

Urban Resilience and Local Governance

INFORMAL SETTLEMENTS IN TANZANIAN CITIES: ADDRESSING RESILIENCE AND GOVERNANCE

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Urban Resilience and Local Governance in Tanzania

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1. Introduction

The challenge of informal settlements has gained significant attention over recent decades, leading to various approaches to tackle their increasing prevalence. Globally, there has been a shift from exclusionary to more inclusive approaches (UN-Habitat, 2003; Kachenje, 2020), including in Tanzania, where informal settlements pose a significant challenge amid rapid urbanisation. Tanzania is among the fastest urbanising countries in sub-Saharan Africa, with about 44.6% of its population residing in urban areas, exceeding the continental average of 43.5% (UN-Habitat, 2020). This rapid urbanisation and population growth strains planning, land management, infrastructure, and service provision, fuelling the expansion of informal settlements.

The 1995 Urban and Housing Indicators Programme indicated that 70% of Tanzania's population lived in informal settlements, a figure that has since risen sharply to 80% according to recent studies (Magina, Kyessi, & Kombe, 2020). Between 40% and 80% of built-up areas in Tanzania are classified as informal, with most urban households residing in such settlements (Zhang et al., 2020). Factors such as a growing urban population, limited planned land availability, and high land acquisition costs have pushed many low- and middle-income households into these settlements lacking proper planning, secure tenure, and essential services.

This situation exposes residents to environmental and health risks and hazards.

The increase, and precarity, of informal settlements thus poses a significant challenge to achieving sustainable urban environments in Tanzania. Urgent policies are needed to preserve existing liveable urban ecosystems and ensure the creation of more safe, sustainable, resilient, and liveable housing and communities. Resilience, often viewed from the perspective of affected and vulnerable populations (Vertigans, Mueller-Hirth and Okinda, 2021), highlights the need for innovative responses to environmental and socioeconomic challenges in informal settlements. Government or non-state actors' support is crucial for residents facing such challenges. What remains paramount however, is how quickly a community is able to respond to crises, evidenced through their level of community engagement and rapidity of collective response.

UN-Habitat describes several approaches that governments have taken to address informal settlements used over the last few decades, from negligence, eviction and demolition, self-help and in situ upgrading, enabling, resettlement or relocation, and participatory planning and reblocking approaches (UN-Habitat, 2003, 2015). Cities Alliance expands on these with various forms of upgrading, such as



transformative, comprehensive community-led with a resilience lens, comprehensive community-led, comprehensive, more complete upgrading, rudimentary, and eviction-based upgrading. Increased recognition of the positive role of informal settlements by governments and global frameworks such as the 2030 Agenda for Sustainable Development and the New Urban Agenda has led to a progressive shift from models of *forced removal and relocation towards models of in-situ upgrading and securing tenure*.

In Tanzania, the past 60 years has seen a range of strategies to address urban informality, including slum clearance, community infrastructure upgrading, and regularisation - currently seen as the most effective option (Magina, Kyessi, and Kombe, 2020). The approaches have taken two general forms: top-down approaches led by the state with little attention to community participation; and bottom-up approaches driven by locally based or community-based organisations (Magina, Kyessi, and Kombe, 2020). Despite a shift to more progressive approaches, informal settlements are still generally seen as unacceptable, and face increased vulnerability to resilience issues. This paper argues that given the significant portion of the population living in informal housing without alternatives, informal settlements should be normalised and accepted as integral parts of the urban fabric in SSA. Rethinking urban regulations is necessary to create sustainable human

settlements aligned with people's needs. Addressing climate-related challenges, which disproportionately affect informal settlements due to their vulnerability, requires resilience-focused approaches. In Tanzania, where rapid urbanisation exacerbates development challenges, prioritising urban resilience in the informal sector is crucial. Leveraging community knowledge and existing socio-political structures can ensure a more bottom-up and inclusive approach to improving living environments for all.

This paper therefore seeks to explore the approaches implemented by the Tanzanian government to address informal settlements, and the extent to which these approaches have worked from the perspectives of governance and resilience-building. Based on these, the paper includes recommendations for policy uptake in the context of Tanzania and other sub-Saharan African countries.



2. Overview of informal settlements in Tanzania

2.1 Defining and characterising urban informality in Tanzania

The definition of informal settlements has evolved over the years to better represent communities. Terms such as slums and squatters have been central to debates on dignified settlement, because they fail to dignify and humanise the people living in them. However, the United Nations has since 2003 adopted a standard definition of the phenomenon. Informal settlements are defined as areas lacking essential infrastructure and socioeconomic services, and characterised by “five key deprivations” of which one or more may be lacking, namely: insufficient water provision; inadequate sanitation and related infrastructure; poor housing quality; overcrowded settlements; and inadequate tenure security (UN-Habitat, 2003).

While insufficient water provision, inadequate sanitation and overcrowding are prevalent in Tanzania’s informal settlements, a study by UN-Habitat indicated that the informal settlements in Tanzania are unique in three key aspects, namely, security of tenure, structural quality of housing, and the nature of the population (Zhang & Sheuya, 2010). Informal settlements in Tanzania thus refer to unplanned settlements where land tenure is secured through informal means; there

are challenges in service provision, and quality of life is largely a combination of low- and middle-income groups (Rasmussen, 2013; Iddi, 2022; Zhang, et al, 2010). With cities like Dar es Salaam having approximately “100 unplanned settlements” (Rasmussen, 2013:2), haphazard settlement growth with little or no consideration to future functional structure is also a growing challenge (Iddi, 2022).

2.1.1 Characteristics of informal settlements

The form of the settlements in Tanzania, as is common in sub-Saharan Africa, does not conform to the social, economic, or environmental characteristics of sustainable urban development. Studies have thus pointed to the need to optimise the form and structure of informal settlements, in addition to formalisation projects, in order to attain sustainable and socioeconomic development goals. The characteristics of informal settlements in Tanzania cannot be said to be homogenous across all informal settlements because of their varied levels of settlement consolidation. However, the informal settlements are characterised by a number of common attributes as explored below:

(i) Nature of people residing in informal settlements: An exceptional characteristic of Tanzanian informal



settlements is that mixed socioeconomic groups, ranging from rich to poor, reside together. This is attributed to the relative ease of access to land for housing in the informal market, favourable land policy, and push for security of tenure which encourages the use of permanent building materials. Notably, property owners are both small-scale and large-scale landlords, while tenancy is the dominant form of rental accommodation (Teyanga and Mrema, 2018; Adegun, Mbuya and Njavike, 2022).

