

Housing: Domain report

Miriam Maina, Ezana Haddis
Weldeghebrael, Alexandre
Apsan Frediani and Ola Uduku

July 2024

Miriam Maina

Consultant, Pegasys Consulting, South Africa

Ezana Haddis Weldeghebrael

Research Fellow, University of Birmingham, UK

Alexandre Apsan Frediani

Principal Researcher, Human Settlements Group, International Institute for Environment and Development (IIED), UK

Ola Uduku

Head of School, Liverpool School of Architecture, UK

Acknowledgements

We would like to acknowledge the insightful and detailed work generated by the housing domain researchers from the seven cities examined in the report, as well as their participation in the various workshops and research exchange meetings throughout the project. These included:

Accra: Braimah Rabiou Farouk, Samuel B Biitir, Rebecca Adjewi

Addis Ababa: Tilahun Fekade, Ezana Amdework

Dar es Salaam: Alphonse G Kyessi, Tatu Mtwangi-Limbumba

Freetown: Joseph Macarthy, Ansumana Tarawally

Lagos: Basirat Oyalowo

Lilongwe: Evance Mwathunga, Jimmy Gondwe, Mayamiko Chibowa, Grace Yambeni, Kondwani Chikadza

Nairobi: Linda Nkatha

Abstract

The housing challenge in African cities is far from homogenous. Different countries and regions are experiencing different patterns to their urban transition, themselves shaped by diverse historical, social, political and economic trajectories. This report outlines the findings of the housing domain research of the African Cities Research Consortium, which was implemented in seven African cities: Accra, Ghana; Addis Ababa, Ethiopia; Dar es Salaam, Tanzania; Freetown, Sierra Leone; Lagos, Nigeria; Lilongwe, Malawi; and Nairobi, Kenya.

The research reiterates the need for: housing reform coalitions to focus on addressing **governance and institutional coordination** within the public sector; the stabilisation of and support for **urban rental markets**; and addressing intersectional **challenges in the building and construction sector**. The report highlights that for these three agendas to be advanced, housing reform needs to address multiple and diverse actors, such as government and private sector organisations, institutional bodies, civil society,

local community interest groups, and their intersectional interests in housing provision. Therefore, these agendas emerged as critical for the transformation of housing production systems and, by extension, human settlements: for driving the achievement of housing justice for marginalised communities.

Keywords: Housing justice, housing value chain, rental housing, construction and building industry

Cite this paper as:

Maina, M, Weldeghebrael, EH, Frediani, AA and Uduku, O (2024). "Housing: Domain report". ACRC Working Paper 2024-18. Manchester: African Cities Research Consortium, The University of Manchester. Available online: www.african-cities.org

ISBN: 978-1-915163-17-2

The African Cities Research Consortium is funded by UK International Development. The views expressed here do not necessarily reflect the UK government's official policies.



Acronyms

ACRC	African Cities Research Consortium
ABMT	Alternative building and materials technology
CBD	Central business district
CBO	Community-based organisation
GAMA	Greater Accra Metropolitan Area (GAMA)
IHDP	Integrated Housing Development Program
KNBS	Kenya National Bureau of Statistics
LRGs	Local and regional governments
NGO	Non-governmental organisation
NUPs	National urban policies
OECD	Organisation of Economic Community Development
TVET/VETA	Technical and Vocational Education

1. Executive summary

The African continent is rapidly urbanising, and it is projected that by 2050, African cities will become home to an additional 950 million people (OECD and SWAC, 2020). This rapid population growth in Africa's towns and secondary cities has been accompanied by the explosion of informally designed housing, as formal housing supply markets and systems struggle to accommodate the growing demand for affordable housing. The housing challenge, or crisis, in many urban areas therefore represents the inability of housing delivery systems to supply enough units to meet ever-growing demands and highlights the scale of deterioration in quality of existing urban housing stock. This is further complicated by growing challenges created through poor governance, limited resources within local authorities, planetary changes emerging from climate-related factors, such as higher levels of flooding, and the scarcity of local materials that badly affect housing construction.

The housing challenge in African cities is, however, far from homogenous. Different countries and regions are experiencing different patterns to their urban transition, themselves shaped by diverse historical, social, political and economic trajectories. This has resulted a wide range of housing challenges and experiences. Policy responses have also varied from context to context, with diverse outcomes, generating different housing conditions in each country. For example, while northern African countries have high levels of urbanisation and the lowest rate of growth within the region, these countries have also seen a decline in the absolute numbers of informal settlement dwellers over the past two decades, due to the implementation of large-scale housing programmes. In West Africa, on the other hand, land ownership remains a major hindrance to housing delivery, as historic landowners can challenge government policies to distribute and give access to land, and enable housing possibilities for low-income households.

Previous research on housing and housing conditions in Africa's towns and cities has highlighted a variety of issues, primarily focused on: the mismatch between housing demand and existing supply ecosystems; gaps between local incomes and house affordability; the role of the housing sector in boosting economic growth (World Bank Group, 2015); and the efficacy and efficiency of various policy responses in different countries (UN-HABITAT, 2010; World Bank Group 2015). This research report has also outlined several characteristics and challenges facing the housing sector across the continent, articulating the need to improve the quality of informally delivered housing, as well as to deepen the reach of the formal housing and housing finance sectors.

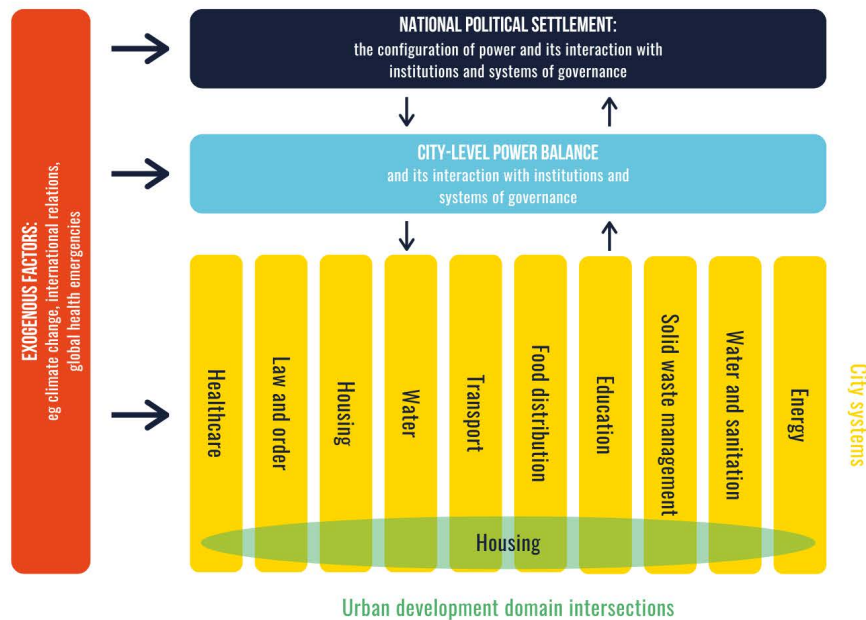
Recognised challenges in housing include the limited affordability of existing formal housing stock, which forces many low- and middle-income households to find alternative solutions through informal processes and systems. The affordability challenge is exacerbated by the fact that government subsidies or programmes for producers and consumers fail to effectively address existing systemic issues, including the affordability constraints associated with formal housing. Formal construction costs are equally affected by the costs of acquiring building materials, labour shortages and

restrictive building regulations. Housing and human settlement developments are further hampered by delays in land administration and regulation systems, which then constrains investment and market exchange. With low- and middle-income households unable to access or afford formal housing finance, only the upper-middle classes and those on high incomes can secure access to finance to purchase or construct their own homes. The high interest costs of housing loans, and the poor performance of the microfinance sector, in the countries where it exists, has meant that it remains problematic for those on low incomes to gain access to finances to enable them have improved access to better housing.

The research findings presented here highlights the interlinked nature of the housing production ecosystems and value chains. Housing production ecosystems refer to the links between materials procurement, their use in building systems and the labour involved in their production and use. This report argues that existing housing research and practice fails to engage with the power relations and asymmetries that shape the nature of the housing sector in different contexts. Current housing research also only engages minimally with the impacts of prolonged inequalities in the housing sector, the deepened social, spatial and economic inequalities, gender imbalances, urban poverty, and the effects of climate change of current building materials. Finally, existing research and practice fails to unpack the housing experience for different actors—including low-income households and those with different characteristics, from gender and age to nationality – as well as the hybrid (formal and informal) nature of actors' access to networks.

The housing domain research seeks to contribute to ACRC's knowledge base through empirical case studies that explore the multiple modalities of housing production across African cities. It has been undertaken as part of a complementary series of 'domain' studies. Domains comprise one of the three integrated components of the ACRC's holistic framework for analysing urban development in Africa – the other two being **politics** and **systems**. Within this framework, the domains component looks at distinct fields of discourse, policy and practice that have formed around complex, intersystemic development challenges (such as "housing") in cities, and analyses how the actors (political, bureaucratic, professional and popular) engaged in these fields collaborate and/or compete for authority. The politics component uses "political settlements" theory to model how power is configured at national and city levels, and then analyses how these configurations of power shape (and are shaped by) urban development processes in a given city. The systems component analyses the functioning of the key systems (composed of physical infrastructure and people organised in various ways) that sustain and/or improve urban life in cities. Figure 1 below gives an indication of how these three components come together.

Figure 1: ACRC's conceptual framework

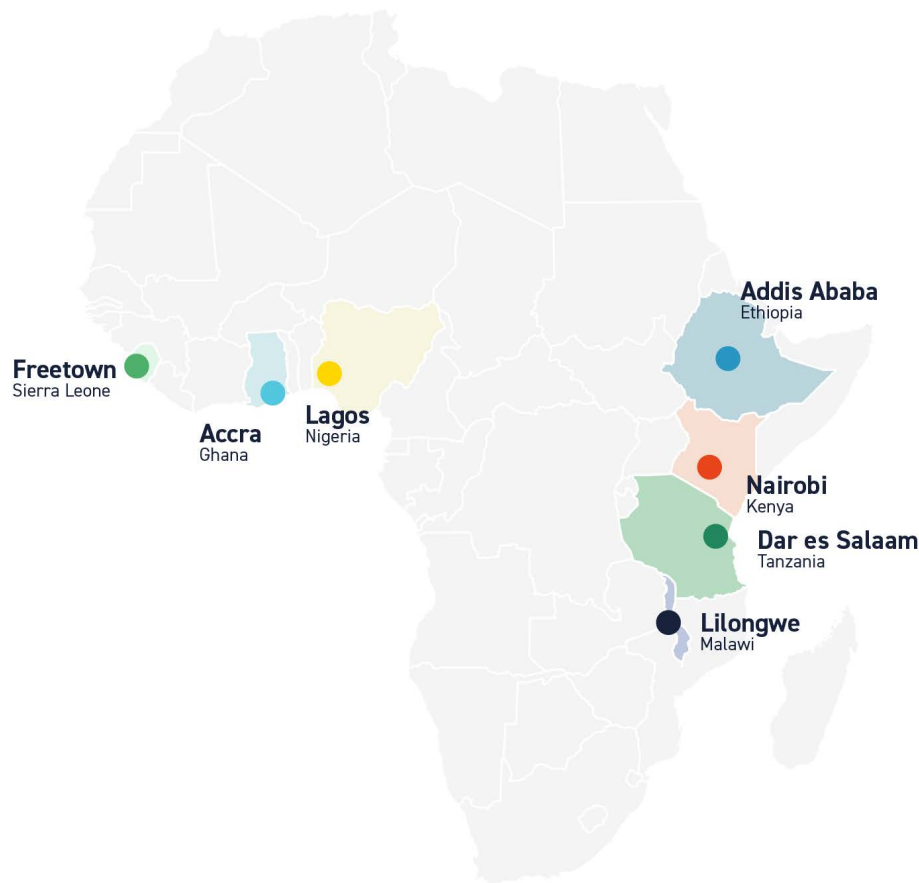


This report highlights the interconnected nature of these components and has sought to complement existing studies that focus on informal housing, land policy and infrastructure in African and other cities, by engaging with the social, political and ecological analysis of the chains of housing production in African cities. As with other reports, it also argues that the influence of local politics and policies cannot be underestimated in the framing of the housing crisis across Africa, and in the case study cities this report has engaged.

The research report also highlights how inefficiencies in city systems contribute to a rise in inequality and discrimination, and hamper access to housing justice. As a consequence, the report outlines how these housing injustices deepens the unequal distribution of environmental burdens of urbanisation trajectories across the region, as poor urban residents are continuously and disproportionately exposed to risks caused by inadequate housing, such as flooding, landslides among others.

The housing domain research was implemented in seven African cities: Addis Ababa, Ethiopia; Accra, Ghana; Dar es Salaam, Tanzania; Freetown, Sierra Leone; Lagos, Nigeria; Lilongwe, Malawi; and Nairobi, Kenya (see Figure 2). This report presents a cross-city analysis of key issues emerging within the housing domain, and from the fieldwork undertaken in the cities. Research was conducted mainly through in-depth, politically and historically informed case studies, selected by local research leads and relevant stakeholders, in line with specific city contexts. The application of an overall shared conceptual and methodological approach enabled the collation of findings that were unique to the cities, but that could also support comparative analysis.

Figure 2: Housing domain cities



In line with the United Nations New Urban Agenda's (UN-Habitat, 2017) commitment to fulfil the right to adequate housing, we conceptualise housing as a fundamental human right. Human settlements, including all forms of housing and shelter are a critical factor for the delivery of sustainable urban development. Improved shelter and quality of life for all of Africa's urban population are integral in enhancing national socioeconomic development and low-carbon urban transitions.

The research concludes by reiterating the need for housing reform coalitions to focus on:

1. Addressing governance and institutional coordination within the public sector;
2. Stabilisation and support for urban rental markets; and
3. Intersectional challenges in the building and construction sector.

These three issues emerged as critical for the transformation of housing production systems and, by extension, human settlements: for driving the achievement of housing justice for marginalised communities.

2. Introduction

Housing plays a wide range of roles and functions for households, cities, countries, investment communities and global economies. Its multiple roles imply that housing is conceptualised from multiple lenses and perspectives, ranging from functional, political-economic and human rights perspectives, to capability approaches. Housing is now understood as a fundamental human right, and a pathway to the achievement of multiple global sustainable development goals and aspirations. Global declarations, such as the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the Sustainable Development Goals, highlight these functions. Housing provision should provide households with safe, adequate shelter, while also enhancing the production of safe, resilient and sustainable cities. Additionally, adequate housing is expected to provide households with access to clean water and sanitation, and to affordable and clean energy; as well as improve poverty reduction, with optimal access to good health and wellbeing, quality education, enhanced gender equality, decent work and economic growth; and reduced urban inequalities.

Human settlements are also critical components within an urban system, with housing playing a central role in urban development. The production of housing also connects multiple sectors and value chains, significantly affecting local labour markets, regional and national economic systems. Housing production requires efficiently functioning land access, land exchange and registration ecosystems; access to critical infrastructure, including water, electricity, sewerage and stormwater; functioning systems of spatial planning, development control and urban development investment; an efficient and resourced construction and building materials sector; and access to various forms of finance for construction and for end-users. Access to housing thus is a pre-condition for access to employment, education, health and social services, requiring coordinated urban development.

