of cities and communities so they can respond to shocks requires helping people to cope with current changes, adapt their livelihoods and improve governance systems as well as ecosystems' health so that they are able to avoid problems in the future.

CONCEPTUALISING URBAN RESILIENCE

A resilience conceptual framework assists policy-makers to recognise how communities and urban systems react to shocks and stresses. In addition, it explores how shocks and stresses impinge on livelihood outcomes and communities' well-being. The resilience framework aids in recognition of the key control points to be used in developing theories of change, which inform programming designed to enhance resilience (Tyler and Moench, 2012). The framework enables policy-makers to have a comprehensive perception of the factors and processes controlling vulnerability and resilience

at the household, community and higher-level systems. It aids discovery of appropriate factors, gaps in key livelihood assets, the functioning of structures and processes of key institutions as well as the livelihood strategies of vulnerable communities and cities (Cannon *et al.* 2003). Barker (2003: 369) defines resilience as a "human capability (individual, group and/or community) to deal with stressors, crisis and normal experiences in a sensitively and physically healthy way; an efficient and effective coping style". Resilience can also be viewed as the capacity to bounce back from some form of distraction. Windle (1999) defines resilience as a thriving adaptation to life task in the face of social drawbacks or extremely unfavourable situations. Resilience is a two-dimensional procedure pertaining to the exposure to hardship and the affirmative adjustment outcomes of that hardship. In Zimbabwe, there seems to be challenges in adjusting to hardships probably due to the economic crisis and political context.

According to Mehmood (2016: 41) "urban resilience can be defined in evolutionary terms as a proactive rather than reactive view to planning, strategic steering and policy-making in which communities play a crucial task for resilient place shaping through their ability for vigorous learning, robustness, ability to innovate and adaptability to change". Urban resilience can also be defined as an active "process of monitoring, maintaining, facilitating and recuperating a virtual cycle between ecosystem services and human wellbeing through intensive effort under external influencing factors" (Zhang and Li, 2018: 145). Urban resilience is an important factor of sustainable urban settlements. Urban Sustainability is the active process of synergetic incorporation and co-evolution between the subsystems making up a city without compromising the potential for development of surrounding areas and contributing towards minimising the destructive effects of development (Huang *et al.* 2015).

Urban resilience has two concepts which are the hard and soft resilience (Moench, 2009). Proag (2014: 371) notes that "the concepts of resilience take two broad forms: (a) hard resilience which is the unswerving strength of structures or institutions when placed under pressure, such as mounting the resilience of a structure through definite underpinning measures to lessen their likelihood of failure. (b) soft resilience which is the aptitude of systems to absorb and convalesce from the effect of disrupting events exclusive of essential changes in structure or function, which depend on the suppleness and adaptive aptitude of the system as a whole". Thus, for any effective ability to overcome shock and stresses the country should have and incorporate both hard and soft resilience.

Meerow *et al.* (2016: 45) define urban resilience as ''the capacity of an urban system and all its constituent socio-ecological and socio-technical networks across temporal and spatial scales to sustain or swiftly return to desired functions in the face of a disturbance, to adapt to change and to quickly alter systems that limit existing or future adaptive capacity. Focusing on the long-term sustainability of cities and social systems''. Fiksel (2003) identifies four categories of characteristics of resilient systems that can also be considered as resilient augmentation features, such as: (1) diversity, or "existence of multiple forms and behaviours"; (2) efficiency, or "performance with modest resource consumption"; (3) adaptability, or the "flexibility to change in response to new pressures"; and (4) cohesion, or the "existence of unifying forces or linkages." Leichenko (2011: 164) notes how across the broad array of urban resilience literatures, resilience is normally understood as the capacity of a system to endure a major shock and uphold or swiftly return to normal function. ''Resilience is not just about economy and environment but also society and culture'' (Mehmood, 2016: 418). It does not refer to readiness to the surprise occurrences alone, but also refers to long term strategies to mitigate and adapt to socio-economic and environmental challenges. In a world of limited resources, resilience thinking can assist to incorporate the issues of economic, environmental and social well-being by strategically navigating the policy and planning to proactively generate, assume and shape change (Mehmood, 2016).