(ii) **Socioeconomic characteristics:** The socioeconomic environment of informal settlements is characterised by housing shortages, high levels of urban poverty, high unemployment rates, poor accessibility to economic opportunities, rising cost of living, and general economic recession, among others. Most of the households are low-income earners that work either as wage labourers or in informal sector enterprises, largely earning wages that are at or near minimum wage. The settlements have a number of livelihood activities comprising mostly informal activities developed along their borders (Rasmussen, 2013).

(iii) **Location:** Most informal settlements are located in environmentally vulnerable areas such as unstable slopes, in proximity to coastal zones, rivers, and channels, and areas prone to erosion, flooding, mudslides, faulting, strong winds and high temperatures among other vulnerabilities (Teyanga and

Mrema, 2018; Hambati, 2013; Hambati and Yengoh, 2018). Many settlements have also been developed on land that is unsuitable for urban development or reserved for alternative land uses (Teyanga & Mrema, 2018).

(iv) **Housing and structural quality:** Single storey traditional 'Swahili houses' make up the average housing configuration in informal and unplanned settlements in Dar es Salaam (Rasmussen, 2013; Adegun, Mbuya, and Njavike, 2022:3). These settlements are typically highly dense, compact, and lacking structural integrity (ibid.). The majority of informal settlements are built using permanent and modern local building materials, mainly influenced by the ideal of perceived tenure security, and their densities increase in settlements that are closer to the city centre.

(v) **Services and infrastructure:** Infrastructure provision at the city level in Tanzania is indicative of unsatisfactory scenarios in the less-serviced informal settlements where only 13% of the city's residents are served by adequate sewerage systems, and 37% of solid waste is properly collected (Erman et al, 2019). Informal settlements are inadequately provided with other network infrastructure such as water supply, sanitation, roads and drainage systems, waste collection, electricity, and social infrastructure such as schools and health centres (Teyanga and Mrema, 2018). Most residents with access to electricity lack access to alternative

electricity sources, for example generators or solar power (Adegun, Mbuya, and Njavike, 2022).

Most tenants access water from municipal-supplied water, community boreholes, hand-dug wells, streams, and bottled/sachet water (Adegun, Mbuya, and Njavike, 2022). Traditional pit latrines are the most dominant sanitation system, used by over 90% of urban population (Kasala, Burra, & Mwankenja, 2016). In areas prone to flooding, groundwater recharge raises water tables causing pit latrines to overflow, which adversely affects sanitation (Kasala, Burra, & Mwankenja, 2016). Waste collection services are mostly absent, relying on community responsibility (Rasmussen, 2013).

(vi) **Varied settlement consolidation:** Iddi (2010) observes that Tanzanian informal settlements can be categorised into three consolidation zones, each exhibiting different characteristics. The inner zone comprises informal settlements with high densities and chaotic structures which make service delivery a challenge. (2) The intermediate zone has informal settlements that are consolidating at a fast pace without planning authority guidance. (3) The peri-urban zone comprises the urban poor who are unable to afford land in the intermediate and inner core city areas, and is also targeted by middle-income households that purchase relatively larger plots for multiple uses which may include urban farming.

(vii) **Tenure security:** The tenure structures in Tanzania have strongly influenced the emergence of informal settlements and their characteristics. Customary, quasi-customary and informal tenure are the dominant forms of land tenure in Tanzania's informal settlements, where statutory tenure rights do not generally apply (see Figure 1) (Zhang & Sheuya, 2010). This lack of statutory rights does not lend itself to tenure security for informal settlement dwellers. Insecurity of tenure is thus a characteristic common to all informal settlements. Zhang and Sheuya (2010) note a 'perceived' security of tenure by residents of these informal settlements mostly due to government's policies of tolerance since the 1970s, and the state's inability to pay compensation for land. However, through the government's strategy of regularisation of informal settlements launched in the 2000s, where informal settlements have been regularised, residents now have access to residential licences (RLs), an intermediate short-term form of tenure security, or Certificates of Right of Occupancy (CROs), which are the ultimate goal of formalisation (Zhang and Sheuya, 2010; Collin, Sandefur and Zeitlin, 2015). These are explored further in the section on informal settlement strategies and their legal, policy and planning frameworks.



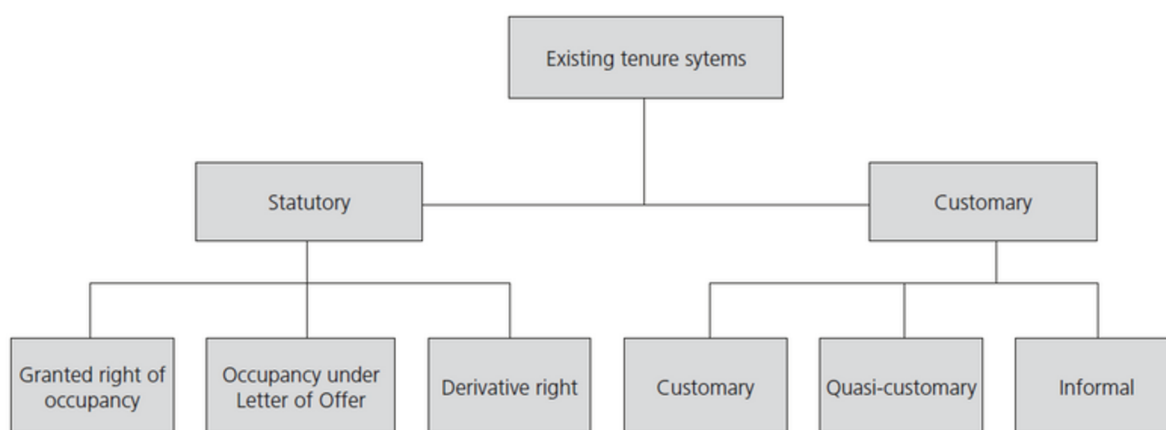


Figure 1: Existing Tenure Systems in Tanzania

Source: Shabaan Sheya (2009) as cited in Zhang & Sheuya, 2010

2.2 Drivers of urban informality

The growth of informal settlements in Tanzania has been attributed to urbanisation and governance-related issues, including land administration and planning, the failure of public authorities to provide serviced land, and the coexistence of multiple tenure systems (Teyanga and Mrema, 2018; Nuhu, Munuo and Mngumi, 2023). Public authorities' inability to provide adequate and affordable housing, including serviced land, has led to overcrowding and the development of permanent informal housing structures in poorly serviced areas.

Weak institutional frameworks, slow economic growth, and high urbanisation rates have driven most Tanzanians to rely on informal means for housing finance (Zhang and Sheuya, 2010). This has particularly limited low-income households' access to secure tenure. Since the collapse of the Tanzania Housing Bank in 1995, housing finance

opportunities have been scarce. Although microfinancing options have emerged, most people cannot afford them or are reluctant to accept high interest rates (Zhang and Sheuya, 2010). Consequently, most houses are constructed or renovated using informal financing methods like family savings, inherited land, and informal credit associations (Magina, Kyessi and Kombe, 2020; Zhang and Sheuya, 2010).