A dominant perception of housing relates to the socioeconomic role it plays, and its role in structuring national and global economies. A well-functioning housing sector is critical to the overall health of the economy. Adequate housing stock creates a balance between housing demand and supply, enabling labour mobility within an economy. Housing also plays a critical role in affecting household investments and finance, which ultimately affects national economic performance. Housing precarity generates regular maintenance costs, reducing households' disposable income, and therefore compromising the ability of households to invest in livelihood activities, as well as other services and goods. Therefore, access to adequate housing plays a critical role in stimulating local and national economic development as well as advancing human development (Frediani et al., 2023).

Policy approaches to housing present a mix of rights-based, socioeconomic and capability approaches. The right to housing is enshrined in many countries' constitutions, or within the housing legislative framework. Traditionally, however, the housing crisis in Africa is depicted through the gap in housing units and framed against

continually growing demand. From this perspective, housing policies and programmes have been oriented towards enhancing the supply of housing stock, through subsidies, direct supply or other strategies. This, however, also enhances views of housing as a market commodity, whose supply can be generated through market mechanisms. As such, interventions in housing tend to focus on market solutions, steering away from a rights discourse and a justice-based orientation.

These supply-oriented housing programmes have, however, failed to provide adequate housing to meet the growing demand within African cities. Households unable to access housing through traditional market structures are therefore forced to reside in low-quality housing or informal settlements, compounding the challenges that policymakers must address. National housing policy interventions – for example, those promoting the provision of affordable housing or stimulating private sector real estate developments – have, however, retained their focus on reducing this quantitative gap between demand and supply through the increased supply of housing units.

A critique of this perspective to housing is that this approach tends to increase the commodification of housing and the subsequent marginalisation of households that cannot access housing through formal market systems. This is apparent through the absence of rights-based housing policies in many African countries, the general withdrawal of national and local government agencies from housing sector interventions, or the continued supply of housing units that are unaffordable for the majority of urban households. These market-supplied solutions tend to be unaffordable and inaccessible to many low- and middle-income households. Additionally, market-focused solutions (such as mortgage-backed house purchases, formal lending, and finance) exclude residents working in cash-dependent informal sectors, or who have unreliable or undocumented incomes. Households locked out of these systems are then forced to rely on their own savings, or borrowing from family, friends, or local savings schemes. These resources are incremental. Adaptable, and easily accessible, incremental finance has been critical to enable informal housing developments. Having said that, housing suppliers and financiers have been also unable to scale and support the diverse housing needs of urban residents across cities.

More importantly, by focusing on formal market solutions, many governments tend to ignore or vilify existing housing solutions developed by residents. As such, informally developed residential areas – which house the bulk of the urban population – are neglected, deprived of social services and utilities, and often continually under the threat of demolition. This emphasis on formal market solutions by governments has not only ignored the efforts, investments and opportunities generated by informal housing developments but also criminalised them, contributing to systemic housing discrimination and exclusion.

It is within this context that the current housing literature has called for new conceptualisations of the housing crisis that are able to support new policy and programming directions. Concepts such as “housing justice”, “housing as commons”, “housing as infrastructure of care” emphasise the need to recognise a diverse set of

housing practices, including everyday, informal as well as community-led housing. They also highlight the fundamental role that governments need to play to provide and guarantee the conditions within which these practices can advance more equitable and sustainable access to adequate housing (Cociña and Frediani, 2024).

Building on these conversations, the ACRC housing domain research was undertaken in seven African cities, seeking to explore factors shaping housing production and development within these cities. Drawing on the ACRC theoretical framework, the housing domain research methodology explores the power relations embedded in the processes of planning, designing, constructing and managing housing. This methodology draws on Mitlin's (2022) application of political settlements methodology to examine the politics of shelter, where Mitlin argues that the "analysis of the politics of decision-making related to shelter is critical to understanding shelter outcomes and improving shelter provision as well as offering insights into relations between state and citizens more generally" (2022: 1).

The housing domain research takes a systemic approach to examine actors, practices, norms and procedures embedded in housing systems, with the objective of exploring their implications for issues of justice and environmental sustainability. The research was undertaken in the cities of Accra, Addis Ababa, Dar es Salaam, Freetown, Lagos, Lilongwe and Nairobi. These cities offer a wide range of different insights into how housing markets are functioning across different urbanising contexts, and in different social, economic, political and environmental conditions. The research presents different case studies of housing production through a range of modalities, highlighting the challenges affecting the production value chains within the cities. In each city, value chains of these different case studies were identified, and the research reveals the relations associated to them. Through this value chain analysis, the research also interrogates how gender relations, climate change and finance play a role in the different stages of the chain of the housing case studies. As a result, the value chain analyses has begun to reveal the systemic nature of the housing domain in each city, demonstrating that even without explicit housing policy and programmes, current housing conditions are a result of political, social and economic choices and dynamics, driven by as well as affecting existing political interests.

By presenting multiple case studies of different modes of housing production, the case studies allow insights into linkages and blockages across the land, housing production and urban development ecosystems, and how these constrain effective housing production. These illuminate the need for more intricate connections across these sectors, for effective urban development. The research report also maps the range of actors, roles and decision support institutions along the different components of the value chain, highlighting critical governance gaps, especially at the local or sub-national government levels. Similarly, in showing how different actors pursue multiple pathways along the housing production value chain, the research expands our understanding of the politics and power dynamics that shape housing and urban production.

As rapidly urbanising places, African cities are significant in shaping global thinking on housing, housing justice and sustainable urban development. The urbanising trajectory of African cities is unique to the rest of the world, and this has created new challenges and complexities, due to rapid urbanisation, urban growth, the urbanisation of poverty and inequality, and the housing justice challenges created through the continued production of human settlements exposed to various environmental and social risks. These are further compounded by shifts in global economies, climate change and climate variability.

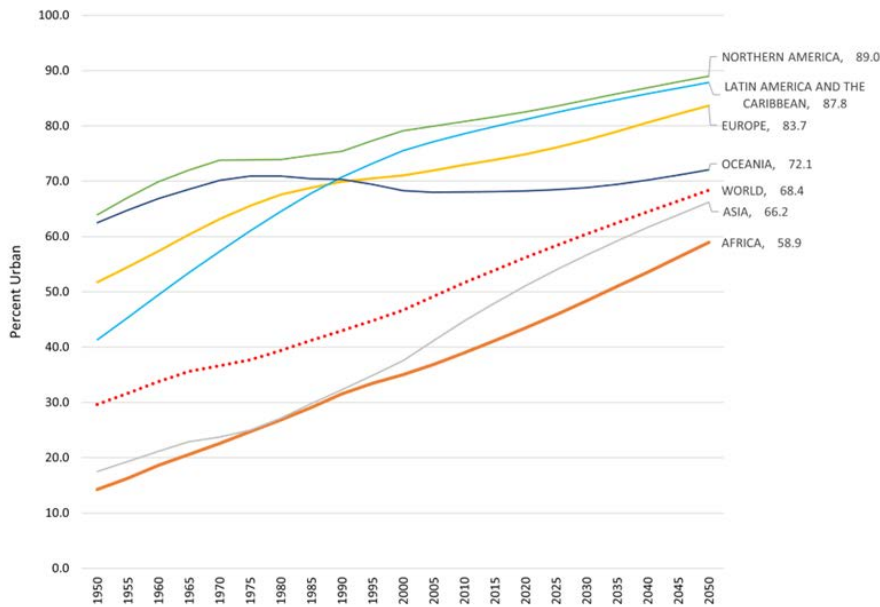
This report presents a cross-cutting analysis of the findings emerging from this research. It begins by outlining a summary of existing literature within the domain and using a value chain perspective to explore the challenges and bottlenecks facing various modes of housing development across the cities. It then discusses the conceptual approach and methodology, before presenting a cross-cutting analysis of key findings, highlighting the role of streamlined governance and institutional coordination, the need to support existing human settlements and, in particular, rental markets. The final section discusses the potential for supporting innovations in building materials and the construction sector as a means for enhancing sustainability and urban resilience.

3. Summary of prior knowledge

Although many countries in Africa remain predominantly rural in demographics, African cities are undergoing a significant increase in population, transforming the continent's urban landscapes in unprecedented ways. Africa is going through a massive urban transition, which has direct implications for various areas of urban growth and transformation, as well as urban life. Despite being the least urbanised continent in the world, the urban growth rates of most African nations are now the fastest in the world. While Africa's urban population was estimated to be 15% of the continent's population in 1960, by 2015, this had increased to 50%. By 2050, it is expected that 60% of Africa's population will be living in urban areas (UN-HABITAT, 2015). Global data projects that over half of Africa's population will be residing in urban areas by 2030 (see Figure 3). Over recent decades this rapid urbanisation pattern has had a direct effect on Africa's cities, which have multiplied in size and urban density.¹ By 2050, Africa will hold the second largest share of the global urban population after Asia.

¹ United Nations, Department of Economic and Social Affairs, Population Division (2019). World Urbanization Prospects: The 2018 Revision, custom data acquired via [website](#).

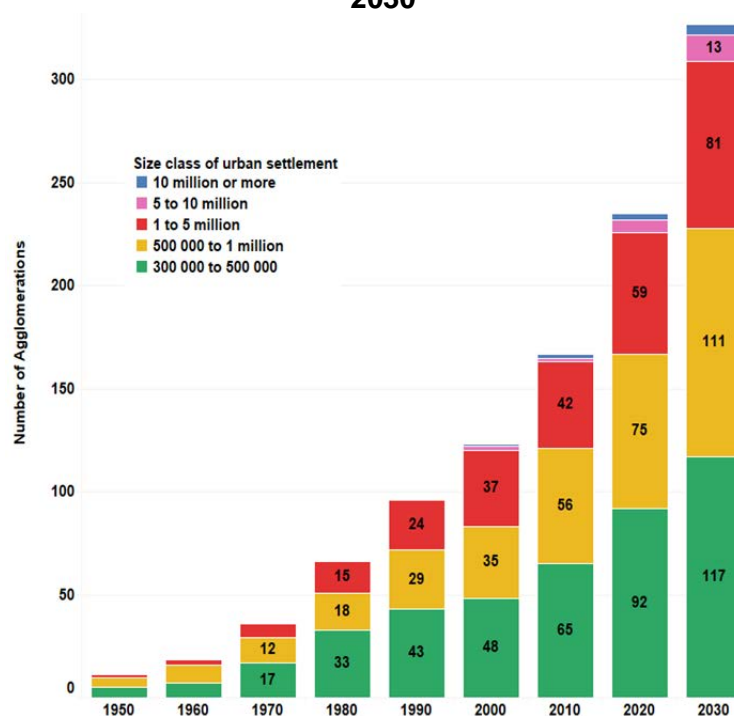
Figure 3: Percentage of the population that is urban, by region



Source: United Nations, Department of Economic and Social Affairs (2019).

The patterns of urbanisation across Africa are also notably distinct. While some key large cities are experiencing notable growth, it is in secondary cities that most absolute urban growth is taking place (OECD and SWAC, 2020). As Figure 4 below illustrates, while more residents are expected to reside in large cities and metropolitan areas, there has been a rapid growth in the number of small and medium-size towns (with populations between 300,000 and 1 million). The population within these areas is also projected to increase.

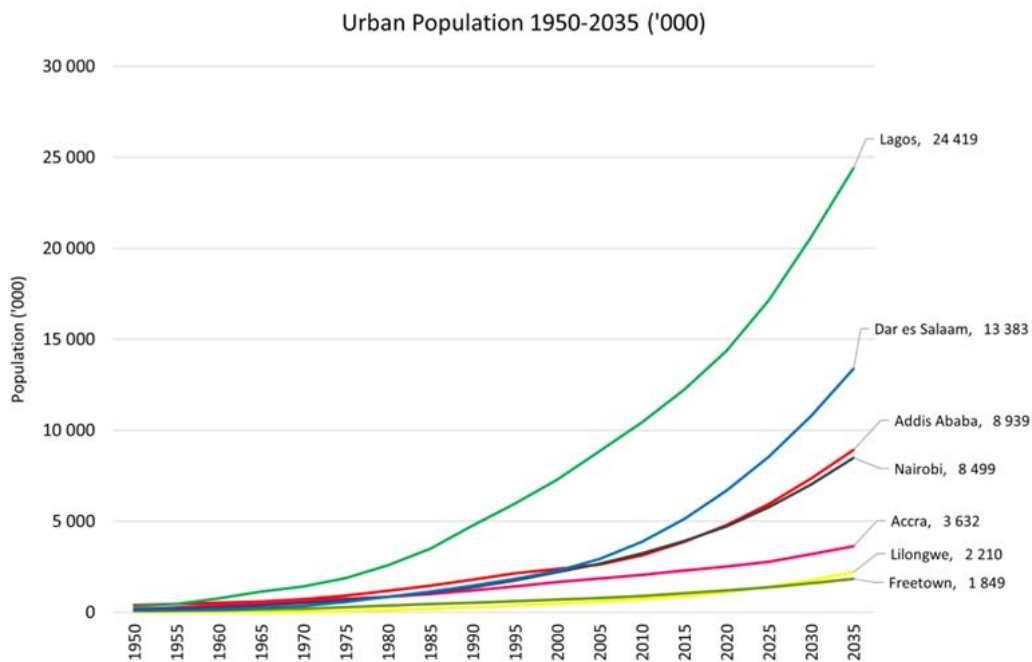
Figure 4: Projected growth of urban agglomerations in Africa by size class: 1950-2030



With data from United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization Prospects: The 2018 Revision, Online Edition.

Global data on projected urban growth in the cities within the housing domain research presented similar growth trends to other African cities. As presented in Figure 5 below, the rate of growth and size of the regions vary widely. The greater metropolitan regions of Lagos are already identified as a global megacity (United Nations, Department of Economic and Social Affairs, 2019; Uduku and Lawanson, 2022), whereas Dar es Salaam is projected to grow into a megacity, with over 10 million residents, by 2035. Irrespective of city size, research across all cities presented similar drivers for the continued rate of urban growth. As a consequence for all cities, increased population created high demand for housing, especially for low- and middle-income residents.

Figure 5: Projected urban population in ACRC housing domain cities



Source: United Nations, Department of Economic and Social Affairs (2019).

Some of the drivers of urbanisation in Africa include rural-to-urban migration as well as natural population growth. People from rural areas are drawn to cities in search of better livelihoods, and improved access to education, healthcare and other essential services. Cities also provide better access to healthcare, pipe borne water, sanitation, mobile phone networks and basic education; for these reasons families are opting to settle in cities (OECD/European Commission, 2020). This, and also the natural growth of Africa's cities, has led to a youthful demographic composition of the continent's cities, with a significant proportion of the population under the age of 25. Harnessing the potential of this young population through adequate education, skills training and employment opportunities is crucial for sustainable urban development. Housing domain cities researched were varied in size and demographic character.