The conceptualisation of urban resilience is important in understanding the Zimbabwean situation. Vulnerability and resilience context in Zimbabwe is characterised by the pre-independence policies of marginalisation and segregation, increasing poverty levels, increasing food insecurity, poor and declining service delivery and poor macroeconomic fundamentals. Having a clear knowledge of the resilience concepts is imperative in understanding and building resilience strategies in Zimbabwe's urban areas. The definitions would assist planners in strategising the abilities of local people and groups to harness local resources and expertise to help them in an emergency. Understanding urban resilience definitions will help policy makers to incorporate other important components not found in the Zimbabwean resilience agendas, for example poverty and inequality. Therefore, exploring the conceptual framework on urban resilience facilitates in finding solutions to environmental threats such as water scarcity and land degradation, which negatively affect long and short-term livelihood processes.

THEORIES ON RESILIENCE

Resilience theory is rooted in the study of adversity (Mastern *et al.* 1990). The Second World War brought poverty, homelessness, destruction of infrastructure and death. Scientists were eager to research on the impact of severe trauma to communities. The concept of resilience then came through as a way of understanding the relationship of the trauma and the ability of communities to recover from such.

It appears that resilience theory has been strongly criticised, particularly for its neoliberal tendencies. Questions rose as to whether the theory contributes to urban thinking and practice in developing countries. However, the theory has proven to contribute to urban development. This is because resilience theory provides a useful framework for research that bridges the micro/macro divide, which could make important contributions to deepening social development theory. Resilience theory is not without its critics, though it remains resilient in the face of criticism – a testimony to its intuitive appeal and the usefulness of the theory in understanding the human experience of adversity and in informing policy and practice.

Resilience theory is of great relevance in Africa at a time when the continent continues to translate urban development theory into practice, cope with rolling poverty and underdevelopment, and embrace the opportunities and challenges of decolonising urban thinking and practice. Where, intelligently and critically applied, resilience theory can help to open up new understandings of how people in the resource-constrained environment of Africa work for their growth and development, and how social structures of inequality and opportunity can be mobilised to encourage a society that cherishes economic and social flourishing.

The applicability and capacity of resistance theory to expose details of urban affairs in Africa has been creatively and sometimes critically contained by social scientists (Norris *et al.* 2008). Some have combined it with an analysis of structures of legitimation, supremacy and signification to examine how power is held and used to encourage or maintain certain pathways of urban development, and how transformation is blocked or may be facilitated in certain cities. In Zimbabwe and other developing countries in Africa, the issue of power and power dynamics is largely misused. This is because of the dominant power given to government in development policies and plans. Such policies are usually failures as a result of structural challenges. Communities have shared fate and geographic boundaries, and are the

product of a complex interaction of built, natural, social, and economic environments. Each community has a dynamic set of resources, assets and options which act as capacities to respond to disruptions, hazards or adversities. Far from achieving a balance between the three pillars of the triple bottom line approach to sustainability, urban governmental, private, and nongovernmental actors encounter tension between three often contrasting and politically unbalanced priorities, with equity and environmental issues on growth and development.

It is important to note that; resilience as a theory is highly applicable in Africa and precisely Zimbabwe. This is because it helps maintain and mitigate sustainable measures which are of benefit to the people in alleviating poverty and ensuring economic growth and development. However, the problem arises in implementation of the policies. In Africa, lack of good governance limits the success of many policies despite their sound intentions. There appears to be lack of checks and balances in Africa's system of governance which negatively affects implementation of good policies.

Vulnerability is the intrinsic susceptibility of a city to harm from exposure to exogenous or endogenous risks (Brooks, 2003). Some risks can be handled through appropriate policies and measures whilst others may be inherent or structural constraints that can best be managed through the implementation of appropriate policy measures or other government, private sector and community actions. Vulnerability is observed in association with the incidence of external shocks of changing magnitudes, which negatively impact the environment/ecological, economic, geographic and social profiles over time (Brooks, 2003). Some of the vulnerabilities found in urban areas include: global economic shocks, drought and floods, water and sanitation, social discontinuity and the connectivity paradox. It is important to understand these vulnerabilities before engaging in resilience strategy. These vulnerabilities shape the resilience enablers in urban areas. These enablers include infrastructure (physical enablers), stable income sources, human capital (education, health, food & nutrition), integration into global economy and strong procedural enablers. For an urban resilience agenda to succeed these enablers should be existent. In the Zimbabwean context, the enablers appear to be missing which explains why most of the sectors in Zimbabwe such as service delivery and infrastructure provision are deteriorating.