Access to land is another major driver of informal settlement growth and is a function of the land delivery system and land ownership status, which comprises customary land tenure and statutory land tenure (Nuhu 2019; Kironde, 2015; President's Office on Regional Administration and Local Government [PO-RALG], 2021). Land under customary land tenure is sold through the informal land market, and is more easily accessible compared to the formal land delivery system (Zhang et al, 2010; PO-RALG, 2021). Furthermore, the friction between the system of

market control tied to state hegemony on land ownership on the one hand, and the market economy with the increasing participation of the private sector in urban development and the land market on the other hand, has also resulted in the dominance of informality in the land market where land sales are hardly captured and shared (PO-RALG, 2021).

The lack of planned and surveyed land has specifically been cited as one of the largest contributors to urban informality (Magina, Kyessi and Kombe, 2020; Nuhu, Munuo and Mngumi, 2023). As of 2016, 85% of land remained unsurveyed and much of this land was located in poorly serviced areas vulnerable to natural and human-induced hazards (Magina, Kyessi and Kombe, 2020).

Poor enforcement of urban planning related laws, regulations and frameworks is another major driver of urban informality. Related to this, traditional master planning approaches and the absence of up-to-date master plans in most cities, have led to the burgeoning of informal settlements. A major contributor is the shortage of urban planning professionals, and the low technical capacities of local government authorities to ensure effective and efficient planning and implementation which have contributed to the high rate of informal settlement growth (Iddi, 2022). On the other hand, the perception by informal settlers and the public on how to develop and plan their neighbourhoods is quite often

contrary to the provision of the laws (Iddi, 2022).

Enforcement of laws and regulations has also proved insufficient or ineffective in preventing encroachment into many hazard-prone areas or to ensure adherence of developments to adopted master plans (PO-RALG, 2021).

There has been a general failure in the governance system to address the above challenges and to ensure adequate land administration and planning processes. Thus, over the years, urban residents have both taken opportunities to adjust to these circumstances by providing more accessible tenure options, or leveraged the informal means of accessing land tenure to meet livelihood needs.



3. Institutional and governance framework of informal settlements

The planning, development and regulation of human settlement activities in Tanzania falls under the mandate of two main institutions: The Ministry of Land, Housing and Human Settlement Development (MLHHSD) and the President's Office-Regional Administration and Local Government (PO-RALG). The MLHHSD handles urban planning functions, while the PO-RALG oversees the administration of human settlements (Teyanga and Mrema, 2018). Their goal is to ensure fair land distribution and access while promoting sustainable human settlement development for all income groups, guided by the National Land Policy (1995), Human Settlement Policy (2000), and related legislation (Iddi, 2022). These responsibilities are executed through Local Government Authorities (LGAs), including city councils, municipal councils, town councils, and township authorities (Mussa, 2022).

In the LGA, the urban governance structure starts at the sub-ward level called the mtaa (meaning "streets" in Kiswahili), comprising several 10-cell units, then progresses to the ward, division, municipal council, and finally the city. The mtaa is led by a community leader elected by residents, who collaborates with a municipal officer (Rasmussen, 2013). Known as the

'mtaa-leader,' this community leader serves a three-year term, with potential for re-election, while a civil servant acts as a secretary, appointed by the municipality. The governance structure extends systematically to settlement and household levels, integrating both formal and informal settlements into the formal urban governance framework (Roy et al., 2018).

3.1 Informal settlement strategies and their legal, policy and planning frameworks

Tanzania's response to urban informality has evolved over six decades through legal, policy, and planning frameworks. Initially ambivalent, these frameworks have shifted towards recognising the rights of informal settlers. Government policy has transitioned gradually from viewing informal settlements negatively to accepting them as integral parts of urban life, necessitating focused interventions to improve living conditions. The impact of these frameworks on strategies for informal settlements is discussed below.

3.1.1 Slum clearance - 1960s to 1970s

Tanzania's post-independence era saw government hostility towards informal settlements, as rapid rural-to-urban

migration in the 1960s that followed lifting of colonial migration restrictions led to unplanned housing and urban sprawl (Peter and Yang, 2019). The government's response, from the 1960s to the 1970s, involved aggressive slum clearance and redevelopment efforts to eliminate what was perceived as eyesores in the cities (Magina, Kyessi, and Kombe, 2020; Iddi, 2022). This included forcibly relocating residents to the urban periphery, where access to public services and job opportunities was limited. Additionally, the government implemented the Ujamaa-villagization scheme from 1973, aiming to resettle urban populations into villages, but this led to the decline of urban centres.

3.1.2 Squatter upgrading - late 1970s and early 1980s

After the shortcomings of slum clearance, the government introduced the squatter upgrading programme in the late 1970s and early 1980s, backed by the World Bank. This initiative focused on enhancing network infrastructure (Magina, Kyessi, & Kombe, 2020), and represented a shift from eviction towards recognising the importance of improved shelter, infrastructure, service delivery, and tenure security in informal settlements (Iddi, 2022). Community participation was integral, with members involved in planning, design, and construction, utilising community labour.

The program emphasised affordability and community involvement in decision making.

3.1.3 Sites and services projects - 1972 to 1990s

The government implemented sites and services projects, akin to the squatter upgrading programme, aimed at providing basic infrastructure, services, and community facilities in new informal areas (Magina, Kyessi and Kombe, 2020; Iddi, 2022). These initiatives also focused on relocating households from hazardous flood-prone areas, particularly in river valleys. However, the projects yielded unsatisfactory outcomes, leading to their discontinuation in the 1990s. By 1988, 3,000 plots remained undeveloped, and five years after completion, only 48.3% of developed plots were occupied, 22% were not yet habitable, and 26.6% remained undeveloped (Magina, Kyessi and Kombe, 2020). The World Bank withdrew support due to poor performance, and by the early 1990s, rapid urbanisation and population growth had outpaced government efforts.

3.1.4 Participatory upgrading approaches - 1990s to 2000's

By the early 1990s, there was a shift in the government's approach to informal settlements in Tanzania, echoing trends



across sub-Saharan Africa. The failure of squatter upgrading led to a shift towards more participatory approaches, emphasising local community involvement. community-based organisations (CBOs), non-governmental organisations (NGOs), and communities collaborated to upgrade informal settlements.

In response to the Habitat Agenda, in 1992 the United Nations Centre for Human Settlements (UNHCS) supported *environmental planning management (EPM)* which sought to improve on the traditional master planning approach and emphasise building partnerships with CBOs and providing a forum for common priority-setting with communities (Iddi, 2022). An example was the Hanna Nassif CBO Upgrading Project implemented under the Sustainable Dar es Salaam Project (SDP).