However, while increased urbanisation presents opportunities in African cities, it also posed significant challenges. The rapid growth has strained existing infrastructure and public services, leading to inadequate housing, limited access to clean water, sanitation issues and overburdened transportation systems. This urban growth has been accompanied by the rapid increase of population living in informal housing across the continent, with formal systems of housing production and delivery unable to deliver adequate quantities of affordable housing for this growing demand, and with local governments across the continent lacking the capacity to coordinate urban growth and development (Bandauko et al., 2021). This gap between growing demand for adequate and affordable housing across the continent and supply ecosystems has generated an ongoing housing crisis in most African countries (Potts, 2020).

Africa's housing crisis is, however, far from a homogenous phenomenon. Housing conditions and experiences in each country have been shaped by their respective histories, their patterns of urbanisation, and the different types of policy responses in each context. While, for example, Northern African countries have some of the highest levels of urbanisation and lowest rates of growth within the region, they have also had a decrease in the absolute numbers of informal settlement dwellers over the past two decades (Bredenoord and Van Lindert, 2014). This is due to the implementation of large-scale housing programmes (Bredenoord and Van Lindert, 2014). Different countries have deployed varied policy responses to address the housing needs created by their respective patterns of urbanisation, depending on context (Bredenoord and Van Lindert, 2014).

This section presents an overview of the literature on housing and housing production in African cities. There is a large and growing body of research that effectively documents the complexity and diversity of the domain, and the persistent housing challenge in many countries. These sources also capture the interlinked factors that hinder or enhance efficient housing delivery. In an assessment of three decades of research on housing in Africa, Gbadegesin and Marais (2020) observe that the bulk of research remains focused on empirically articulating the realities on the ground, in an effort to grapple with inherent challenges within the domain, while also proposing avenues for intervention.

Research on housing takes different perspectives. There is housing research which is focused on household affordability that highlights the inability of households to afford formally constructed housing (UN-Habitat, 2010) and the emergent forms of housing delivery and production that rise to meet this “gap”, crossing the spectrum from shack settlements, incrementally built housing, and a wide range of rental housing options that may or may not be authorised or approved. At a macro-scale, other research perspectives highlight the role of housing and the housing sector in shaping and boosting economic growth and vitality, or supply-side sectoral issues that affect housing production ecosystems (World Bank Group, 2015). Another body of research focuses on tracking developments in finance – where it is widely understood that the majority of households are still unable to access formal housing finance options

(Centre for Affordable Housing Finance in Africa, 2021). At the same time, sources have highlighted the value and range of microfinance products that have created opportunities for marginalised groups to access quality housing. Other less explored areas on end-user finance are on the role of remittances on shaping housing investments, and on enhancing household budgets.

In assessing government intervention through policies, programmes and subsidies aimed at producers and consumers, research highlights how evolving government policy and intervention programmes are framed and informed by shifting concepts and ideas at the global scale, but are also structured by national political ideologies, systems of governance and local political economy (Buckley et al., 2016; Ward, 2012). The effectiveness or efficacy of existing policies at the local level could therefore vary, depending on context, implementation capacity, or mismatch between policy aspirations and local realities, as Arku (2009) demonstrates in the case of Ghana. A wide body of research highlights the myriad of ways in which interventions fail to address at scale the multi-faceted challenges and constraints facing housing markets in different contexts including (Arku et al., 2016; Huchzermeyer and Misselwitz, 2016; Mwathunga and Donaldson, 2018; Mwau and Sverdlik, 2020). These papers all highlight the need for housing and related policies to work in synchronicity to address this diversity of issues facing the sector, and the pivotal role of local and regional governments (LRGs) in shaping housing production and conditions with their respective contexts (UCLG, 2019; Sette Whitaker Ferreira et al., 2020).

In line with other global policies on urbanisation, resilience and sustainable development, the United Nations New Urban Agenda (UN-Habitat, 2017) acknowledges the multiple roles and functions served and met by housing or shelter, and by human settlements in the creation of equitable, sustainable, inclusive and productive towns and cities. It also emphasises a useful link between existing urban areas and built environment forms and the systems of planning, finance, development and governance that create or sustain them.

The sources provide insights along the housing production, exchange and consumption value chains, highlighting the power asymmetries involved in the housing sector and the broader built environment ecosystem. Additionally, by focusing on specific components of the housing market – as examples, informal settlements upgrading or formal housing finance solutions – others fail to reflect on the system-wide configurations of built-environment production, and how these intersect with social, political, spatial and economic contexts to reproduce urban inequality, deepening poverty and contribute to worsening climate change dynamics.

There are still existing opportunities for housing research to unpack the ways through which housing production systems function, as a sub-component of the broader urban ecosystem; and how processes embedded in the functioning of housing markets and production systems contribute to marginalisation, discrimination and exclusion in African cities. There are also opportunities to deepen analysis of how poorly functioning housing markets shape the distribution of environmental burdens of urbanisation

across the region. Similarly, there is a need to understand further the various housing pathways adopted by diverse categorisations of urban residents to meet housing and shelter needs, including but not limited to, low-income residents, migrants, as well as different age groups and along individuals' life cycles, and across multiple household configurations.

3.1. Key concepts

Housing fulfils diverse roles and functions, depending on perspective. Satterthwaite (2020: 3) observes that housing could be viewed as:

“a need, a right, a commodity, an asset, a conduit to basic services and to legal status, a base for employment/working from home, an investment or security for loans, an economic stimulus, and an employment creator”.

In policy and programmes, definitions of housing, affordability or adequacy are critical, as they structure and shape modes and approaches of intervention. While, for example, definitions of housing and adequacy tend to focus on the unit (including unit size, amenities and services), these could be expanded to include households' ability to access social and community amenities and infrastructure as part of the right to housing (ibid). Research on housing, human settlements and informality across the continent has also highlighted the continued need to challenge the understanding of formality and informality within the housing domain as a strict binary. What is clear is that that the 'formal' and the 'informal' exist as part of a wide spectrum of residential possibilities which are essential in the production of contemporary urban spaces (Mitlin and Bartlett, 2020: 319).

Policies, programmes and interventions seeking to expand housing access within a rights-based environment would therefore need to appreciate this spectrum, and appreciate the interlinked elements that contribute to lack of affordability across income groups. Affordability is generally defined as the cost of housing or its rental being no more than a maximum of 30% of a household's income. Mitlin and Bartlett (2020) argue that many households lack access to formal finance, often having to rely on savings, or informal, community savings and other group-determined forms of finance, which means that the cost of housing is often more than 30% of their household income.

Research on housing production within African cities highlights the prevalence of dweller-initiated modes of housing delivery (Bredenoord and Van Lindert, 2014). From a broader value-chain perspective, there is still, however, a need to unpack the housing production value chain across multiple production modalities and how these vary across Africa's towns and cities. Another key concept explored through the research were the different modalities of housing production, which include: dweller-initiated housing production; private-led production; state-driven production; and civic-led practices. As we present in the findings section, these modalities are not always independent. The different modalities, however, vary at the stages of housing production, drawing from diverse sources of finance and investment. However, they

face similar challenges in their reliance on shared systems of land and spatial governance, access to labour and related skills, infrastructure, and access to building materials. Analysis of these multiple modes of housing production from a value chain perspective therefore enabled an appreciation of the challenges and bottlenecks facing the broader human settlements sector. They also enable a richer view of the complex ecosystem of actors, agencies, roles, functions and power relationships within the housing domain.

There have been a diverse set of government-led initiatives focused on housing production, particularly focused on to creating affordable options in African cities. These have included: the state subsidising developers to produce free-standing homes (in South Africa); creation of parastatal bodies to manage housing developments (in Lesotho); subsidised and government-led loan-based housing programme (in Ethiopia); enabling private-public-partnerships, focused on unleashing the potentials of the private sector through policy reforms, tax and land incentives, and subsidies to stimulate the development of land and housing at affordable prices (in Nigeria and Kenya); targeted subsidies housing developments (in South Africa); as well as incremental housing through assisted self-help programmes through the provision of affordable loans (in Namibia); as well as site and services and informal settlement upgrading (in South Africa and Kenya).

While there is a diverse experience of ways through which governments can support housing production, the outcomes of such experiences have often been criticised due to: lack of scale and affordability to those most in need; poor quality and lack of participation and responsiveness to local needs and aspirations (Huchzermeyer and Misselwitz, 2016); housing developments often located in non-desirable areas, due to challenges in accessing well-located and affordable land in the city (Bredenoord and Van Lindert, 2014).

Research tracking the shifting role of the state in housing has traced a transition across different countries, with governments focusing less on providing housing, moving towards enabling or supporting housing markets and producers within their jurisdictions. Satterthwaite (2020) proposes that government support could be further extended to removing existing barriers that hamper the participation and inclusion of a wider range of actors and producers, including private, cooperative, community and social housing producers “whose housing better matches the needs and priorities of low income groups” (Satterthwaite, 2020: 14).

A broader critique of these programmes has been the fact that state support for housing production has remained focused on homeownership solutions, though it is evident that rental housing remains dominant across the region, and is provided through diverse and varied ecosystems. Research from Nairobi (Mwangi, 1997; Huchzermeyer, 2007; Mwau et al., 2020, for instance, demonstrates the scale, dynamism and continuous transformation of a largely private-sector rental housing sector, in spite of limited housing policy and programmatic support. From South Africa, Scheba and Turok (2020) also unpack different modes of rental housing submarkets,

emphasising the need to differentiate rental housing providers to better understand the modes of governance, support and infrastructure support required (see also Spiropoulos, 2019).

Literature tracking the role of private sector and market players in housing production shows that while the private sector has always been active in housing production across the region, its participation and role has increased in recent decades with the rise of new stakeholders, resource flows, and ideas of planning and real-estate development and financing, globally and within African urban areas (Pitcher, 2017). This growth in private-sector involvement and participation in housing provision has also failed to address the housing needs of marginalised and low-income residents (Adegoke and Agbola, 2020). Analysts, however, also highlight the notable advantages that market and private-sector players have over state and government housing supply, due to their being innovative, adaptive and effective implementation, offering potential for state–market collaborations in future housing programming (Giti et al., 2020; Muzorewa, 2020).

The range of private-sector housing suppliers across Africa’s cities is considerably broad, and varies from developers of large-scale housing developments, including mixed-use development private “cities” and gated communities, to developers of small dwellings and medium-height residential developments across both formal and informal settlements. A closer exploration of the multiple pathways adopted by different types of housing developers offers an opportunity to understand the challenges and opportunities that exist in the supply of sufficient quantity and quality of affordable housing across Africa. These also offer a more nuanced blurring of the spaces between “formal” and “informal” as actors selectively go through the processes of acquiring land, development and construction permission, sourcing materials and labour, producing housing units, and transferring the finished “product” to homeowners, or tenants (Rubin et al., 2023).

There can be notable variation in the steps taken by various developers through a spectrum of housing typologies within a country, or a city, and at various points of the process. In Sierra Leone, for example, most large-scale developments initiate their constructions without the necessary land permits, as they tend to pursue permits after developments are finalised. Research on Accra and Nairobi’s housing tenements has also demonstrated that non-compliance is sometimes the result of complex or poorly implemented laws and regulations, limited regulatory capacity, or driven by developer decisions (Arku et al., 2016; Mwau and Sverdlik, 2020; Gillespie and Schindler, 2022).

Research on the role of finance in the housing market indicates the lack of capital market investment as a key inhibitor for the production of a “well-functioning” private housing sector, and the fact that the main source of household finance tends to be savings and mortgages (Mitlin and Bartlett, 2020). The limited number of mortgages across the continent, however, underscores the fact that there is still room for innovation and expansion of housing finance ecosystems across the continent, and for the expansion of financial instruments to support individuals and households to meet

their housing needs (Centre for Affordable Housing Finance in Africa, 2021). There has also been a growing recognition of the role of remittances and international investment finance in structuring housing investment resources, particularly in sub-Saharan Africa (World Bank Group, 2015).

It is widely acknowledged that the bulk of housing produced across Africa is developed by households themselves (Huchzermeyer and Misselwitz, 2016). As government policies in the 1980s shifted from direct housing provision to enabling housing markets, private sector agencies provided housing for middle- and high-income residents, but limited affordable options for low-income residents (Ferguson et al., 2014). As an example, from the 2019 Kenya Population and Housing census, over 93% of homeowners across the country had constructed their homes (KNBS, 2020). Research on dweller-initiated housing processes and pathways, however, highlights that households adopt innovative modes and approaches to incrementally meet their housing needs, or through investing in additional units for income generation through rent (Andreasen et al., 2020; Van Noorloos et al., 2020). Finance to these sorts of developments often include household savings and microfinancing loans (Lines et al., 2020).

In many cities, however, the growth of the informal housing sector is also due to individual processes of housing development and expansion. Some examples of these include the growth of backyard shacks in South Africa, or densification of compound houses in Ghana and Kenya, among others (see Turok and Borel-Saladin (2016) on backyard shacks in South Africa as an example). Land arrangements are also quite diverse, crosscutting different levels of formality and informality (for an example of this, see Schlyter, 2006). In some cases, homeowners start from a regular tenure arrangement, but due to challenges in regularising the development, expansion can lead to increased informality. Meanwhile, in other conditions, land might have been acquired informally, and its expansion becoming a way to demonstrate longevity in the area, contributing to security of tenure in the longer term. Increased access to infrastructure, sometimes through formal contracts with water and sanitation suppliers, can also be seen to enhance security of tenure in such conditions. Building materials are often purchased locally, but nevertheless its value chain is often part of wider urban and, at times, transnational networks. In terms of labour, this also done through local contractors or social networks. There has been limited support in terms of policy and formal financing providers to support households across different contexts in building their homes (Jones and Stead, 2020).

Another significant modality of housing production has been led by the non-profit sector, which has included a variety of innovations associated with non-speculative mechanisms to produce housing. In some countries, housing cooperatives (with different degrees of government involvement), have become important actors in the housing sector (for example, 400 registered housing cooperatives in Kenya and 1,200 in Zimbabwe) (for more on this, see Feather and Meme, 2019). Other non-speculative modes of housing production include, for example, community land trust initiatives, or

community development housing groups (such as in Namibia). These experiences have set important precedents about alternative and more collective mechanisms of housing production. However, they have often struggled to achieve scale or reach out to those most in need. Apart from such collective forms of production and management of housing, civic-led practices also include the widespread activities of collective savings (Lines et al., 2020); as well as social, technical and legal support work done by NGOs. Furthermore, NGOs have also been playing a key role in supporting and carrying out advocacy activities focused on struggles against evictions and violations of housing rights across the continent.

3.2. Actors, institutions and power relations

As presented above, the processes of housing production across multiple modalities inevitably involve a wide range of institutions, actors and agencies. And despite stated aspirations for sustainable urban development, effective management of existing resources, or the achievement of housing rights for marginalised residents, the multiple actors in housing often find themselves pursuing a range of conflicting, contradictory or even competitive interests.