Leadership is the most significant part in urban resilience. Enterprise leaderships is about setting precedence, making commitments and the capability to make accurate decisions about the courses of actions to take

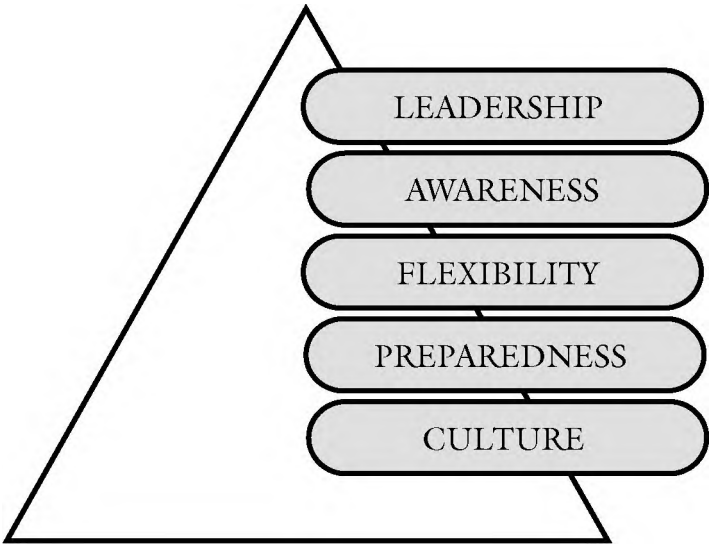

Figure.1. Factors for Achieving Organisational Resilience (Omer *et al.* 2014: 875)

when faced with unpleasant circumstances (Omer *et al.* 2014). There is therefore, need for effectual leadership and management which is engaged and responsive at all levels, empowering stakeholders and fostering integrated development planning which will make a positive contribution to cities resilience.

Another factor is awareness. Policy makers in resilient cities need to examine change that occurs within the urban area and be able to recognise distraction in advance. The data gathering process offers the executive with the current information about state of affairs and divulges the scope of problem as well as how equipped the manpower is to deal with it (Hollnagel *et al.* 2006). City works with a well-built communications infrastructure can easily identify disruptions and alert the responsible authority (Omer *et al.* 2014). The initiative to resilient cities should engage the most vulnerable to the most influential stakeholders, and uphold awareness of the power dynamics, motivations and incentives.

Preparedness or emergency planning is another important factor. It is noted that, city personnel can actively foresee problems and prepare for them by

building a team that is able to envision diverse potentials and is able to apply inventive, efficient and effective solutions (Omer *et al.* 2014). Policy-makers in urban areas have to frequently arrange necessary schemes in emergency planning which can be used to deal with problems by training individuals in the courses of action to take in the event of emergencies.

Flexibility allows cities to adjust to new shocks and stresses. Resilience through flexibility is attainable by allowing urban dwellers to make decisions (Lengnick and Beck, 2016). Organisations should ensure flexibility in decentralised institutions in order to make them responsive to local realities. The decision-making process must be comprised of a flexible and iterative monitoring system that allows for timely and competent decision making. It is further noted that resilience is achieved through a culture built on trust and accountability (Bryan, 2005); fostering stakeholder engagement at all levels, by developing a sense of mutual ideas encouraging a culture that is aware of its environment and supporting communication through the organisations (Omer *et al.* 2014). A city's culture is understood to be the key to controlling crisis. It is the culture of a city that makes it crisis-prone or crisis prepared.

Essential Aspects of Urban Resilience

According to Tyler and Moench (2012: 313), resilient systems ensure that functionality is retained and can be rapidly reinstated through system linkages despite some failures or operational disruptions. Resilient systems do not rely on the strength of individual components, but retain functionality through flexibility and diversifying functional dependence. Social agency outcomes arise not only from interaction between elements but also from purposive decisions. Agents are capable of deliberation, independent analysis, voluntary interaction and strategic choice in the face of new information. Agents are actors in the sense that they introduce volition and intent into choice; they behave in ways that reflect their location and structure within society (i.e. as government entities, businesses, community advocates, households and individuals), their preferences, and the opportunities and constraints they perceive. Techniques for analysing agent behaviour and capacity are different from those required for systems. Agents, or actors in urban systems, comprise the second key element in the resilience framework.