The *Community Infrastructure Programme (CIP)* was also implemented to carry out basic infrastructure improvements using mostly community labour and a microcredit program (Iddi, 2022). The *Community Infrastructure Upgrading Program (CIUP)*, initiated around 2003 under the Local Government Support Program (LGSP), focused on upgrading and upscaling infrastructure and services such as roads, drainage, water, sanitation, waste management, and street lighting (Iddi, 2022; Ndezi, 2022).

3.1.5 Comprehensive land reform and regularisation of informal settlements, 2000 onwards

Another major shift was the government adopting comprehensive land reform to integrate urban/informal and rural/customary tenure into modern land administration systems (Collin, Sandefur and Zeitlin, 2015). This led to a *neoliberal land formalisation programme* from the mid-2000s, aimed at addressing insecure tenure in informal areas and reducing poverty and underdevelopment (Peter and Yang, 2019). Affordable housing schemes were introduced to tackle improper land use, meet housing demand, and curb the growth of informal settlements (Peter and Yang, 2019).

The reforms had a major aspect of pursuing a strategy of *regularisation of informal settlements*, supported by urban planning policy and legislative changes. The *1995 National Land Policy* prohibited the removal of informal settlements and mandated their upgrading, except in hazardous areas (Peter and Yang, 2019). The Land Acts No. 4 and 5 of 1999 introduced a regularisation strategy, focusing on titling properties and plots (Magina, Kyessi and Kombe, 2020), along with individualised land tenure for informal landowners. The Lands Act recognised the rights of informal landowners and introduced two new forms of formal land tenure: the *Certificate of Right of Occupancy (CRO)*, providing a leasehold of urban land for 33-99 years and the

ultimate goal of formalisation, and the *residential licence (RL)* (Collin, Sandefur and Zeitlin, 2015) an intermediate form of tenure for properties not meeting CRO requirements.

Section 4.1.4 of the *National Human Settlements Development Policy of 2000* similarly prohibited removal of informal settlements, and further committed to upgrading and regularisation by residents through community-based organisations (Peter and Yang, 2019; Magina, Kyessi and Kombe, 2020). Section 23 of the *Urban Planning Act No.8 (2007)* also recognises informal settlements as planning areas and provides for their regularisation and preparation of regularisation schemes (Magina, Kyessi and Kombe, 2020).

The government thus launched the *property and business formalisation programme (MKURABITA)* in 2004, implemented in 2008. Through this programme, residents in regularised informal settlements can obtain derivative rights of occupancy via renewable RLs, initially valid for 6 months but later extended to 2 years, with provision for extension up to five years (Zhang and Sheuya, 2010; Collin, Sandefur and Zeitlin, 2015). However, while RLs are more accessible and affordable, there has been limited progress in extending access to CRO for informal residents despite its greater benefits. Despite implementation challenges, regularisation is seen as the most effective approach to formalising informal areas.



4. Vulnerability of informal settlements

Informal settlements are vulnerable to natural disasters, climate change, and man-made disasters which are expected to keep increasing in both frequency and intensity (Hambati, 2013; Williams, Manez Costa, Sutherland, Celliers, and Scheffran, 2019). These varied events have the potential to negatively disrupt activities in informal settlements, and at times result in new and innovative solutions to adapt to challenging circumstances. Tanzania has experienced a 1°C rise in temperature over the last six decades which affects informal settlement residents the most (Irish Aid, 2015). The extent to which this, and other climate change events impact informal settlement residents in Tanzania has not yet been extensively studied (Hambati and Yengoh, 2017; Sakijege, Lupula and Sheuya, 2012). However, various authors have explored the impact of disasters to give insight into the challenges faced and the ways in which Tanzanian informal settlement dwellers have adapted to these vulnerable conditions.

4.1 Factors influencing vulnerability

The physical conditions of a settlement can impact vulnerability, especially when settlements are located in climate-vulnerable areas such as flood-prone zones. A common challenge faced by residents of urban informal

settlements is the lack of basic infrastructure. Informal settlements often lack wide roads and spaces for movement, and as such there is limited space for physical amenities such as parks, and street furniture. It also becomes challenging for services such as water, sewerage, and drainage systems to be provided. In line with the vulnerability to environmental hazards, residents in informal settlements find themselves prone to flooding, sewer overflow, poor drainage, and pollution (Roy et al., 2018). Increasing urbanisation rates and climate change further undermine efforts to recover by compounding the impacts of hazards (Williams et al., 2019).

The approach by public authorities to disasters is reactive rather than proactive, and as a result the response systems are inadequate in alleviating the pressures and impacts of the hazards in a timely manner. A missed opportunity is in the provision of green infrastructure which plays a critical role in communities because they create opportunities that improve the well-being of urban residents, while improving climate change adaptation. Roy et al. (2018) look at the challenge of infrastructure in informal settlements through the lens of urban green spaces. They highlight that urban green services in Dar es Salaam are declining, and therefore are leading to greater

vulnerabilities and challenges for residents to adapt to environmental changes.

Resilience of households may be measured in terms of access to finance to recover from disasters, and the poor are noticeably less resilient. Erman et al. (2019) observe from their study of flooding incidents in Dar es Salaam that 29% of affected households had not recovered from shock, leaving them more vulnerable to the after-effects of the disaster. These households refer to the poorer of affected households who live in low elevation areas with relatively poor-quality infrastructure, including poor access to in-house piped water and electricity. Often, families do not have disposable income to replace or repair damaged property. They also note that low-resilience households have systematically lower access to finance, rely more on self-generated income and less on private companies, and informal lending remains an important driver of recovery for them.

Resilience efforts can be strengthened when undertaken at the wider community level. The role of community support and networks extends beyond financing into sharing of resources, labour and time to help each other rebuild after a crisis. Erman et al. (2019) point out that community saving groups are a positive tool to assist households with recovery, but may not be an ideal instrument to deal with aggregate shock, mostly due to the strain put on resources when many members are

affected at the same time. A more ideal method to help the saving groups manage risk better could be the pooling of resources across more than one community or insuring community groups against aggregate shocks. In other instances where individuals fail to recover from disasters, NGOs and CBOs invest in community upliftment programmes that focus on improving the resilience of communities by addressing the vulnerabilities of the settlement. While various actors play a key role in supporting the efforts of individuals and communities, they often face challenges in accessing readily available data.

4.2 Vulnerability of residents to flooding

The vulnerability of informal settlements can be understood from the context of flooding which is highly prevalent in Tanzania - the most flood-affected country in East Africa (Erman et al., 2019). Flooding is estimated to be the costliest hazard nationally, accounting for 62% of losses from natural disasters in the period 1990 to 2014 (Erman et al., 2019). It is also one of the biggest environmental challenges that informal settlement residents face in Tanzania.