Adopting a “value chain” perspective on the housing production process enables a more realistic understanding of the broader ecosystem that shapes and frames housing production and exchange across various contexts, and the different institutions, agencies and departments that are engaged in coordinating land markets, construction, labour and building material value chains, and flows of finance and related resources (Bredenoord and Van Lindert, 2014). It is, however, worth noting that the concept of institutions, as applied to housing, tends to be quite complex and unclear. Boelhouwer and Hoekstra (2012) distinguish between the idea of “institutions” as the organisational configurations through which specific tasks are performed, on the one hand; and on the other, the “rules of the game”, which view institutions as formal laws, regulations formulated by different governments, and as the informal values and norms within which the rules are implemented.

3.2.1. *Government actors and agencies*

Governments are considered one of the key players in housing production, because of their involvement across all points of the value chain, from land administration to planning, to finance, to procurement and regulation of the enabling environment. As specific institutional actors within housing, national, regional and local governments perform a range of tasks and functions, including policy and regulation, management and oversight over other actors and players. It is, however, important to understand that government is characterised by non-homogeneity, as it comprises multiple functional and territorial layers charged with diverse roles and functions, that exert different forms of power relations within and among themselves (Boelhouwer and Hoekstra, 2012).

National governments often have housing policies that set targets for housing provision over “development plan” periods, which may range from 5 – 25 years or more. In socialist countries, the government is also the ultimate landowner from whom one must apply for or purchase land rights; in most countries, however, whilst land purchase is transactional, the registration of land ownership is a government function. In some contexts, this statutory land system coexists with customary mechanisms, often creating interdependencies that shape land transactions as well as security of tenure. The role of LRGs in housing is increasingly appreciated as integral, especially since LRGs are also involved in the coordination of the broader functioning of the urban ecosystem of which housing is but a part. Local and Regional Government (LRG) involvement is more direct in land acquisition, planning development, regulation and local taxation. As few local or state (sub-national) governments have the financial resources, only super ‘city-states’ such as Lagos (Nigeria) and provincial governments in (the Western Cape and Gauteng, in South Africa, for example, are involved in housing finance and procurement activities.

The majority of state and local government parastatals in African cities are however predominantly involved in levy and tax collection and have the main responsibility to ensure housing regulations are enforced. The level and consistency of implementation of taxation, as well as land and housing regulatory systems, differ across formal and informal systems, but they are often influenced by complex institutional arrangements and political interests. This patchy system of implementation of the housing regulatory system means that the state regulates housing in the context of informality, while also at times avoiding implementing regulations in formal housing developments. Mitlin (2022) and Mwau et al. (2020) demonstrate these complexities by arguing that even in situations where one sector of government authorities might deny planning approval for housing in an informal settlement in Nairobi, another state agency might still recognise and issue a “form of approval” that sits outside formal planning and building regulations.

3.2.2. Producers: Housing entrepreneurs and developers

The private sector today has a growing role in the formal housing market (Rust, 2019). In some countries, this is fuelled by significant international funding and finance. Formal sector housing in high land value areas is becoming similar in investment value and audience attraction to lower-income parts of Europe (PWC, 2015).

Private local entrepreneurs, however, are the main actors in this sector. This is a market that is emerging and consolidating as a formal approach to housing provision, particularly for middle-class dwellers (Karaman et al., 2020; Maina and Cirolia, 2023; Meth et al., 2021; Sawyer, 2016). By far the most typical actor in the private sector, however, is the private individual who self-builds his/her own home (Bah et al., 2018).

Often for formal housing the private builder effectively is in charge of all parts of building and delivery of their dwelling and ensuring it conforms to the accepted formal norms of town planning and local building regulations (Karaman et al., 2020). This act

of self-agency is the most typical, although there are emerging examples of community agency and participatory action, albeit more so in the informal than in the formal housing sector. Formal housing agents, however, will often act communally to ensure access to services such as security, electricity and provision via gated, serviced communities, often incorporating private security, and communally organised and paid-for infrastructure access (Bagaeen and Uduku, 2010, 2015). The informal housing sector is also shaped by private actors, including small-scale developers (CAHF, 2018). These actors are often not recognised in most discussions about housing provision, but they often are the ones making the largest investments in the production of affordable housing in African cities.

Meanwhile, contract and procurement agencies are also key players in the construction industry, making a critical contribution to economic activities. Housing procurement and provision is heavily dependent on building materials, their procurement and use. Contractors and suppliers are crucial to the process, thus as actors they have key roles. In some countries, some materials are supplied by contracting agents, who have virtual monopolies (Akinyoade and Uche, 2016).

3.2.3. NGOs and social movements

NGOs may be local or international. International NGOs can often be economically powerful, although they are generally more focused on the informal than the formal housing sector. Furthermore, with landholding and services provision being in the hands of the government, few NGOs can operate in delivering housing for the formal sector and instead are more likely to work with informal dwellers to secure title to land and community housing programmes. Social movements have also played a similar role, focused on claims against evictions and violations of the right to adequate housing. At the same time, federations of marginalised urban residents across the African continent have played an important role in demonstrating mechanisms for the provision of affordable, community-led housing (see, for example, Chitekwe-Biti et al., 2014; Chitekwe-Biti, 2018; Lines and Makau, 2018; and Shand, 2018).

3.2.4. International actors

There is a wide range of international organisations and agencies involved in housing, including but not limited to UN-Habitat, the World Bank and the UNDP, as well as private sector investment and finance companies (such as Shelter Afrique and DDDD). While these agencies participate in housing through investment, lending and technical support, their influence is also exerted through offering legitimacy to certain ideas, policy positions and systems of implementation and administration (Payne, 2014). The World Bank has been involved in decades of housing investment across Africa and remains a major lender to national governments (Buckley and Kalarickal, 2006). There are also bilateral and other aid arrangements via countries such as the UK, and more recently China, all of which have significant investments in formal housing projects, as do regional groupings such as the EU, although for major investors such as France, the

focus is more on their former colonies in North Africa and the Maghreb than in sub-Saharan Africa.

3.2.5. *Building professionals and research institutes*

At the apex of the provision and procurement of formal housing are the building professionals: architects, planners and civil engineers, who have direct input on construction trends and development by universities and research institutions with disciplinary interests in housing. In the lightly regulated housing markets of Africa, these professionals have less of a role and most individual entrepreneurs who self-build their own homes are less likely to engage their services. However, for more formal housing delivery, such as housing estates, the influence of these actors in setting standards and encouraging trends (such as provision of solar-pv collectors on housing) can be crucial.

3.2.6. *The “end user” – homeowners and tenants*

As consumers, beneficiaries and recipients of housing, homeowners and tenants also form a critical actor within the housing system. Using case studies, research focusing on tenants and homeowners has highlighted the different types of households and communities in submarkets designated by income, and the pathways followed towards accessing and securing housing (Access to Finance Rwanda et al., 2022; Baziwe and Kasaija, 2019; FSD Mozambique, 2019; Nketcha-Nana et al., 2020). Others have presented different living conditions of residents living in backyard shack dwellings in urban South Africa from a residents’ satisfaction and quality of life perspective (Turok and Borel-Saladin, 2016).

This body of research highlights the integral role played by households in producing the majority of housing stock in urban Africa. Drawing from a range of formal and informal finance sources, households often undertake direct investment in housing, either through self-construction, or with the support of professionals and artisans. As with the developers and producers of housing, the practices and costs incurred by households in accessing land, acquiring development approval, procuring construction materials and developing housing provide useful insights in understanding some of the bottlenecks facing housing production in African cities.

3.3. Systems and linkages

Housing forms a distinct component of the broader urban fabric and ecosystem and is intricately linked to multiple flows and systems within and between cities. As Van Noorloos et al. (2020) argue, a systems view of cities and human settlements would lead to more integrated responses and interventions. Currently, this has yet to be implemented in African cities, as housing responses are based on sectorial thinking, and embedded in narrow policy frameworks. Van Noorloos et al. (2020) call for more responses that address the dynamics of city-making shaping housing practices in African cities.

This systemic approach to housing is one of the wider ambitions of the ACRC theoretical research analysis framework. Furthermore, Burlotos et al. (2020) link the quality and effectiveness of a country's housing stock to the effectiveness of the industries and processes that constitute "housing production ecosystems", which they draw on Huynh et al. (2013) to define it as the "totality of markets, laws, resources, participants, and inventory that make up housing delivery and housing finance" (2013: 9). Adopting systems, ecosystems and complexity approaches to housing broadens analysis of the housing domain to encompass the broader set of linkages and relationships that affect housing production. Sometimes defined as "value chains", these systems represent the "actors and institutions involved in the production, consumption, and regulation of housing" (Boelhouwer and Hoekstra, 2012: 585).

Housing production is reliant on, and directly shaped by these complex systems, which include but are not limited to land, finance, construction industry and labour dynamics, social, demographic and economic systems. Some of the other major challenges facing housing markets or housing programmes have been attributed to blockages manifesting in: urban and land management contexts (Buckley et al., 2016); housing finance systems (Ferguson et al., 2014); challenges in accessing materials and construction finance, to mention a few.

One of the main crosscutting themes is finance, which could be assessed from the perspective of end-user affordability, or development and construction finance. Only 15% of the urban population in Africa can afford formal housing, with the associated financing costs (CAHF, 2010). Challenges around housing affordability have been attributed to high costs of borrowing, as well as high rates of poverty and low and unstable employment in the continent. As well, policy and intervention have focused on end-user finance, without attending to construction finance for different types of developers, which could continue to bottleneck the supply-side aspects of housing delivery. Also, as mentioned, aside from the African middle classes and the elite, access to formal methods of finance is challenging for marginalised communities and those with irregular informal incomes, who cannot access traditional methods of finance (CAHF, 2018).

Housing production is also significantly shaped by land and land administration systems. Land systems have been a key bottleneck for housing developments in African cities. These systems have been complex and constituted by plural land tenure conditions, which includes customary, neo-customary, informal and statutory systems, which often exist side-by-side and overlap in various ways. Apart from hindering housing developments, or contributing to different urban challenges, including sprawl (Bidandi and Williams, 2020), dynamics around access to land have also been a key driver of discrimination and gender inequalities, as they have been substantially exclusionary and disadvantageous to women.

Land and spaces are embedded in their specific histories. In many African cities, the legacy of colonialism continues to structure, hinder and shape current practices, and the relationships through which space and spatial practices are coordinated. In Malawi,

for example, Mwachungu and Donaldson (2018) demonstrate how colonial practices erased existing customary notions of space, replacing them with systems of private and individual tenure, thus justifying acquisition of land through violence and conquest. These conceptions of land were then inherited into and perpetuated by post-colonial administrations and regimes and filtered into planning mechanisms for regulating and producing urban space. Similarly, Klopp (2000) unpacked the practices of grabbing and allocation of urban land in Kenya in the 1990s from a historical perspective, depicting links between colonial acquisition and grabbing of land, with post-independence methods of allocating public land as a form of patronage, accumulation and rent-seeking among political elites. Addressing these legacies of colonialism in African cities has been a key priority in various innovations in land administration and tenure with the purpose of enabling the provision of affordable, inclusive and, at times, collective housing options.

Closely related to land, the dynamics associated with spatial planning and urban development are another key factor shaping housing governance arrangements. Planning is generally understood to be an important and powerful tool for managing urbanisation and spatial growth, and for generating sustainable and equitable urban spaces. At the same time, analysts and practitioners have noted the lingering image of planning across Africa as a “disengaged, technical, and apolitical profession” or more critically, a “deeply political profession whose overriding purpose has been to further the interests of political and economic elites” (Watson and Agbola, 2013).

The ecosystems of planning, land use management and development control also structure boundaries between formality and informality, or the “regulated and unregulated” by framing the rules, norms and practices of urban space production (Arku et al, 2016). Without adequate resources, and technical and implementing capacity, planning systems remain unable to coordinate urban growth, creating unsustainable spatial outcomes that often disadvantage marginalised urban residents.

The now discontinued Doing Business indicators developed by the World Bank had offered insights into the various systemic challenges and complexities that exist within the development regulation ecosystem, and how these slowed down construction and real estate markets. As an example, the processes of obtaining property registration and construction permits in sub-Saharan African countries were costlier than other regions. On average, it takes 57.5 days and it cost 8.3% of property value in sub-Saharan African countries to register a property, which is over twice that of Europe/Central Asia (22 days and 2.6% of property value) and OECD high-income countries (21.8 days and 4.2% of property value) (World Bank, 2015).

Government-led incentives for property development through flexibilisation of spatial regulations or infrastructure investments outside a rights-based environment often led to an increased threat of market-led displacement as well as forced evictions. There has been little effort in African cities to capture the value generated through spatial planning for increased investment in housing while securing the right to adequate housing for those most marginalised.

More recently, the increased adoption of national urban policies (NUPs) across the continent represents an acknowledgement of the need for governments to respond to rising urbanisation and associated challenges. Within the framework of the New Urban Agenda, NUPs could indicate a shift from piecemeal, haphazard, and firefighting responses to urban issues, towards coordinated and integrated intervention, and to respond to climate concerns (Bandauko et al., 2021). However, it remains to be seen whether national policy aspirations will achieve the desired impact through the provision of required financing, through implementation plans, or through capacitation of implementing agencies at the regional and local levels.

Another component shaping housing and housing governance relates to skills and labour, and development trends in construction and the building materials sectors. The norms and relationships shaping the housing construction value chain and building materials are another determinant factor of housing governance arrangements. The high cost of building materials creates a critical challenge to make housing more affordable (UN-Habitat, 2011). These costs are generated by unresponsive building codes and regulations adopted by national and subnational governments. These are often imported or of colonial heritage, “preventing the use of readily available local building materials, and also the use of cost-effective and environmentally friendly construction technologies” (UN-Habitat, 2011: 52). While often shaped by transnational value chains of building materials, little knowledge exists about the connections between these dynamics and the production of housing, particularly in the informal housing sector.

Analyses that focus on housing justice and sustainable human settlements necessitate a shift in scale from individual households and units to neighbourhoods, settlements and locality. At this scale, housing – and its connectivity to basic infrastructure, services and urban amenities – becomes a point of analysis and concern, social and economic services, amenities and infrastructure, local economies, and broader urban sustainability. A key issue with most African cities is their lack of infrastructure development, from transportation routes and networks to service infrastructure, including electricity, water and, more recently, reliable internet provision.