Agent behaviour can be changed, but depending on the circumstances, this may not be any easier than modifying complex technical infrastructure systems. Many agents (e.g. households) depend on urban systems and demand

services but are not proactively involved in the creation, management or operation of those facilities. Other agents are directly concerned with management of critical urban systems. The concept of institutions in social sciences refers to the social rules or conventions that structure human behaviour and exchange in social and economic interactions (Hodgson, 2006). Institutions may be formal or informal, overt or implicit, and are created to reduce uncertainty, to maintain continuity of social patterns and social order, and to stabilise forms of human interaction in more predictable ways (North, 1990; Ostrom, 1990; Campbell, 1998). Institutions of property and tenure, of social inclusion or marginalisation and of collective action influence the vulnerability of particular social groups (Adger *et al.* 2005).

Mehmood (2016: 415-6) identifies "four components contributing towards the enhancement of local socio-ecological resilience". These four components are transformability, adaptability, preparedness and persistence (TAPP). This resilience framework is based on TAPP proposed by Davoudi *et al.* (2013). Transformability and innovation, according to Davoudi *et al.* (2013), require a fair amount of behavioural change. Scott-Cato and Hillier (2010) have analysed the aspects of social and behavioural change in Transition towns through the concept of social innovation. They emphasise the specific focus of social innovation theory and practice in helping to bring about social and behavioural change in the communities. Key contentions of the Transition Movement are about climate change and community-led economic development. They emphasise place-based transformations by means of improving social relations between communities and groups, empowering the people in terms of socio-political decision-making and satisfying basic human needs (Mehmood and Parra, 2013). Adaptability or the ability of being flexible in the face of a crisis or change refers to two distinctive features of the Transition Movement that make it a model of local resilience. First is the predominant focus on the sense of community building whereby the community rhetoric and spirit helps in forming a cohesive relationship and identity whereas externally, it helps in contributing to building alliances and networks to produce projects of wider societal benefits. A key achievement in this respect is the movement's role in low carbon transitions across the board in Transition towns (Aiken, 2012).

The second distinctive feature is its focus on localisation of social and economic processes and activities. Not only does this help explore the potential of smaller towns and cities to sustain their lifestyles but also allows for inter-scalar linkages and helps build networks with other towns of varying

social, economic, cultural and environmental assets bases. These have subsequently provided inspiration for the concept of green networks of cities (Taylor, 2012). Preparedness refers to increasing the learning capacity of the communities through knowledge exchange and sharing mutual experiences. The Transition Movement offers an alternative model of local development that provides opportunities to build resilient communities (Connors and McDonald, 2011). One of the key contributions of the movement is establishing such governance mechanisms that are based on participatory democracy; promoting bottom-up creativity through self-organising community groups (Bay, 2013).

KEY AREAS OF URBAN RESILIENCE

The key themes or area of urban resilience have been adopted from the World Cities Day held on the 31st of October in 2018. Building Sustainable and Resilient Cities, the theme for World Cities Day 2018, is a call to action for everyone to rethink how cities may become better places to protect and enhance people's lives, leaving no one behind. The global World Cities Day of 2018 was held in Liverpool, United Kingdom with the aim of influencing the following five key areas:

Climate Action

Climate change impacts on people's wellbeing and livelihoods because of the altered weather patterns due to rising sea levels and more extreme meteorological events (Adger *et al.* 2003). In a rapidly urbanising world, resilient urban development cannot be achieved or sustained without mitigation and adaptation measures, such as water recycling, water and energy sensitive urban and building design, sustainable urban planning of city extensions, financial and planning tools for risk management and awareness campaigns for behavioural change (Padgham *et al.* 2015). This explains the importance and need for cities to promote effective climate action and recognising sustainability as a key area in achieving resilient urban settlements.