A recent World Bank study established that flood risk in Dar es Salaam goes hand in hand with informality, directly affecting households which have more insecure tenure arrangements (Erman et al., 2019). Flood-affected households also tend to be located in areas with



poor access to services such as low-quality waste collection systems, lack of access to reliable infrastructure, low-quality water and sanitation, and bad drainage systems. An example of such has been documented in Magomeni Suna, Dar es Salaam. This informal settlement is vulnerable to flooding and heat, amongst other environmental crises. A study by John (2020) found that 93% of residents in the informal settlement experienced the impacts of flooding on an annual basis. With limited governmental support, affected households in Tanzania are often left to absorb the costs of flood damage and to protect themselves from future exposure (Erman et al., 2019).

Informal settlement residents respond to vulnerability to flooding with both permanent and temporary solutions. The most common measures to prevent flood damage include the use of sandbags and tree logs, raised pit latrines, installing water outlet pipes, constructing embankments, elevating foundations, and boiling or chemical water treatment (Erman et al., 2019). In the construction phase, residents build their homes at least one metre above ground, construct permanent embankments, and raise their doorsteps to ensure that they are protected from flooding. In instances of severe flooding, additional protective walls are temporarily built for added protection. Despite this, residents are often displaced from their homes and lean on friends and family for housing until water levels reduce.

In her study, John (2020) showed that the larger the household, the more they were vulnerable to flooding, which was attributed to the fact that such households would also be lower-income households. Interestingly the study also found that the same households were better positioned to adapt to flooding because they were able to lean on social networks for support in preparing for floods and in rebuilding to normalise living conditions (John, 2020). In the World Bank study by Erman et al. (2019), a relationship between poverty and flood risk in Dar es Salaam was observed, with results pointing to the poor being disproportionately affected by flooding. The poorer households also tended to settle in areas with high risk, while the flood-affected households were also significantly more food insecure than non-affected households. Furthermore, female-headed households with insecure tenure, residing in areas with low-quality waste collection systems were more likely to be directly affected by floods than male-headed households.



Residents adapt to flooding in the Keko Machungwa informal settlement

Residents in informal settlements across Tanzania have adopted similar coping strategies. Keko Machungwa, an informal settlement located in Temeke Municipality, has not only been affected by environmental changes, but as a wetland, has often been affected by water logging. This informal settlement lacks critical infrastructure. The settlement has uncoordinated stormwater drainage, poor waste management, and no reliable sanitation facilities. During seasons of rain, 25% of the settlement, closest to the valley, often floods severely. The main cause of flooding has been the lack of a proper stormwater drainage system, people encroaching the river valley, and the clogging of existing drainage systems with solid waste (Sakijege et al, 2012). The flooding causes diseases, water and air pollution, and water logging.

Residents of the informal settlement have developed some permanent and temporary strategies to manage flooding. When building homes, doorsteps are raised, protective walls are built, and building foundations are raised to ensure that no water, or as little as possible, floods the building. Pipe outlets are incorporated into the construction to help filter out water. Often residents are also either temporarily displaced or make the choice to find a new home.

These experiences highlight that, there is not one single approach that can be taken to addressing the challenges in informal settlements, and all solutions need to be developed in collaboration with informal settlement dwellers who best understand the dynamics of the settlement. The section to follow considers whether the approaches to addressing these challenges have worked thus far.



5. Are the approaches to informal settlements working?

The context of informal settlements in Tanzania certainly has unique characteristics. One cannot speak about urban informality without speaking about the intricacies of land tenure in Tanzania. As detailed above, the history of urban planning and development control has had varying effects on access to land tenure. The difficulty in accessing tenure through the system in place has made it challenging for the majority of the Tanzanian urban population to access long-term tenure options, but subsequently birthed a system in which people have been able to by-pass government processes to meet their housing needs. The dynamics observed in Tanzania offer a perspective on how formal and informal systems can exist in harmony. There are merits to identifying opportunities to embrace the elements of urban informality which allow life to take place in Tanzania. This presents a challenge for us to think of ways in which we can embrace informality and change our world view, without romanticising the shortcomings of informal settlements. This section of the thought piece adopts a resilience perspective to unpack the role of governments, NGOs, private sector, CBOs and informal settlement dwellers in addressing challenges experienced in Tanzanian informal settlements.

5.1 A resilience approach to urban informality

A critique of existing models for informal settlement resilience has been that focus has largely been placed on the ability of urban residents to adjust to changes in the environment. Resilience is typically explored through the perspective of those affected and vulnerable to a crisis, therefore it can be determined by how people adapt to a crisis (Vertigans et al, 2021). When we determine resilience, we consider how quickly a community is able to respond to a crisis with the aim of normalising their living conditions, and it is observed when there is evidence of community activities and engagement. This can include food gardens, playgrounds, and other activities which encourage the community to engage with each other (Vertigans et al, 2021). While changes in climate negatively disrupt communities, it is during these circumstances of vulnerability that the resilience of residents is observed as they work towards normalising living conditions.

The question that remains is whether the approaches that Tanzania has adopted have improved the living conditions of informal settlement residents and whether the approaches to urban planning are facilitating the

development of sustainable human settlements or further entrenching lack of access to secure tenure for the majority of the population. This is particularly necessary given that the responsibility of ensuring sustainable and liveable human settlements is mandated to governments at a constitutional level.

5.2 The role of government

The provision of housing, infrastructure and socioeconomic services has long been seen as a government responsibility, although in recent decades governments have taken up the role of 'enabler' in meeting the needs of populations. The enabling approach towards informal settlements can be traced back to the World Bank's shift, in the 1980's, away from the upgrading and sites-and-services approach, to a more programmatic-oriented approach that advocated for institutional development and reform. UN-Habitat later introduced the enabling approach in the 1996 Habitat Agenda and popularised it in its first global human settlements report of 2003, the *Challenge of Slums*. This approach requires governments to provide institutional, legislative and financial frameworks to enable individuals and communities working with the private sector to take a leading role in the development of urban housing.

Therefore, when it comes to informal settlements and resilience, the governance role is thus critical as

'enabler' or 'facilitator', as it determines the extent to which other actors can play their roles. Fukuyama (2013:350), defines governance as "a government's ability to make and enforce rules, and to deliver services, regardless of whether that government is democratic or not". Avis (2016:5) further defines urban governance as "how government (local, regional and national) and stakeholders decide how to plan, finance and manage urban areas". This view expands urban governance to involve a range of actors and institutions, including the state, local government, private sector, civil society, and the informal sector, with the relationships among them determining how a city develops. Thus, as an 'enabler', the government has a strategic role of forging partnerships with and among the various stakeholders.