Lastly, we will explore the ecosystem through which housing is acquired and used within the urban areas, ranging from sale and transfer to rental housing markets. The majority of the research on housing demand and user needs in Africa focuses on homeownership, which has been mainly shaped by the dynamics of formal housing markets, and which sometimes overlaps with the demands and aspirations of local households. However, a vast number of urban residents in African cities are currently tenants (Bha et al., 2018), though the rental housing ecosystem is less understood or documented. The housing domain research report therefore sought to present evidence on the norms, relationships, rules and regulations relating to the appropriation and use of housing across urban areas and within formal and informal governance arrangements. Here, we will also be interrogating the various actors and agencies involved, as well as the power dynamics across the supply and demand side of the

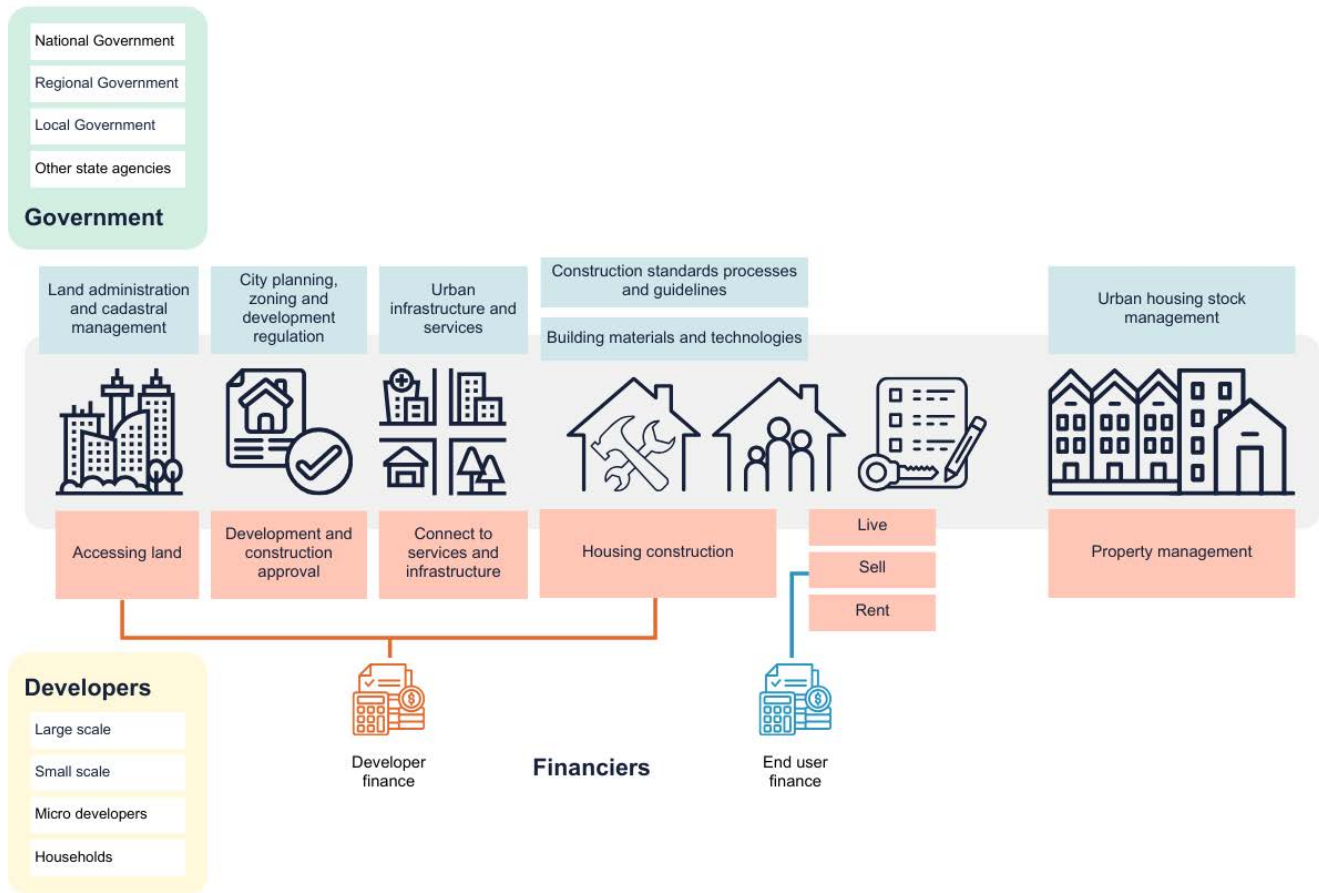
housing, unpacking how these strengthen or debilitate users' rights to housing across different cities.

4. Approach and methodology

The research applied an end-to-end value chain perspective to housing production, and as a methodological tool to examine the case studies (see Figure 6). A value chain perspective acknowledges that housing production is influenced and affected by a range of interlinked components and phases, though these are not always sequentially pursued. Actors engaged in the production of housing at all scales need to navigate through: systems of land acquisition; urban planning and development approval processes and related regulations. They also need to connect to critical infrastructure; undertake housing construction processes; and navigate through market interactions relating to transfer or use of housing. Once the housing stock is produced, households and other agencies need to undertake subsequent maintenance of housing stock and residential neighbourhoods. This approach also recognises the crosscutting role of finance, including the diverse sources of construction finance and end-user finance.

This approach was used because it provided a methodological mechanism to interrogate the systemic issues affecting the housing domain in each city. The approach proved instrumental in enabling city researchers to zoom into specific sectors and bottlenecks affecting the establishment or maintenance of robust affordable housing markets. The value chain approach also provides an empirical logic for documenting the processes, costs and approaches adopted by housing producers across the formal and informal divide; from individual households to small- and large-scale developers; and across different income segments. This perspective therefore enables researchers, policymakers and housing advocates an opportunity to identify critical challenges facing housing markets through an articulation of the processes, costs and approaches deployed through these stages. This approach also illuminates the actors, relationships, power dynamics and politics that influence housing production across different modalities. This also enabled the selection of case studies that would inform potential areas for intervention, programme development, or advocacy within cities. Additionally, it enabled cross-city comparison and lesson sharing.

Figure 6: Processes along the housing production ecosystem



Source: Authors, 2023.

Through case studies, researchers also aimed to highlight the different systems and modalities of housing production and delivery in each city. These aid in highlighting the processes, actors, agencies and institutions involved, and support a more situated understanding of the politics and power dynamics within each modality. The different modes of housing production examined include state-driven production, private sector-led production, ranging from large-scale housing projects to small and micro-developers, dweller-initiated production, and civic-led housing production.

All city researchers therefore deployed mixed-methods research, drawing from primary data collection through surveys of the selected neighbourhoods, and interviews with key informants (ranging from policymakers, local government regulators to real-estate agencies, financiers, NGO/CBO representatives and individual households). Secondary data sources offered insights on policy and existing programmes, demographic data from local census information, and literature reviews from the cities. The findings presented here draw from the reports produced by the housing domain researchers.

Recognising the governance challenges that have constrained effective housing policy and programmes in Ghana, research in **Accra** concentrated primarily on the housing governance and regulation ecosystem. Focusing on four neighbourhoods of Danfa, Ashaiman, Mallam and Old Fadama in the Greater Accra Metropolitan Area (GAMA), primary research sought to unmask how power dynamics created winners and losers within the housing markets, and how different coalitions between key actors have contributed to create exclusion and marginalisation within housing markets.

In **Addis Ababa**, research focused on the characteristics and challenges faced within the production and use of multiple existing modes of public and market-developed housing. These included: state-developed condominiums and social housing, and formal and informal private-sector housing. The research highlights the processes and costs of housing production in the private sector, the processes of redevelopment of informally developed housing, and the use, improvement and transfer of state-developed Kebele (smallest administrative units in Ethiopia) and condominium housing by households.

In **Dar es Salaam**, the researchers drew on existing research that highlights the significant contribution of individual-built housing in generating urban residential stock. They reviewed local practices in housing production. The aim of this was to highlight the processes and financing systems employed by households, with a view to identifying workable models for scaling up housing through policy and programmatic support.

Researchers in **Freetown** also identified different settlement forms and types that exemplified the spectrum from formal to informal housing serving different income groups. Three settlements were selected, including: the Western Area, which mainly has formally developed housing for relatively high-income earners, and which has access to housing infrastructure; Wilberforce, in the Western area of Freetown, which features a mix of formal housing with access to infrastructure and amenities, and semi-formal housing developed through spontaneous expansion, and where these amenities are limited; and lastly, Cockle Bay, an informal settlement built on the coastal areas to the west of Freetown, inhabited by low-income residents.

In **Lagos**, researchers identified the socio-spatial configuration of the distinct housing settlement typologies in the state. They also identified the institutional and interagency networks and power relationships within housing production.

Research in **Lilongwe** drew from multiple case studies that exemplified the diverse modes of housing production in the city. These included dweller-initiated expansion, private-sector led development, state-led housing production and NGO-led housing development.

In **Nairobi**, 12 case studies were selected across three representative zones in the city, and these highlighted the spatial, temporal and housing typology diversity across housing markets. The research also underscored the symbiotic spatial linkages across low-, middle- and high-income residential neighbourhoods in the compact city.

Empirical data on housing prices, rents, household demographics and construction ecosystems depicted significant contrasts and differences manifesting across settlements that necessitate more targeted spatial programming for more equitable housing outcomes.

In tracking housing production, the influence of and trends within the building and construction materials industries and value chains were also assessed. The vast systems of housing production across all income groups and neighbourhood typologies all relied on the same construction materials. The research therefore highlighted the impacts of market trends on the importation, transportation and ultimate cost of construction materials, primarily cement and steel, and how these affected household decisions and construction practices across the regions. Researchers across all cities also interrogated the relationships between housing and the broader, intersecting issues of finance, gender and climate change.

One of the main challenges in undertaking domain research was a limitation on time, which necessitated a selective approach to case studies. Time limitation also constrained the ability of researchers to delve in more detail into the wider political economy shaping housing production. The collaboration and exchanges with the ACRC researchers focused on the political settlement analysis were helpful to try to address this limitation. Furthermore, applying a value chain lens enabled the research teams to focus on the specific issues that were of primary focus to their cities, while offering comparable perspectives and data for cross-city research. As a result, cross-city findings could be synthesised from the empirical data, enabling a deeper conceptual understanding of housing production challenges across the continent. Findings from individual cities may also be used to develop pilot intervention projects and proposals for future research and innovation.

5. Findings

This section presents the crosscutting issues affecting housing across the cities explored in the research. Applying a value chain perspective to exploring housing production ecosystems offered an opportunity for understanding the interlinked challenges across all modes of housing production in the cities. Similarly, the framework enables a comparative view of the different countries' institutional systems in housing. The case studies supplied empirical evidence on the nuanced systems and typologies of housing and housing production systems across the cities, the diverse and entangled markets across demographics and income groups, and the disparate modes of financing housing development across different production modalities. These enabled the identification of potential avenues for redress, support or upscaling for greater housing justice, while highlighting opportunities for collaboration across different groups and organisations.

Researchers in the different cities also revealed the underlying politics and political economy shaping housing across the cities. Housing production requires effective land markets and an adequate supply of critical urban infrastructure. As the sections below

indicate, the management and coordination of these sectors is often highly political and politicised, with dire implications for existing housing markets. The governance of housing is coordinated between national, regional and local governments, which are in charge of land administration, the regulation of urban development and construction systems, and the supply of urban infrastructure. As presented below, the governance of land, housing and urban development markets creates complex tensions across and between various spheres and levels of government.

Researchers were therefore able to corroborate existing arguments within housing discourse that critique the continued policy focus on supplying units for home ownership through unaffordable market solutions. Their research calls instead for broader and more holistic understanding of the interlinked efficiencies in land, spatial planning and urban development mechanisms, the broader construction sector and sustainable urban management.

This section of the report outlines the cross-cutting findings associated with examination of the mechanisms, processes and relationships shaping the housing domain in each of the researched cities. The findings are structured around eight themes that were identified through comparison among the city-based housing research of: 1) the role of the state in shaping housing systems; 2) the institutional relationships affecting housing value chains; 3) the value chain of housing production; 4) dynamics in the rental housing sectors; 5) management and maintenance of urban residential stock; 6) construction materials and innovation; 7) labour and working conditions within the housing-related construction sector; 8) and climate-related vulnerabilities associated to housing value chains.

5.1. Role of the state in shaping housing systems

Applying a political systems analysis to housing offers a useful lens for understanding contemporary understandings of housing, and the role of the state within the housing production ecosystems. This research demonstrates that the lack of access to adequate housing is a result not of the absence of the state, but rather due to its persistent and counterproductive presence across the entire value chain. We argue then, that the state does not just shape housing through housing policy, but through multiple land policies, investment decisions and actions relating to land administration, spatial planning, the prioritisation of infrastructure investment, construction standards and the incentivisation of certain sectors at the expense of others. These actions emerge through multiple disconnected departments across national, regional, and local government levels, whose activity contributes to housing outcomes that are ultimately counterproductive for securing the right to housing.

Strategic master plans that focus on large-scale infrastructure investments and land development projects lead to the commodification of land, and the development of middle- and high-income residential estates that are unaffordable to the majority of poor urban residents. These plans also draw investments from inner-city urban upgrading, or improvement of lower-income areas, where the majority of low-income

urban residents live. Similarly, the enabling role of the state is focused on supporting markets and market activity, and on the design of programmes rooted in economic logics that support market-based solutions, including: land release, subsidisation of large-scale housing projects, lenient attitudes, and limited regulation of private housing suppliers. Few of these solutions meet the needs of the urban population.

The proposition is for the state to act instead as a guarantor of housing rights, and of a decent standard and quality of life. This would require the state to focus proactively on supporting existing housing construction ecosystems and developments, and channel resources towards the upgrading and safeguarding of existing neighbourhoods. It would also necessitate the resourcing of urban governments and local authorities for integrated development, and investment in infrastructure and services to support existing residential areas. At the same time, local governments would need to actively protect the rights of poor urban residents from market-driven evictions from the improved settlements, through rental regulation and arbitration.

Applying a political settlement approach to housing enables an understanding of how politics shapes the housing agenda in African cities. In some of the cities, housing is still a low priority, in the sense that there are no existing housing policies. In these contexts, the absence of policy framework creates a vacuum that is often exploited by local elites. This is the case in Freetown, as there is no national housing policy in Sierra Leone, and the country lacks urban policies with clear guidelines for integrated urban development. Even with a comprehensive land policy in place, Freetown as a city has grown without any efficient formal system of land cadastre. Within this context, local “elites have often capitalised on the weak land management system to grab large areas of land which they illegally sell out to the public” (Macarthy and Tarawally, 2023: 17).

In other cities, policies in land, housing and urban development tend to align with the interests of the elite, who range from large-scale landowners to large-scale developers. In Lagos, for example, we have observed the state aligning itself with large-scale elites and landowning elites, who tend to evict poor urban residents in the interest of opening up land and housing for development for middle- and high-income residents. Furthermore, research demonstrates that there is evidence to suggest that there are ongoing purchases of properties and lands by particular ethnic groups in different parts of Lagos to enable sufficient ethnic agglomerations of voters to gain electoral seats and contest the current non-Yoruba political dominance at the Lagos State House of Assembly (Oyalowo, 2023).

Countries such as Kenya and Ethiopia, where there are already existing housing policies, also depict housing policy frameworks which view housing as a market-oriented commodity that can be addressed through scale solutions, often neglecting the nuanced challenges of urban housing. Programmes such as Kenya’s Affordable Housing Program or Ethiopia’s Integrated Housing Development Program (IHDP) are geared towards subsidising the large-scale production of housing units that primarily benefit the middle- and high-income residents (see Box 1 below for an extract from the

Addis Ababa report (Fekade and Amdework, 2023) outlining the affordability challenges of the IHDP). Similarly, land-release programmes tend to unlock land that is poorly located, and housing produced in these locations would create affordability problems for those on low incomes.