Upgrading from Informality

The number of people at risk is increasing significantly where rapid urbanisation exceeds formal planning capacity, leading to uncontrolled and densely populated informal settlements in hazard-prone areas (Gencer, 2013). Unplanned cities are more vulnerable to shocks as they often have to cope

with pre-existing stresses. Urban systems are complex and interdependent. If rapidly growing cities are to respond equitably to the Sustainable Development Goals and Sendai Framework for Risk Reduction, holistic tools are needed to help planners prioritise investment in an inclusive manner, based on limited information and rapidly changing contexts.

Economic and Social Resilience

Godschalk (2003) notes that building urban resilience takes multiple forms, but must seek for the improved living conditions of people, specifically those in vulnerable situations. Poor people are exposed to hazards more often, lose a greater share of their wealth when hit, have limited safety nets, and receive less institutional support. The impact is often most felt by the poorest of the poor, especially women, girls, and the elderly. This is because the poor often live in deprivations as a result of limited access to employment opportunities and income. As women, girls and the poor are highly vulnerable this is worsened by the continuous occurrence of hazards.

Governance and Decentralisation

The analysis of decentralisation in terms of local governments' responsibilities, planning and financial capacity is key for building city resilience. Local governments have a particular role to play in urban resilience as they are in charge of a variety of processes related to the functioning of the city as well as the first line of response in any crisis situation (Gencer, 2013). Local governments need to be empowered to efficiently deliver on these requirements, and good national-local level cooperation to build resilience in time of crisis is imperative.

Humanitarian Urban Crises

Resilience also lies at the core of the humanitarian-development nexus, bridging two often disparate agendas. Ingraining resilience can reduce risks by increasing capacities and addressing vulnerabilities to decrease fragility and mitigate impacts, thereby enhancing an effective and forward-thinking response (Amit, 2016).

OUTCOMES OF URBAN RESILIENCE

The outcomes of urban resilience in the poor, heavily indebted and developing cities depend on several factors. These factors include the technological

creativity of implementing agencies and the political incentives facing political leaders in the urban areas (Chirisa *et al.* 2015). Urban settlements need to engage the processes of political, economic and governance transformation by generating synergies with other cities to enable them to forge the emerging institutional 'best practices'.

Urban resilience is a critical element of sustainable development. Investing in resilience contributes to long-term sustainability by ensuring that current development gains are safeguarded for future generations (Griggs *et al.* 2013). Resilience focuses especially on learning to prepare for, adapt to, and respond to the spectrum of risks that exist at the interface between people, the economy, and the environment (Zolli, 2012). At the same time, investing in resilience is not a substitute for broader approaches to sustainability. For example, it does not provide the insights into social sustainability that are gained through the social science concepts of agency, conflict, knowledge, and power (Olsson *et al.* 2015). Given the mandate of the World Bank, issues of sustainability and resilience are primarily focused on cities of low- and middle-income countries.

Due to the complexity and wide scope of the concept of resilience, operationalising the city resilience-building process is still a challenge (Mehmood, 2016: 417). Transition towns as resilient settlements present a place-based perspective to the capacity for learning (preparedness), being robust (persistence), being innovative (transformability) and being flexible (adaptability) in the face of a crisis or change both immediately and in the long term. There is evidence supporting the fact that crisis situations can play a role in shaping new innovation trajectories (Howells and Bessant, 2012). Extreme conditions with the absence of common-sense solutions and first-option alternatives can lead to the search for radical innovations. Innovation in the social sense (social innovation) can therefore help identify new ways to produce and support social change and foster understanding of the conditions that provide solutions to complex social and ecological problems (Moulaert *et al.* 2013). It can also deepen our understanding of the dynamics that drive both continuity and change, including; at the societal level, how and under what conditions the change can successfully arise and diffuse, transforming social relations and empowering local communities to help satisfy basic human needs.

The 2030 Agenda for Sustainable Development and its dedicated goal on cities— SDG 11 aims to make cities inclusive, safe, resilient and sustainable. It therefore puts sustainable urbanisation as one of the key priorities. In

addition, under the New Urban Agenda, there is a defined and renewed dedication among the global development community to ensure that cities expand in a sustainable way for all.

By engaging all stakeholders in resilience efforts, cities can harness transformational change and improve the lives of their inhabitants. Over the past decade, urban resilience has emerged as one of the core principles of sustainable urban development widely acknowledged in various agreements including the Paris Agreement on climate change and the Sendai Framework for Disaster Risk Reduction (De Bruijn *et al.* 2017). Generally, cities lack the capacity to operationalise these national commitments alone and shifting from awareness to action remains a challenge. These trends will not change unless policy makers, government and communities all start working together towards building resilience for more sustainable cities.