An analysis of the approaches taken to address informality in Tanzania reveals two general forms: *top-down approaches* which are led by the state with little attention to community participation; and *bottom-up approaches* which have been driven by locally based or community-based organisations (Magina, Kyessi and Kombe, 2020). While the majority of approaches have been top-down, evidence points to bottom-up approaches as being more sustainable and successful at driving socio economic upliftment in informal settlements. Facilitating bottom-up approaches requires that urban governance is decentralised and local



autonomy strengthened. However, governance and local autonomy are amongst the major challenges facing informal settlements in Tanzania. Despite the existence of urban governance structures (from the central government to the lowest sub-ward level), many scholars and decision makers in the urban space have argued that with rapid urbanisation, the demands of the urban population have been unmet by these structures (Teyanga and Mrema, 2018). They cite several managerial shortfalls including over-dependence on central government; unguided urban development; non-coherent regulatory frameworks along with rigid and unaffordable standards; lack of coordinated efforts by actors; continued top-down planning with inadequate participation of local citizenry; and high urbanisation amidst poverty (Teyanga and Mrema, 2018).

The centralisation of land-use planning activities has been found to create multiple barriers to efficiency in bureaucratic processes. Research has however highlighted the potential of local autonomy particularly in improving engagements with community stakeholders, further suggesting that with the current financial, management, and executive capacity constraints in government, planning rights could be moderately decentralised and encourage local autonomy, taking advantage of local knowledge (Zhang et al., 2020). It has been argued that despite the inability of local government

units to deal adequately with urban planning and land administration matters, they are in a greater position to do so than the central government, owing to their ability to respond speedily and more affordably. Sub-ward leaders have been known to step in to cover government deficiency in planning, and have the advantage of being able to authenticate land ownership and local residents' identity.

Therefore, this paper argues that to improve the governance of informal settlements, the role of government as enabler requires strengthening in terms of institutional and governance frameworks, as well as legal, policy and planning frameworks. Due attention should be paid to ensuring effective cross-sectoral and multi-governance coordination, and coherent legislative frameworks that have a bearing on informal settlements. Furthermore, the decentralised urban governance structures provide a good basis for bottom-up governance, but requires that local autonomy is strengthened, particularly in terms of decentralising decision making related to planning and devolving resources to lower-level governance structures. However, local governance structures require capacity strengthening not only in urban planning and land administration matters, but in management capabilities. A study by PO-RALG (2021) acknowledged that urban development management in Tanzania could benefit from integrating with existing local administrative structures, and that ward and

mtaa-level institutions—who are at the lowest levels of these structures—provide untapped potential.

The lack of tenure security has been a key issue forming the core of efforts to improve informal settlements, and at the centre of the government's informal settlements regularisation programme since the 2000s. However, although regularisation has been considered the most effective method of formalising informal areas, the regularisation programme has faced challenges in meeting its objectives of regularising land in unplanned areas (Magina, Kyessi and Kombe 2020). There has also been little community involvement in the implementation of regularisation projects leading to sub-standard implementation. Furthermore, despite the importance of RLs in granting security of tenure, access to credit and property value enhancement, there has been a low application rate and uptake by property owners. Detering factors include short licence-holding period, exposure to land-related taxes and rent, complex application process, limited acceptability of the licences by financial institutions, as well as their inferiority to CROs which have stronger security of tenure as they are issued for a much longer lease term (Kusiluka and Chiwambo, 2019). Property owners in informal settlements generally see RLs as a temporary measure with not much value addition to the property as their issuance is not normally accompanied by settlement upgrading (Kusiluka and Chiwambo, 2019).

This paper acknowledges that informal settlements are an integral part of the urban fabric, and as such the need to increase access to security of tenure for their residents, and to shift from providing temporal tenure options to long-term options, remains critical to addressing their urban resilience challenges. Access to secure tenure will increase the ability of residents and communities at large to improve their resilience as they will have greater motivation to do so, including greater access to financing support. Affordability of tenure is key to increasing access, and thus making the entry-point RLs and CROs affordable will help increase their uptake. Greater efforts need to be made in extending access by informal residents to CROs as a more permanent form of tenure and as the ultimate goal of formalisation, as this will greatly improve the value of their properties and thus the financing opportunities available to them. It is notable that the implementation of the regularisation programme has placed greater emphasis on tenure security than the actual upgrading of settlements which would help build resilience at a community-scale. It is thus important that increasing tenure security is done in tandem with actual settlement upgrading, and at the centre of these efforts should be community involvement.

A critical aspect of urban governance relates to land administration and planning.



Notably, the failure of public authorities to provide planned, surveyed and serviced land, has been observed to be driving the growth of informal settlements. Government as an enabler should step up its role to plan for urban growth, and provide the necessary land, infrastructure and services to support the creation of a sustainable living environment for the growing urban population. This should be done from the lens of building urban resilience, which should be mainstreamed in all its initiatives, particularly in addressing the vulnerability of informal settlements. For instance, the provision of green infrastructure can help improve climate adaptation while improving the living environment in informal settlements.

The strides the government has made to address the challenges faced in informal settlements through the development of policy and legislative frameworks are commendable and if well implemented, can greatly enhance the quality of life of residents of informal settlements. However, poor enforcement continues to be a challenge. Furthermore, in the delivery of services, governance challenges such as a lack of accountability and transparency have been found to contribute to and facilitate urban informality despite the availability of policies and regulations for urban development. Thus, strengthening enforcement of urban planning related laws, regulations and frameworks, and improving government accountability and transparency to its citizens in the provision of critical urban services is cardinal.

5.3 The role of communities and NGOs

The transitions in policy and legislation in the late 1900s and early 2000s represent a key value addition by government which enabled non-government actors to take agency to provide necessary support for informal sector actors. Often, the approaches taken to address resilience have leaned on civil society organisations and NGOs at large. NGOs have thus taken the role of offering technical and financial support to those negatively affected by climate-related disasters in informal settlements, and others have offered services to improve resilience (Vertigans et.al. 2021). It is well understood that the majority of informal settlement dwellers are also low-income earners and are often one of the most vulnerable groups in society (Global Centre on Adaptation, 2022).

Vulnerability is further entrenched by the inability to plan long term as a result of insecure tenure and low income. Although people are negatively affected by social, economic and environmental challenges, the evidence has shown that people find innovative solutions to adapt and build resilience (Hati, 2021). Individuals within communities come together often to address challenges through social networks. Social networks refer to the relationships between actors in society, highlighting the ways in which they engage with each other, build relationships, exchange resources and/or experiences, and rely on each other in

times of crisis or need (Morgner, Ambole, Anditi and Githira, 2020). Social networks can therefore be a critical tool necessary to facilitate access to support, services, and opportunities where formal structures for doing so are lacking. Research has shown that social networks are beneficial to implementing both long- and short-term solutions necessary for overcoming challenges, including more resilient, effective, and budget-friendly solutions.