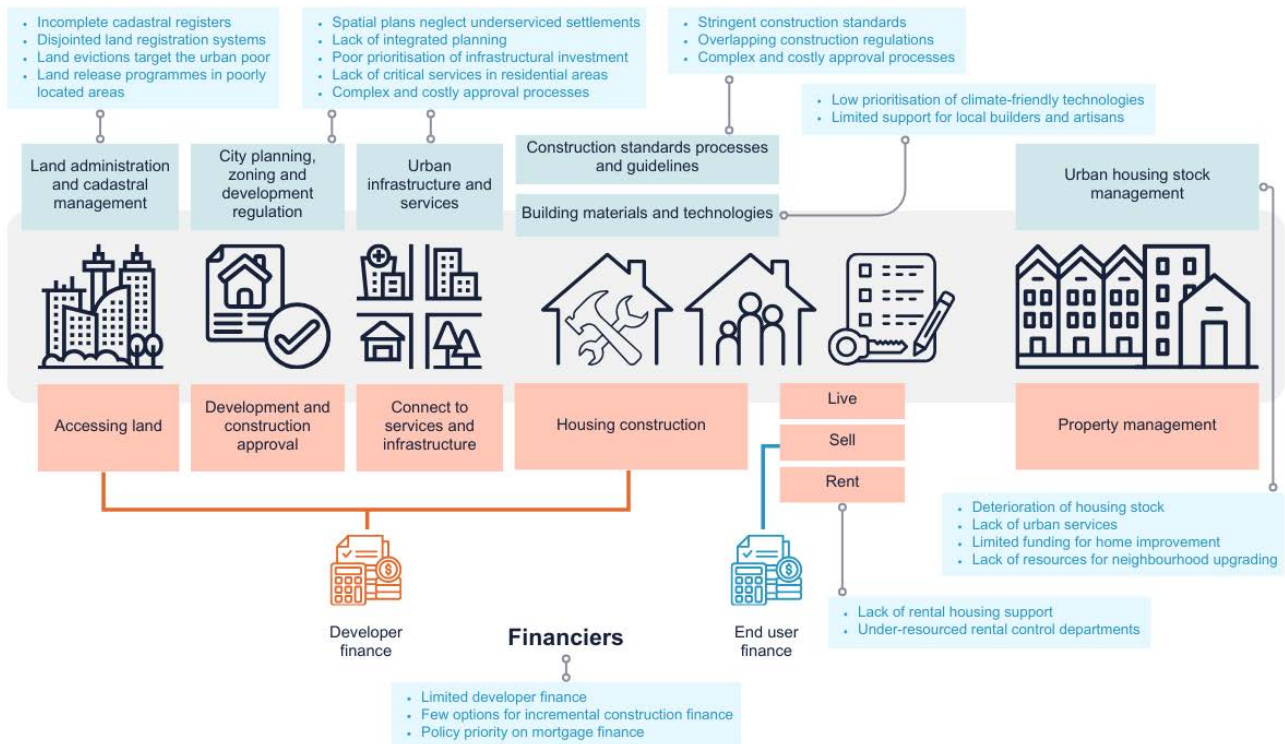
Box 1: Affordability challenges of Ethiopian's IHDP

Beneficiaries of the Integrated Housing Development Program (the public managed condominium programme) would receive keys for their units after paying 10, 20 or 40% of the administratively set housing prices as an advance payment and entering mortgage contracts with the Commercial Bank of Ethiopia for the repayment of the remaining balance. Once the condominium units are transferred, it is the beneficiaries themselves who should undertake “finishing works” and hence arrange for adequate finance and buy the construction materials, as well as hire and supervise construction workers who will undertake the finishing works. As a matter of fact, this would entail demolishing some parts of the units and the use of new construction materials and making replacements with better quality fixtures (doors, windows, walls, ceilings and partitions, indoor lighting, sanitary fixtures, and so on). Furthermore, as the units to be reconstructed are part of the common condominium building, the construction process may entail externalities that have to be regulated by condominium by-laws or building regulations. Given differences in the quality of construction of the distributed housing units, the extent of “finishing works” actually varies. Such finishing work might be tantamount to re-constructing the units and the huge costs involved in undertaking such finishing works, and limited access to housing finance (as the bank will not provide additional loans for finishing works), will have implications on housing affordability. It may even force individual households to sell their units and hence determine who the actual beneficiaries of the programmes really are.

Source: Fekade and Amdework (2023).

Furthermore, among all the seven cities examined by the housing domain researchers, the absence of the state in rental market regulation also exemplifies state presence, through lenient positions taken towards large-scale producers of low-quality rental units, who also tend to be elites. This is compounded by a lack of effective rental regulation and legislation, which creates ripe opportunities for unfair and exploitative practices, and through the underresourcing of local governments, which are expected to regulate local rental markets. In this way, both national and local governments effectively remove themselves from safeguarding access to housing, and the living conditions of low-income city dwellers.

Figure 7: Involvement of the state across the housing value chain



5.2. Institutional relationships affecting housing value chains

The housing production ecosystem encompasses multiple interlinked components, which are managed through a large network of institutions and agencies operating across the land, housing, finance, construction and urban development sectors. These sectors and agencies could be mapped horizontally across the housing production chain, and vertically across the different levels of government, as illustrated in Figure 7 above. The effective functioning of the housing ecosystem requires synchronised policy and programming, as well as coordinated planning, coordination and resource allocation across these systems.

A key cross-cutting challenge across many of the cities in this domain study was the time lag created by incomplete policy and legislative frameworks for supporting housing production. This feeds into competing, misaligned and contradictory aspirations across different agencies and institutions. The reasons for this include a lack of statutory guidelines and policies in critical sectors; unimplemented policies and programmes in others; limited resources and capacity for the implementation of existing policies, where they exist; and a lack of coordination and regulation of guidelines for institutional cooperation and collaboration at local, state and national level.

In Freetown, the housing department within the Ministry of Lands, Housing and Country Planning has the principal responsibility for managing and controlling the housing sector. As mentioned above, however, Sierra Leone is yet to develop a national

housing policy. The lack of a housing policy, together with the existence of a few but very old and obsolete colonial housing laws, that are clearly not compatible with current realities, have led to a complex and chaotic housing situation in the city. There have nonetheless been other reform efforts in land and urban development, including the launch of the National Land Policy in 2015, The Land Commission Bill (2022) and the Customary Land Rights Bill (2022).

In the other West African cities studied – Accra and Lagos – legislation has been updated from the legacy town planning and building regulations inherited from colonial Britain in the late 1950s.

These challenges are compounded by limited resources available to local governments, which are mandated to coordinate housing production. In African countries, as elsewhere globally, local governments have planning responsibilities that play an important role in the management of housing production. This is through the coordination of land administration, planning approval and construction standards regulation, and the everyday management of urban development. Local authorities, however, have limited financial, institutional and bureaucratic resources to meet this mandate. Additionally, most also lack the regulatory and legislative power to achieve their goals.

In the case of Nigeria, legislation is often frustrated, as despite low-cost housing being legislated for those with low incomes, these homes are often given to political party supporters or through corrupt practices. These homes are then inherited by families of these recipients and therefore do not improve the housing of the low-income residents for whom they were originally built.

In some countries, the regulation of building standards and certification is assigned to national government agencies, and de-linked from local government development approval. Unfortunately, these national government agencies and local governments still lack the resources to proactively inspect rapid construction activity occurring in cities.

In Kenya's 2010 Constitution, housing and urban development coordination are devolved functions. County governments are therefore expected to shape the development of human settlements through planning, infrastructure development and investment, development control, the regulation of housing production, and the maintenance of existing urban housing stock. These activities are, however, yet to be systematically coordinated. The fact that over 90% of residents in the city are renting also means that the county needs to develop a rental housing policy, and effectively establish programmes and mechanisms for regulating the largely private housing market. These mechanisms are, however, not yet in place, and a key contributing factor for this is the lack of adequate institutional resources.

Similarly, while the Accra Greater Metropolitan Area has a rent control department, this agency remains under-resourced, and has been unable to adequately regulate and control rental markets within the Metro Accra region.

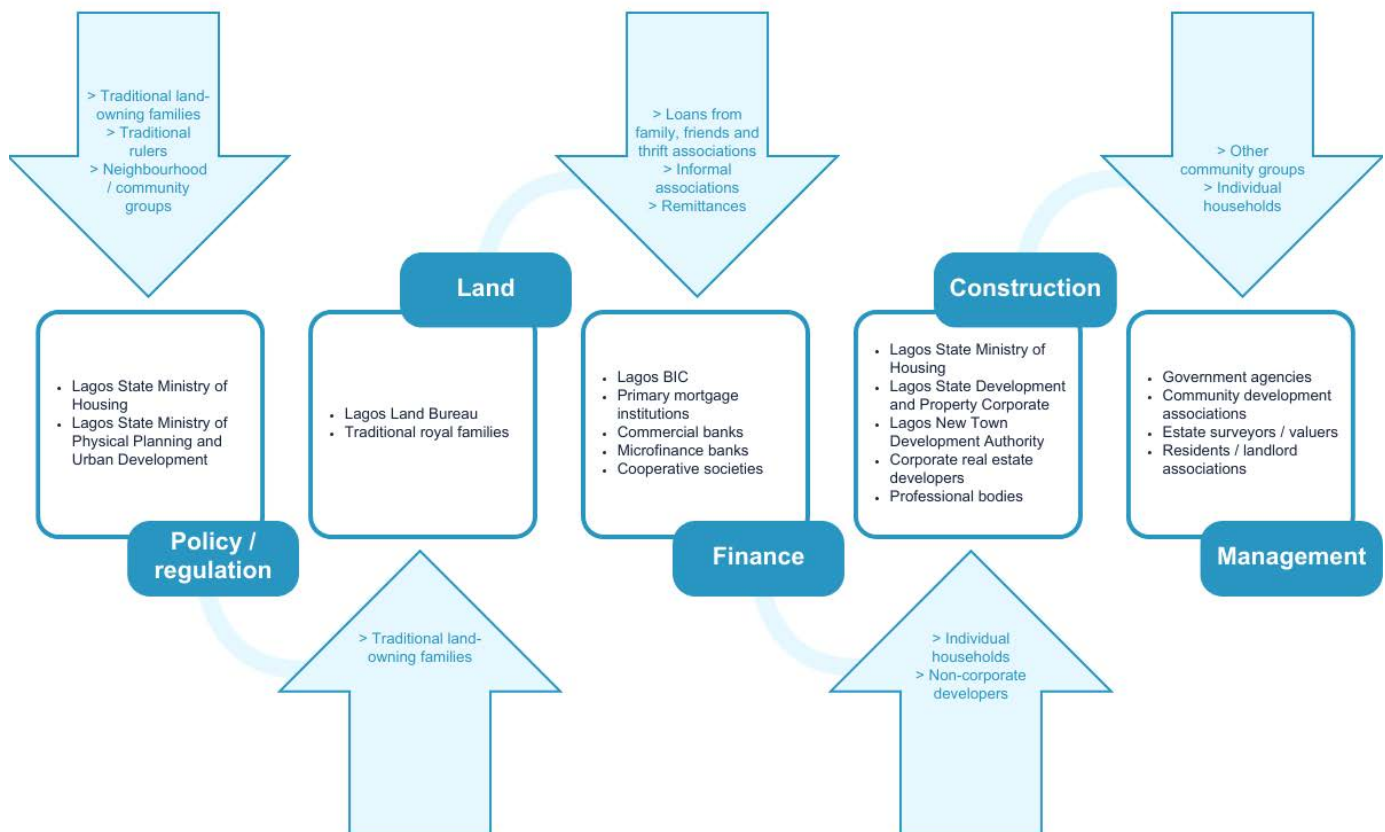
The institutional infrastructure necessary to support effective human settlements production therefore remains incomplete in many African cities. The situation varies from one city to the next, requiring targeted, city-specific intervention. In cases where policy is absent, there is an opportunity to develop integrated human settlements policies that appreciate the linkages across the housing value chain, and the need for cross-sectoral coordination. In areas where policies are present, there is the need to address missing housing legislation and regulations. This shows the need to install necessary systems with an orientation towards supporting just housing outcomes. These include programmes to support the dominant modes of small-scale private and user-developed housing. In the larger metropolitan areas, there is also a need for urban rental housing policies and programmes of support for privately supplied rental housing.

Ultimately, there is a need for enhanced capacity within local and regional governments to support coordinated urban investment and human settlements development. The devolved functions to local governments need to be supported with adequate resources, institutional and human resources capacity for the effective management and regulation of urban development outcomes.

5.3. Housing project value chain

Applying a value chain perspective to understanding different modalities of housing production enabled researchers to track and outline the range of processes and practices adopted by the multiple producers of housing, demonstrating that these practices discount the use of simple delineations between formal and informal, legal or illegal, approved and unapproved housing. The housing value chain is a sequential process that involves various actors who work to deliver housing. This comprises land acquisition, development approval, procurement of building materials, connection to infrastructure and utilities, and housing unit construction (see Figure 8 for an example of the value chain analysis carried out by Oyalowo (2023)). The value chain analysis helps to generate questions associated with each stage of the value chain, as well as the relationship between them. This perspective highlights the need to investigate the actors, processes, norms and procedures within and among the stages of the housing development value chain, with the objective of revealing power relations and the distribution of burdens and opportunities.

Figure 8: Governance in the Lagos housing development value chain



Source: Oyalowo (2023).

These practices all take place before the housing unit is put on the market for sale, rent or occupation. Research across the cities depicted a more unbundled and modular approach, depending on scale, financial resources and investor decisions.

For example, while large-scale developers might go through formal processes of accessing and registering land, acquiring development approval, and constructing housing units before transferring them in the market, smaller-scale developers and individual households might take a more incremental and modular approach to securing land and constructing housing. This research therefore reiterates a need to concentrate analysis on the practices and processes adopted by households and small-scale developers, as it is they who supply the majority of housing in African cities, drawing from diverse sources of finance.

Building on research on household approaches in developing housing (for instance Teresa Caldeira's research in Latin America (Caldeira, 2017) and Housing Investment Chronicles² research by the Centre for Affordable Housing Finance in Africa (CAHF), these findings highlight that households and small-scale developers follow multiple

² See [Housing Investment Chronicles - CAHF | Centre for Affordable Housing Finance Africa](#) (accessed 21 May 2024).

pathways in securing access to housing. These pathways are strongly shaped by incremental access to finance. In accessing land and constructing housing, different actors unbundle the production value chain, discarding or postponing processes that would prove costly, or delay their ability to access housing. Phases such as connecting to infrastructure or acquiring development approval are often ignored, or postponed to later stages, as households prioritise house construction and occupation.

Research from Ethiopia, however, also depicts that incremental housing construction is not merely restricted to households. State-subsidised housing is also developed in the form of a minimal unit, with households improving and finalising the unit after they have already occupied it, and often at their own cost.

This modular approach to accessing land and house construction also presents a critique for formal and traditional understandings of housing finance, which are focused on enabling end-user house acquisition through mortgages, or through rent-to-own purchase schemes. Researchers identified a gap in finance that could support incremental construction approaches already being deployed by households.