The risk environment in African cities and towns is complex and diverse. Poor urban communities in Africa experience a range of hazards, from floods, epidemics to crime and violence. The poorest and most vulnerable people must cope with both acute, large-scale disasters and recurrent 'small' events (Montgomery, 2009). These erode resources and undermine efforts to end poverty and injustice on the continent. Disaster risk in urban areas is strongly linked to developmental conditions, insecure livelihoods, lack of basic infrastructure and services, poor urban and land use planning; and inadequate oversight and low accountability for the provision of infrastructure and basic services increase exposure to hazards, and vulnerability to their effects. A monetised economy leaves poor households particularly vulnerable to changes in the availability and cost of food, water, energy and transport. Practising urban resilience can ensure recovering from these stresses and shocks. Building resilient cities will ensure sustainability and the ability to cope under various vulnerabilities.

LESSONS DRAWN FOR URBAN ZIMBABWE

In Zimbabwe, programming for resilience building focuses on the overlap between areas of chronic vulnerability and the occurrence of shocks and stressors. Reducing risk and building resilience to disasters in urban areas requires tackling the deficits that underlie it. To address existing risk drivers, particularly inadequate service delivery, unemployment and governance failures, planning is critical in improving resilience in both the short and long term. People must have reliable and well-maintained infrastructure and

services, which protects them, and enhances their ability to cope with and recover from disasters. To measure improvements in resilience in Zimbabwe, there is need for empirical evidence regarding what factors contributes to resilience, under what contexts, and for what types of shocks. The ability to measure the relationship represented by resilience depends on the analysis of a number of substantive dimensions and structural features. Substantive features highlight the specific indicators considered and data collected so that insights related to resilience dynamics can be measured. A regional approach may enhance the effectiveness and efficiency of resilience capacity-building programming in Zimbabwe by allowing stakeholders to align resources, build staff capacity, and address cross country themes that require systems thinking and approaches.

To put the resilience agenda into action, Zimbabwe will need to mobilise resources from public and private sectors, domestic and international sectors included. The acute and cumulative effects of disasters generate major economic and fiscal losses on the individual, community to national level. These events can undermine hard-earned development gains, trap the most vulnerable groups in poverty, and exacerbate inequality. For an effective urban resilience program Zimbabwe will need strong government leadership and coordination across the national to local level; consisting of bottom-up, locally managed funds such as engagement of the private sector; and technical expertise to develop a range of innovative financial instruments. In an increasingly urban world, the major resilience challenges of this century (the 21st) —poverty reduction, natural hazards and climate change, environmental sustainability, and social inclusion— will be won or lost in cities. With commitment from leaders, partners, and citizens, Zimbabwean cities can lead the resilience agenda, and spearhead the economic and social transformations necessary for reducing poverty and boosting shared prosperity.

CONCLUSION AND WAY FORWARD

There is a growing awareness of the urban resilience-vulnerability linkages. As urban areas are urbanising, the urban dwellers, especially the poor are increasingly faced with risks to their lives, health and livelihoods. These problems relate to their limited economic base, location, low access to risk-reducing infrastructure and services as well as inadequate governance and disaster risk management. In order to reduce the risk of and impact from disasters and increase the safety and wellbeing of citizens, cities must be

more resilient and prepared to address shocks and stresses. In this context, improving cities level of resilience to expected and unexpected disasters is of utmost importance and requires a holistic approach. Resilience covers the ability of city stakeholders to understand and prevent the disaster risks, to mitigate those risks and to respond in such a way as to minimise loss of or damage to life, livelihoods, property, infrastructure, economic activity and the environment. However, there exists a large gap in resilience operationalisation when going from theory to practice and making resilience tangible and practical for cities. Therefore, it is imperative for urban local authorities to invest in resilience which contributes to long-term sustainability by ensuring current development gains are safeguarded for future generations. There is need for innovative tools for local resilience which must be integrated in urban planning and management practices. There should be national policies on urban resilience with the government providing support and leading coordinated policies that push for resilient urban areas, while supporting local and global partnerships.

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