In the case of Magomeni Suna, as documented by John (2020), residents support each other after flooding episodes to clean up and repair damage. Residents also depend on less-affected family and friends to accommodate women and children when family homes are flooded. Given the frequency and growing intensity of floods, this often happens on an annual basis. While informal and unplanned settlements are often the most affected by climate hazards, the strong social networks that develop help communities during the rebuilding process.

This role is one that cannot be undervalued, but should not be positioned as the primary response to addressing the socioeconomic and environmental challenges that affect informal settlement residents. As previously mentioned, the capacity of communities to respond to a crisis often focuses on meeting immediate needs, but shortcomings are then observed in the longer term or once

there is a need to address aggregate shocks (Erman et al. 2019). Individual resources can no longer be stretched further, particularly when financial pressures start mounting. Despite the availability of traditional solutions such as microfinancing to help ease pressure, informal settlement dwellers struggle to access these opportunities. The discussions around finance and access to tenure indicate that informal settlement dwellers in Tanzania are not only unable to access microfinance solutions but are reluctant to do so, given that this does not yield enough benefit to justify taking on a loan. As a result, what we see emerging in the context are different ways of adapting to urban life which are often looked down upon and discouraged because they do not align well with formal systems.

Clearly, social capital is essential and approaches that promote inclusivity through community participation are likely to have greater success in improving the resilience of informal settlements. Morgner et al. (2020) explain that social networks can also be understood through the social ties that connect individuals in a community, each type serving a different purpose. Strong ties create a sense of community and produce social gatekeepers who have strong relationships with many members of the community (Morgner, et al. 2020). On the other hand, weak ties create opportunities for community members to remain connected and engaged with



each other, resulting in quick and simple solutions to general challenges such as creating a community savings pocket for short-term emergencies. The role that NGOs play in strengthening these networks has been observed in Tanzania with a number of organisations often embedding their work in informal settlements by offering solutions and directly engaging with informal settlement dwellers to understand daily living and to collect data.

NGOs are well positioned in that they are able to engage directly with informal settlement dwellers to understand lived experiences, and also well positioned to engage with the government to influence legislation and policy. Both globally, and in Tanzania, NGOs have influenced policies and established platforms for collaboration. They have further been able to contribute to strengthening the agency of dwellers, and furthermore leveraged funding for larger scale upgrading initiatives with the aim of dignifying settlements.

5.4 The role of the private sector

The enabling approach identified the private sector as a key actor in the development of urban housing. As pointed out by Fukuyama (2013), urban governance involves a range of actors beyond the state that include the private sector. This paper has observed the growth of informal settlements, partly attributable to the failure of public authorities to provide planned, surveyed

and serviced land, as well as housing opportunities for the majority of the urban population. This failure has led to the 'minimal state' approach to urban development, where the state has taken a regulatory role, while the private sector takes an active role in service provision.

In the case of Tanzania, government has, through the Urban Planning Act No. 8, 2007, allowed the private and popular sectors to take part in urban development including regularisation of informal settlements to help reduce the widening gap between demand and supply of planned, surveyed and serviced land (Kasala, Burra, & Mwankenja, 2016; Nuhu, Munuo & Mngumi, 2023). Over the past two decades, public private partnerships (PPP) in the delivery of planned, surveyed and serviced land, where the Ministry of Land Housing and Human Settlements Development and local authorities have collaborated with private firms, commercial banks, public pensions funds, and private companies, has resulted in a marked increase in housing supply. PPPs provide mutual benefits. On the one hand, PPPs benefit local authorities through accessing areas for public services freely, saving resources, technology transfer, enhanced revenue collection, the actual delivery of planned and serviced land, and ultimately the controlled expansion of informal settlements. On the other hand, the private sector benefits professionally and financially, while landowners benefit in terms of value

addition on their land, addressing land use conflicts, and having their lands registered.

The regularisation of informal settlements in Tanzania provides opportunities for increased self-builders' incremental investments in informal land and housing, which have been linked with household wealth accumulation processes (Andreasen, Mcgranahan, Kyessi and Kombe, 2020). There are opportunities for the private sector to leverage on the incremental housing approach, which would allow them to provide partly-constructed housing at a far lower and affordable cost, and enable owners to invest overtime in completing their house (Collier, Glaeser, Venables, Blake & Manwaring, 2019). This has been applied with success in informal settlements in countries such as Zimbabwe, Uganda, South Africa, Chile, and Malaysia.

As previously mentioned, private sector investors and financiers avoid investing in the informal sector due to high risks and lack of collateral, leaving informal sector dwellers to rely on community finance mechanisms for upgrading their homes and responding to risks. Through collaboration, private sector and community actors can come together to improve access to finance which includes a range of activities such as saving, raising capital to meet financial obligations, or pooling funds to benefit from easier access to higher capital (Shand, et.al, 2017). Shand et.al

(2017) highlight the growing pressure of urbanisation on urban economies, noting that improving access to finance is necessary irrespective of the innovative solutions that informal settlement residents have created to enable them to contribute to development or meet their basic needs. They recommend that the private sector should consider innovative solutions to providing access to finance, which should be developed through collaborative engagement with informal settlement residents. This is necessary to "mitigate real and perceived risks associated with underserved markets" (Shand, et.al, 2017:6).

Innovation in providing financial services requires an understanding of the target audience and their needs. An important starting point is risk reduction for the urban poor which can be achieved through data analysis on the patterns that show how the urban poor, including informal settlement dwellers, access money, build savings portfolios, and use funds (Ibid.). Data insights can support the curation of savings and investment plans for the urban poor seeking to engage in activities that build their local economies. Building a strong evidence base for formalising tenure for informal settlement dwellers can encourage regularisation. Furthermore, efforts to regularise tenure access helps residents to build collateral which can be used to access further funding for investment in the economy. informal sector. This is necessary to "mitigate real and perceived risks associated



with underserved markets” (Shand, et.al, 2017:6).

While the expanded involvement of the private sector and other actors in urban development have reaped dividends globally, there are criticisms that these have not catered for the poorest segments of the urban population or translated into pro-poor, affordable housing (UN-Habitat, 2015). In the context of Tanzania, partnerships should not absolve the state of its responsibility. It remains critical that the state takes up a greater role in improving informal settlements and addressing their vulnerabilities. Furthermore, it must be noted that the private sector is profit-oriented, and thus often has its focus on the economic benefits while social and environmental aspects are neglected. In the context of building resilience in vulnerable informal settlements, it thus becomes crucial that the public sector puts in place mechanisms to ensure that the private sector gives priority to social and environmental needs, while adopting a resilience lens to investments in informal settlements.