Incremental finance solutions have, however, been developed, mainly through NGO-supported programmes. In Dar es Salaam, for example, under a public–private partnership-based housing scheme, the city administration will allocate residential land under a lease-free arrangement, whilst the private developers will be responsible for financing and undertaking the construction of houses. As part of the partnership agreement, developers will hand over at least 30% of the constructed houses to the city administration that will be part of the public rental housing stock. This approach aims to foster collaboration between the private sector and the city administration towards ensuring more responsive housing delivery that will specifically address the housing needs of low-income households.

The fact that many housing units are either constructed outside existing development control systems also highlights the importance of proactive development control and building support for households. Current approval systems are costly, reactive and only lead to the proliferation of substandard housing.

Construction is often undertaken through skilled and unskilled artisans, who would benefit from design and construction support through certification and training. This would enable existing actors to design and develop houses that meet set standards for adequacy. This has been highlighted as a key issue for Malawi in the Lilongwe housing domain report (Mwathunga, 2023).

5.4. Dynamics in rental housing

A considerable amount of the housing stock in cities is developed for rent. Rental processes and practices across the cities also depicted a mix of arrangements and agreements, from formal lease agreements to informal agreements. Across all the cities, therefore, **rental housing** emerged as a distinct component of the housing market. While rental housing options are ordinarily viewed as emerging to fill gaps

created by a lag in public and private-sector-led housing supply, it is also apparent that rental markets now exist as critical segments of urban housing markets. Rental markets are prevalent across different income groups and submarkets across the cities, ranging from low-cost, low-income housing, to middle- and high-income rental housing. Urban policymakers therefore need to recognise rental markets as a valid sub-component of the urban housing market, requiring targeted attention and support.

While rental housing presents a robust component of the urban housing sector, low-cost rental housing markets are often unstable and poorly regulated. A notable similarity across the cities was a growing number of privately provided rental housing, amid public policy frameworks that prioritised home ownership. The scale and characteristics of rental markets, however, varied from one city to the next. In Nairobi, for example, the 2019 census reported that over 90.7% of residents were renting, and 87% of rental housing providers were individual investors (KNBS, 2020). Similarly, in Dar es Salaam, over 60% of residents are tenants, with different forms of housing offering viable options for residents' diverse housing needs. In Accra, nearly half of urban households were living in rental accommodation. Low-cost housing markets are, however, limited in supply in cities like Freetown, and this creates environments of overcrowding. Housing supply differed across income sub-categories, with high-income markets having an oversupply of better quality housing, while low-cost housing was of lower quality and overcrowded, and still inadequate to meet the high demand.

Overall, researchers observed limited policy support for rental housing. Housing policies over the last century have favoured home ownership and enhanced affordability to expand owner occupation in housing over support for rental housing. Researchers highlighted several areas for enhanced regulation of rental housing markets. These include design and construction standards and quality, tenants' living conditions and amenities, as well as spaces for the resolution of existing conflicts and disputes.

Researchers across the domain cities identified limited capacity within local government to regulate urban development. While there are agencies created to regulate dynamics within the rental housing market – for example, the rent control department in Accra – these have had limited results. In Freetown, government efforts have included working to secure reductions in the rental cost, particularly by restraining landlords from charging rents in foreign currencies. The impacts of these efforts are yet to be felt within the market.

Currently, the unregulated nature of rental markets puts tenants and landlords in varied, albeit unequal, relationships with each other, and with various state regulatory agencies. Researchers in Freetown highlighted that the housing ecosystem remains fraught and ambiguous, reflecting constantly changing relations between central government, local councils, businesses, the private sector, landlords and tenants, as well as with other agencies within the built environment sector, including architects, planners, contractors and service providers.

The unregulated nature of rental housing markets creates multiple and overlapping inefficiencies, opening spaces for tenant exploitation. A key element is the poor quality of housing supplied. Without adequate planning and design regulation, suppliers of low-cost rental housing often develop substandard or crowded units and environments that have qualitative deficits. These could vary from low-density informal shacks and backyard extensions to high-density multistorey rental flats or tenements.

Often, these units lack adequate services – such as water and sewerage – and residents lack access to urban amenities and facilities. With limited regulation and oversight, rental housing markets feature unequal and exploitative relationships between tenants and the various providers of housing and related services.

Researchers across all cities pinpointed multiple forms of exploitation experienced by tenants, creating an environment of inconstancy and uncertainty. The most dominant form of exploitation experienced by tenants is in accessing and securing housing.

Within an unregulated market, tenants are exposed to irrational demands by landlords and letting agencies that tenants pay exorbitant “upfront” fees to secure housing and accommodation. In Accra, tenants pay one to three years’ rent as advance payment, instead of the six months stipulated by law. While this practice is unlawful, it is widely accepted and practised within the housing market. This is despite the existence of rent controls legislation, which is effectively unenforceable.

Researchers in Freetown also identified the presence of exploitative relationships, whereby new tenants are expected to pay two years’ rent in advance to secure housing. The high rents charged by landlords are intended to offset perceived market risks, though it is apparent that many households cannot raise the required resources. This further compounds hardships in terms of residents’ economic capacity.

In addition to paying high upfront fees to secure housing, tenants in many of the cities face further rental increments from year to year. In Dar es Salaam and Accra, researchers observed that arbitrary increases in rent are not matched by improvements in the quality of housing provided. In Accra, this escalates disputes between tenants – who are expected to pay higher costs for deteriorating housing conditions – and landlords – who feel that these price increases are necessary.

Rental relationships are secured through loose rental agreements. Such agreements establish unequal power relations between landlords and tenants. This primarily exposes tenants to aggressive evictions, with little recourse for justice or resolution. Rental housing ecosystems also feature a proliferation of third party “rental agents”, who assist tenants in accessing housing, while charging extra fees and increasing overall costs of housing.

In Accra, researchers observed that informal rental agents, who help renters to obtain vacant homes to rent, also charge them additional fees, thus increasing the cost of housing. Missing urban services, such as water delivery and waste collection, in high-

density rental neighbourhoods in Nairobi are also provided by informal service providers, and these costs are borne by tenants. Rental housing production and exchange processes and practices therefore also highlight existing relationships and power dynamics that would require targeted intervention approaches.

The informal nature of rental housing markets also renders these spaces “invisible” to various state agencies. In Dar es Salaam, researchers observed that tenants’ needs in informal rental neighbourhoods are often ignored when demolitions and evictions are undertaken, in order to make way for infrastructure development. The influence of political and bureaucratic interference on rental markets is, however, ubiquitous in public and private rental markets. In Lilongwe, for example, rental prices in state housing are influenced by political players. Political influence manifests through offering residents permission to occupy land and develop housing in various areas – such as Area 49 in Lilongwe. Political players also accumulate public rental housing stock, which they later allocate to networks through patronage.

Through our housing domain roundtable discussions during the research period in Dar es Salaam, we were able to establish that cities such as Lagos and Nairobi are under severe housing rental pressure. This is affecting particularly residents living close to inner-city areas, where most formal and informal labour opportunities are. This has meant that rentals were not only subdivided into rooms as units, but even into bed spaces for time periods between workshifts, and so on. These were informal arrangements between renters and landlords, and not subject to any formal controls. We termed these “hot” rental areas, in comparison with cities such as Lilongwe, where rental costs were comparatively low but city planning structures meant that travel to areas of economic activity was difficult and often expensive for poor urban residents.

The above challenges notwithstanding, the scale and growth of rental housing markets across all cities present an opportunity for policymakers. While much low-cost rental housing stock is of poor quality, as existing urban housing stock, it should nonetheless be considered for upgrading in urban development planning. Researchers have identified a critical challenge in the deterioration of privately supplied stock, which compromises tenants’ living conditions. Existing finance instruments are geared towards acquiring land, or purchasing housing, and there are limited housing finance mechanisms for rental housing development, stock upgrading or home improvement for small-scale landlords. This means that existing housing stock continues to deteriorate, amidst delayed supply of new stock.

5.5. Management and maintenance of urban residential stock

One of the findings emerging from the research is that a wide range of housing producers have already generated considerable amounts of residential stock in African cities. So whether they were built by households or government, or small- or large-scale developers, and whether they emerged through formal or informal processes and

practices, residential settlements now comprise an indispensable component of the urban system.

These settlements are robust and diverse in nature, ranging in size, form and typology – from gated communities and wealthy residential estates, to middle- and high-income housing, high-density flats, low-density homesteads and informal settlements. The quality of housing stock varies, depending on the layout and design processes and practices, as well as the materials and construction methods deployed by different producers. This creates varying quality of life and living conditions for urban households. Urban residential areas are produced through formal and informal construction economies and ecosystems providing employment for many, and are intermingled with neighbourhood economies and other employment nodes within cities through public transport systems.

Many of these neighbourhoods, however, lack critical services and amenities and are increasingly exposed to the impacts and effects of climate change, such as flooding, excessive temperatures, and climate-change related systems such as cyclones and hurricanes. A positive example of how some private residential estates have begun to deal with these issues can be found from the Lagos Housing Domain Study (see Box 2 below).

Box 2: Promoting affordable green estates: Peridot Estate

Peridot Estate is located in Badagry, a historical town in the northwest of Lagos. The development was built in partnership between the Lagos State Government and EchoStone Development Nigeria. The estate is the first *Excellence in Design for Greater Efficiencies* (EDGE)-certified housing estate in Nigeria, which highlights its energy efficiency. The project included 252 single-storey rowhouse bungalow units that are two bed and one bath and 64m² in size and was completed in over 24 months, between 2019 and 2022. The homes were designed to reduce energy and water usage, helping residents to save on utility costs. Energy-saving lighting, reflective paint and tiles, insulated concrete walls, and external shading devices contribute to the homes' energy savings, while low-flow plumbing fixtures contribute to the homes' water savings. In addition to the green spaces and community amenities, each home has 53% energy savings, 42% water savings and 35% overall carbon footprint reduction.

Unlike other real estate development projects that apply brick and mortar “wet” model of construction, Echostone deployed an innovative method of construction that enabled the completion of the project in a short time frame. Echostone had developed a “mobile concrete machine and proprietary cellular concrete formula” that facilitates monolithic pours on location, with capacity to produce concrete at a rate comparable to four standard concrete trucks. Because it is monolithic, it offers structural stability, with blocks 60 metres vertically and 200 metres horizontally. The modular form work is lightweight, reusable and recyclable. Other advantages achievable with the Echostone model include:

- Reduced cost, raw material and carbon footprint without coarse aggregate material.
- Reduced drying speed and faster construction.
- Increased comfort for homeowners in tropical, subtropical and colder climates by improved thermal insulation.
- Crane-free handling, and intuitive application.
- Reduces labour.

However, while the cost of each unit is regarded as an affordable housing project, at 9 million Naira (~\$24k USD) post-construction, the project cannot necessarily be affordable to low-income people and key workers. On the other hand, upon completion, the project was said to be handed over to the Lagos State Government, so it is not clear who the exact beneficiaries are. In addition, the project produced two-bedroom bungalows and it remains unclear whether the technology can be deployed to build vertically more dense housing. Nevertheless, partnership between government and the developer and the distribution of expertise suggests that the method can be deployed to support newbuild housing in Lagos, particularly for co-operative societies who already have uptakers.

Source: [Echostone](#) (2024).

A city of systems approach shows how deeply connected human settlements are with the rest of the urban ecosystem and how actions within the rest of the urban area affect residential outcomes for all income groups. In Dar es Salaam, researchers observed that low- and middle-income households, in addition to constructing additional rental units adjacent to their properties, also construct shops and commercial spaces, which provide households with additional income, simultaneously bolstering neighbourhood economies and creating employment. In Nairobi, high-density tenement flats also reserve one or two floors at the ground for a range of commercial activities, generating dense and vibrant, mixed-use precincts. Poor or no planning of these amenities, however, often means there might be health and sanitation problems related to food and waste disposal, and limited walking space, as often the planning guidelines are not observed for these unregulated commercial spaces.

This research therefore asserts the need for the development of urban housing policies and programmes that are better attuned to the current state of human settlements in African cities. Housing policies have historically been focused on driving the construction and production of new housing stock. This approach is lengthy, slow and has been outpaced by the investment activities of households, individuals small- and large-scale developers.

Rather than planning for costly construction projects or ineffective upgrading programmes, urban housing policies could redirect attention to the improvement and safeguard the quality of housing stock already in existence. This requires coordinated investment across different agencies and departments along the housing value chain, It

also needs the formulation of housing and urban development policies that support integrated urban investment, and that can focus investment towards the supply of critical infrastructure, transport and community amenities.

This shift in focus to the qualitative aspects of human settlements would lead to the formulation of urban development policies and programmes that can ensure the development of functional and resilient neighbourhoods. Local government integrated development planning would also enable the provision of necessary infrastructure to existing underserved areas.

To guarantee access to adequate housing for all, urban housing programmes should support housing producers with logistical and design support, by expediting, upgrading approvals for residential stock; or in providing the gap funding needed to improve the quality of housing, in the case of rental housing stock. Where necessary, this might include channelling upgrading finance to improving the low-quality stock to improve the living conditions of urban residents.

5.6. Construction materials and innovation

Housing production activities in the cities researched depicted a continued reliance on unsustainable and carbon-intensive materials and technologies across both formal and informal markets. A key source of construction materials was cement, which also depends on lengthy and cost-intensive supply chain networks, including unsustainable extraction, and high costs of import and transportation; increasing the overall cost of house construction. Box 3 below outlines a section of the ACRC blogpost compiled by the housing domain researchers exploring the rising costs of building materials and ultimately construction in the case study cities, connected to the war in Ukraine and the increase in fuel prices.

Box 3: Rising costs of building materials and impact in housing conditions in informal settlements

Changes in fuel and energy prices have affected housing in many ways, through increased goods and building materials' prices, a rise in transportation costs, and reduced employment opportunities in construction for labourers and local artisans. These, coupled with high costs of food and basic commodities, continue to deepen poverty and inequality and exacerbate housing conditions for low-income urban residents.

The cost of fuel almost doubled overall across the surveyed cities. In Accra, fuel prices were changing weekly, creating an environment of uncertainty. These costs were both in diesel fuel, and in the cost of kerosene, which many households rely on for cooking. Many households build their homes incrementally and rely on the availability of finances. The shifting costs of materials, fuel and energy have severely compromised their ability to access construction materials, and to balance their household needs with those of improving their dwellings. There are also risks of rent increases, as landlords

are spending more on bills and maintenance, which affects tenants' lives, potentially leading to displacement and a reduction in disposable income.

On average, informal settlement residents could spend 15-30% of their monthly budget on construction materials, relying on a range of income and financing options. Where costs of fuel have impacted on transportation and material costs, households have no option but to prioritise other needs, and forego house maintenance.

Researchers in Dar es Salaam and Lilongwe observed a deceleration in construction activity across most housing markets, including informal and low-income neighbourhoods. A similar trend was also observed in Freetown, as a decline in construction activity has intensified conditions for overcrowding, since more residents continue to move into urban areas, and especially into informal and low-income settlements. As pointed out by Ansumana Tarawally, a housing researcher from Freetown,

“the price of building materials is not only affecting the construction of houses, it's also increasing the number of individuals living in one space. Because when the cost of building materials increases, the production decreases. And considering that people are coming in on a daily basis into the community, there will be less houses to accommodate these people. So with a huge number of people living in an enclosed environment, they have been prone to diseases and other conditions”.