5.5 The role of data as a decision-making tool

Data collection in informal settlements does not happen regularly and is usually a challenge to collect given the urban fabric. Lack of data to adequately plan for and respond to crises thus increases the vulnerability of residents. Active community engagement in this context is necessary to obtain up-to-date

insights regarding the impacts of the environment on residents that can be used in decision making. Often quantitative data is the primary data source used to support decision making and planning but the role of qualitative data is a necessity in the informal sector space where resources and capacity to collect quantitative data is often lacking.

Data which provides insight into understanding why people choose to live in a specific location, understanding how community engagement happens, analysing the social networks, testing solutions which can be improved on, and deciphering what community knowledge is held by residents can often unlock insights into what people need rather than offering solutions derived from theory. Where relocation is not ideal for reasons unrelated to the environmental impacts, learning how life functions in informal settlements can support the development of practical solutions which dignify informal settlement living.



6. Recommendations

The approaches to upgrading informal settlements in Tanzania have progressed over the past few decades, but despite this, various factors continue to impede on the ability of various actors to address informality and its consequences. This has implications on the resilience of these already vulnerable settlements against various shocks and stresses. Concerted efforts by all actors, and enhancement of mechanisms and strategies to improve the living environment in informal settlements will be necessary. Below are some recommendations that could strengthen current strategies and approaches to improving informal settlements.

Government

- Strengthen the role of government as enabler in terms of institutional and governance frameworks; create coherence in legal, policy and planning frameworks; and improve urban planning and land administration.
- Step up the government's role as an enabler to plan and provide the necessary land, infrastructure and services to support urban development, ensuring urban resilience is mainstreamed in all its initiatives.
- Pay attention to ensuring effective vertical and horizontal multi-sectoral and multi-governance coordination.

- Prioritise bottom-up governance approaches by strengthening local autonomy in decision making for planning and urban growth. Doing this requires technical and financial capacity. Furthermore, prioritise devolving decision-making power and resources to empower local governance structures to lead decision-making processes.
- Improve coordination at the local governance level by integrating formalised institutional arrangements with existing local administrative structures at ward and sub-ward level. Officials at this level are critical government actors that have influence over local communities and are carriers of local knowledge.
- Let the government play the leading role in coordinating collaboration between different actors, including the public sector, private sector, NGOs, CBOs, communities and citizens.

Communities and NGOs

- Provide support for the co-creation of solutions to urban informality challenges by including CSOs and CBOs in partnerships for community-led planning and development of informal areas.
- Provide greater support with more funding to NGOs with a proven track record for improving resilience in communities to address informality.



- Leverage the convening power of NGOs to bring together various actors (including CSOs and community leaders) to map social capital opportunities that can improve community resilience.
- Collaborate with local community leaders in data collection to leverage local knowledge, and build a centralised database which captures basic data on informal settlement such as population, household typologies, water and sanitation, waste, and quality of life.

Private sector

- Involve the private sector in informal settlement upgrading initiatives by inviting them into strategic planning discussions.
- Pursue PPPs that provide mutual benefits to local authorities, the private sector, and residents of informal settlements.
- Ensure the private sector leverages flexible development methods employed by informal settlement dwellers, such as the incremental housing approach to provide affordable options for housing and service delivery.
- Encourage the private sector to consider innovative solutions to providing access to finance, which should be developed through collaborative engagement with informal settlement residents.
- The public sector should establish mechanisms to ensure that the

private sector gives priority to social and environmental needs and adopts a resilience lens.

Mechanisms for informal settlement upgrading

- Establish more flexible regulations for informal and unplanned settlements that facilitate long-term interventions. This requires acknowledging informal settlements as an integral part of the urban fabric, and reframing perspectives of the formal and informal dichotomy by incorporating aspects of informality that work into mainstream planning.
- Strengthen enforcement of urban planning related laws, regulations and frameworks. This may include training more planning professionals and improving local government technical capacities for effective and efficient planning and implementation. Additionally, sensitise communities to adjust their perceptions on the importance of urban planning rules and regulations.
- Increase access to long-term security of tenure by making the entry-point RLs and the CROs affordable, and shifting from providing temporal tenure options to long-term options. Increasing tenure security should be done in tandem with actual settlement upgrading.
- Encourage private sector actors to invest in appropriate areas adjacent to informal settlements. Revenue

from rates derived by the government can be reallocated to informal settlement upgrading initiatives.

- Encourage the private sector to implement flexible and affordable methods for housing development, infrastructure improvements and service delivery that leverage on current informal resident approaches such as incremental housing.
- Support collaboration amongst socio-political structures at the community level to ensure more bottom-up and inclusive approaches to improving the living environment in informal settlements.
- Build socio-political infrastructure by strengthening socio-political norms, values, rules, and relationships that underpin existing efforts towards inclusive and resilient informal settlements.
- Invest in innovative financial solutions that address the impacts of aggregate shocks, as opposed to leaving communities to their individualised resilience-building efforts to address short-term impacts.
- Mainstream urban resilience in policies, legislative frameworks and urban plans to improve the living environment in informal settlements
- Further invest in and mainstream community-based informal settlement upgrading initiatives, given that these have registered success where they have been implemented.



7. Conclusion

Rapid urbanisation and population growth in Tanzanian cities as in much of SSA has strained planning, land management, infrastructure, and service provision, fuelling the expansion of informal settlements. These are mostly located in areas vulnerable to environmental and climate-related challenges, and lacking in tenure security, and essential infrastructure and service provision. Informal settlements have historically been frowned upon and yet they house a significant portion of the urban population. The resilience of these settlements thus poses a significant challenge to achieving sustainable urban environments. This paper has thus argued that informal settlements should be normalised and accepted as integral parts of the urban fabric and their resilience prioritised. The regularisation of informal settlements by the Tanzanian government provides an opportunity to improve these settlements using an urban resilience lens.

This paper has argued that urban governance is a collective effort, and greater impact can be achieved through innovative and coordinated responses by the government, working in partnership with non-state actors to build resilience in informal settlements. Therefore, the role of the government as 'enabler' or 'facilitator' is critical for other actors to effectively play their roles. This includes establishing more

flexible regulations for informal and unplanned settlements that facilitate long-term interventions, and mainstreaming urban resilience in policies, legislative frameworks and urban plans to improve the living environment in informal settlements. Communities are essential social capital, and their knowledge, strong social networks and socio-political structures, as well as their abilities to mobilise and rebuild when faced with crises, should be leveraged for more bottom-up and inclusive approaches. NGOs are well-positioned to establish platforms for collaboration in communities, and positively influence policies. Private sector has an important role to play in in service provision through investments and PPPs, and in providing innovative financing solutions co-created with communities, but their investments must be pro-poor, and prioritise social and environmental aspects. Additionally, data is a critical decision-making tool, and active community engagement in its collection is necessary to obtain up-to-date insights into their vulnerabilities.



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