Source: Maina et al. (2023) and Frediani et al. (2022).

The highlights of the above ACRC housing domain-authored blogpost point to construction material costs going up, as a result of increased costs of extraction, transportation and ultimately costs of construction directly influenced by global increases in fuel because of the geopolitical events in Ukraine and their effect on global oil costs. Also for low-income residents of informal housing and settlements, the cost of living has gone up significantly as livelihoods are influenced by the high cost of efficient (if non-renewable) cooking fuels, such as kerosene, which has meant households resort to the use of charcoal and other unsustainable fuels, such as firewood for cooking. Furthermore, there is little attention to improvement or construction because of the extremely high costs involved in today's cost of living crisis, which affects those on low incomes the most.

National governments across Africa are investing in the expansion of the alternative building and materials technology (ABMT) sector. This is a sector that has its roots in the 1960s alternative intermediate technology movement, with actors such as the ITDG, GTZ and other NGOs working across Africa to promote sustainable materials use and low technology construction. Examples include the Building Brigade Centres in Tanzania, and the links established by developing ABMT centres alongside technical and vocational education and training institutes in Kenya.

Outputs from these research centres are, however, yet to scale up within the housing construction market, for a number of reasons, including limited information

dissemination, blockages by existing elite interests and parties within the sector, or high production costs. Research and developments in energy-efficient, or ecofriendly construction materials are also stalled, through slow systems of accreditation and registration by materials testing and regulating agencies. This hampers their adoption into scale production for housing markets.

As a result, despite state investment in innovation and sustainable construction, there remains consumer resistance to adopting these technologies. This has been attributed to societal attitudes, cultural perceptions and ideas of modernity, and lack of adequate and reliable information on the range of available alternative technologies. **However, contemporary architecture being advertised by “influencers”** in cities across Africa might be bringing more publicity to sustainable materials and their use in construction (see for, example, the E-flux After Comfort series,³ featuring local materials and labour use in contemporary African construction).

5.7. Labour and working conditions

Another crosscutting issue identified across most cities is on the labour dynamics within the housing construction sector. Housing construction activity is dominated by small-scale, artisanal actors, who work and transfer skills through apprentice-based models. The majority of these workers in the construction industry are youths, who work across multiple sectors, including brickmaking, welding or actual construction work.

The linkages between incremental housing production, building materials, climate and sustainability, local employment, skills development, and finance is therefore evident across many of the case study areas, requiring multisectoral policy support.

Some of the labour market challenges in housing construction include: shortage of adequate skills and expertise, substandard working conditions on construction sites, and lack of adequate, affordable housing.

Housing construction in many African cities is mainly undertaken by unskilled or semi-skilled workers. Our research identified a housing construction labour skills shortage in African cities, both quantitative – with some cities lacking enough labourers – and qualitative – with existing workers lacking the skills or qualifications to participate in higher-paid construction work. Workers and artisans in the housing construction sector acquire skills and technical expertise through apprenticeships, or through incremental manual labour on construction sites. The informalised nature of this training and employment means that workers lack certification, and are confined to lower-wage employment. Cities facing a quantitative deficit in construction work attract workers from neighbouring cities and countries. Low-wage migrants working in construction,

³ Ikko Kobayashi and Fumi Kashimura (January 2024). “Reinterpreting locality, after comfort: A user’s guide”. [Online resource](#) (accessed 21 May 2024).

relying on temporary and nomadic work, often struggle to access affordable housing options, as explored at the Housing Domain Dar es Salaam workshop⁴.

The ACRC research also identified unique gender challenges facing construction workers. As with migrant workers, women and other minority groups are increasingly engaged in high-risk, low-wage construction activities. These workers also grapple with poor working conditions, including lack of protective gear, workplace safety and security, or amenities, including childcare for pre-primary children, who are often brought to the building site. This was also explored in the Dar es Salaam housing roundtable workshop. Furthermore, many cities have female-headed households, particularly in rental accommodation – examples from our research came from Dar es Salaam.

Box 4: The self-built Swahili house in Tandale informal settlement through own savings: Simplicity, flexibility, affordability and income source

Tandale is among the old unplanned and upgraded settlements of Dar es Salaam. It is 5km to the northeast of the centre of the city and is shaped and defined by the biggest and hazardous Jangwani/Msimbazi valley as well as proximity to jobs downtown and easy access to large open markets for affordable food and household goods. The settlement is overcrowded, with about 70,000 people living in 3 km² with poor housing structures. The dominant housing types in Tandale Uzuri are the traditional Swahili houses, which were built in the 1980s and 1990s. Such houses constitute mainly self-built homes. Flexibility is a key feature of Swahili houses and neighbourhood spaces in Tandale Uzuri, expressed by rapid transition from single to multi-family housing and from residential to mixed commercial and residential use. Field results have revealed that the majority of the residents are tenants. Proximity to central business district (CBD) makes rental housing a lucrative income source. Self-building coupled with poverty results in lengthy construction times, and poor unfinished units. The majority of tenants afford rooms in the inferior units, especially those that are semi-finished, lacking social services such as electricity and potable water. The monthly rent for these ranges from TShs. 15,000 (\$6.4) to 25,000 (about \$10) per room. They cannot afford to rent finished rooms with amenities, whose rents are beyond TShs. 50,000 (about \$20). A plot visited had four buildings, with a total of eight single rooms, all for renting. The buildings were not in a good condition and without electricity and water. The shared toilets were separate from the main houses. Each room was rented by a single large family and the majority were female-headed households who were self-employed as food vendors (Mama Nitilie or door-to-door vegetable sellers). There was a family consisting of a mother and three children (two girls and one boy), the second family

⁴ ACRC workshop on Housing in African Cities, Dar es Salaam 21- 22 May 2023. Attendees included all housing domain researchers and co-leads involved in the ACRC housing domain project. Discussions focused on summarising the main crosscutting findings and recommendations of the ACRC housing domain research.

had three members (mother and two children, a boy and a girl). There were also couples without children.

The single rooms which each tenant rents are used for all functions at different times; a bedroom during the night, a store and a dressing room at all times, a kitchen and dining room during rainy seasons. During the day, the majority of functions are conducted outside.

“... our room serves as a bedroom during the night; a kitchen, sitting and dining room when it rains, a store and every function in a household. When it does not rain, we carry out all other functions outside. We live with male children also ...”. Women-headed household.

For many poor households, a rented room is one of the most affordable options and housing transformations and extensions to allow rooms for renting are one of the many ways in which homeowners earn incomes.

Source: Kyessi and Mtwangi-Limbumba (2023).

5.8. Climate-related vulnerabilities in residential areas

African cities face diverse and yet similar concerns relating to climate-related change and uncertainty, including flooding, extreme weather events, heat stress and mudslides. Freetown, Lagos, Accra and Dar es Salaam are coastal cities. And although Nairobi and Lilongwe are inland, they are not immune to climate-related volatility and uncertainty. In coastal cities, low-income settlements are often located in vulnerable regions, including hillsides, riverbeds or along the coastline. These areas are vulnerable to flooding, mudslides or the effects of activities in other upstream neighbourhoods, while residents of these settlements also face the continual threat of eviction. These multiple vulnerabilities affect the economic vibrancy, health and wellbeing of low-income residents. As outlined in the Lagos Housing Domain report (Oyalowo, 2023):

Vulnerability of Lagos residents to climate change impacts is heightened by its being a low-lying coastal city, with at least 12% of its area liable to flooding, which combines with poor disaster risk-reducing infrastructure to increase poverty through loss of housing and livelihoods in informal economic centres especially in already marginalised communities as a result of forced evictions and natural disasters (Oyalowo, 2023).

In Lilongwe, low-income households continue to rely on unsustainable systems of brick production that could be improved and addressed to ensure sustainability, increased employment, and reduction in climate impacts and production costs:

In urban Malawi, burnt bricks are [the] most commonly used walling material in house construction. Burning bricks has serious impacts on the environment and climate change, including deforestation and destruction of natural ecological systems, both within the city and outside the city. In Area 49, for example, the wood and charcoal

supply chain revealed that fuel wood and charcoal originate from Mgoni and as far as Salima district (Mwathunga, 2023).

Climate-related variability and environmental uncertainty also affect the sustainability of urban infrastructure and buildings. This underscores the need to integrate the use of climate-resilient building materials and technologies in the development of housing, within overall urban sustainability and resilience planning. However, climate-related finance and investment instruments for resilient housing and neighbourhoods tend to overlook the needs of low-income residents. Research underscores the need to address this by integrating climate and finance solutions with housing intervention. States and local governments need to develop interventions and finance instruments that can enable the improvement of housing stock, insure neighbourhoods and enhance urban resilience.

Planning and investment in neighbourhood adaptation and resilience therefore seek to deploy diverse sources of finance (including climate financing) to improve neighbourhoods and supply necessary infrastructure, while incrementally upgrading low quality units. The processes of consolidating, upgrading, improving or sustaining these neighbourhoods would require an acknowledgement of this diversity, and the combination of capital and urban development finance for that can ensure a spatially targeted and multisectoral approach. Box 2 in this section provides an example of a climate resilient private development that was provided in the Lagos report (Oyalowo, 2023). Although this was on a small scale and for upper-middle-income residents, it does provide a blueprint for future rollout on a larger scale.

6. Implications

Despite current focus on the state's absence in housing discussions, this research reveals consistent, often counterproductive state involvement throughout the entire housing value chain. We contend that the state's influence on housing extends beyond housing policy to encompass land policies, investment choices, land administration actions, spatial planning, infrastructure investment priorities, construction standards, and sector preferences. These actions are carried out by various functionaries at local, regional and national government levels, resulting in housing delivery outcomes that ultimately hinder the realisation of ensuring the public's right to housing, especially amongst the poorest citizens.

The presentation of the multiple processes, systems and practices across the various modalities of housing production demonstrates the interlinked nature of challenges across the housing production and delivery value chain. This highlights the futility of assuming that there is a clear demarcation between issues affecting formal and informal housing delivery. The analysis also reveals the growing influence of perceptions of housing as a market commodity. This is evident in existing policies and housing programmes in some countries, which have devolved the responsibility of free capital markets and finance systems to deliver housing for all. This follows the neoliberal view that the "state is an enabler of markets". Thus the role of the state, and

its activities, should be primarily focused on unlocking quantitative supply-side components of infrastructure provision. Thus, for housing, this policy encourages large-scale land release programmes, and the subsidisation of large-scale housing provision by private companies to have a “social housing” or low-cost component to their middle-to high-income-focused housing schemes. Our research findings advocate a shift to a rights and justice framework for housing provision. This would require the targeted qualitative improvement of current housing settlements, formal and informal, and importantly, development of robust, government-supported and enforceable urban human settlements policies and programmes. Additionally, it necessitates the unlocking of broader sources of urban finance to ensure the upgrading, improvement and territorial safeguarding of all residential areas.

A domain-level analysis enabled the exploration of housing and human settlements through a broader interlinked framework, allowing also the examination of other crosscutting urban subsystems, such as transportation, commerce and sustainable energy networks. An efficient housing production ecosystem requires the seamless functioning of land and connectivity systems, adequate supply of critical infrastructure, and dynamic models for finance. Housing is central to urban development and works to ensure cohesive social and community infrastructure.

Applying a political settlement approach to housing enabled an understanding of how politics and political actors shape the housing agenda in African cities. In some cities, housing is still a low priority, with no existing housing policies. In others, policies in land, housing and urban development were found to align with the interests of the elite with most political power, including large-scale landowners and large-scale developers.

As described previously, countries with housing policies enacted into law, generally view housing as a market-oriented commodity which can be best delivered through neoliberal free market solutions, allowing shareholders and the market to deliver large-scale housing programmes and projects. This approach effectively ignores or sometimes actively prevents the actions of small developers and, due to the large-scale processes involved, rarely understands or addresses more nuanced challenges of urban housing, such as local access to capital, and the need to engage local labour in housing projects. Land-release programmes tend to unlock poorly located land, creating affordability problems for city residents on low incomes. The absence of effective rental regulation and legislation creates opportunities for unfair practices by large-scale producers of low-quality rental units, who tend to be those who are rich and have political access to governments who lease these areas of land. This is compounded by the under-resourcing of local governments expected to regulate local rental markets. In this way, both local and national governments effectively remove themselves from safeguarding access to housing and living conditions of low-income urban residents.

Housing and human settlements will remain at the forefront of urban development agendas in Africa. With African cities projected to continue urbanising, access to adequate and affordable housing will become increasingly important. In the absence of

state-subsidised low-cost housing, many poor households, increasingly including those middle-class families, find that they can only afford housing in the informal sector with associated insecurities, which are compounded by rising rates of poverty, unemployment and climate change. Failure to address housing issues will lead to the continued growth of low-quality human settlements, threats to urban health and safety, and greater social and political instability. There therefore remains a need for sustainable urban policies and nationally supported low-cost housing programmes to meet the housing needs of most of Africa's urban population.

This research project has highlighted critical entry points for reform and interventions in the housing domain. Specifically, these involve a restructuring of governance systems and public sector actions in housing; proactive support for rental markets, and continued investment in a sustainable building and construction sector.

6.1. Governance

Housing domain governance reforms need to be framed within rights and justice frameworks, which view housing as a critical pathway for advancing global sustainable development goals, as well as national social, economic and environmental development priorities. National government departments need to develop multisectoral policies and programmes, focused on ensuring that affordable and adequate housing solutions support householders' social and economic rights and abilities. Bottlenecks in the housing production value chain could also be addressed through Institutional alignment and coordination, as well as resource allocation that centres on synchronised action across multiple sectors: land, approval, housing construction, building materials and technology, and urban development management.

Where housing policies exist but are unimplemented, governments could streamline implementation structures to ensure effective, equitable delivery of policy goals. Implementers would therefore assess existing programmes to ensure housing justice for all residents. Existing programmes should also be supported with adequate institutional, bureaucratic and financial resources. At the local level, there is a need to align existing building codes and standards to support public and private affordable housing delivery. Support for informal and small-scale developers is necessary, to ensure that housing development meets adequate standards while remaining affordable for those on low incomes.

The information gaps in housing should be addressed through the establishment of data and information banks within cities. Current data on housing focuses on gathering information on beneficiaries for purposes of specific programmes or projects. This needs to be expanded to include information on existing supply systems across both public and private sectors, on housing stock, prices, and ownership systems, as well as information required for the management of housing stock.

The primary role of households and small-scale providers of housing needs to be recognised and supported through policies and programmes. Community-led housing processes also need to be enhanced through data and information, as local

governments assemble knowledge on existing systems, processes and pathways adopted by households in accessing housing. This information would shape regularisation programmes for informally developed housing, the design of new funding and finance instruments to support incremental construction, home improvement and area upgrading, as well as future housing policies and programmes.

There is also a need to strengthen the role of local and metropolitan governments by [re]centring their role in the coordination of activities across the housing production value chain. Local government delivery capacity needs to be strengthened through staffing, capacity building and resource allocation. It is also important to elevate the role of housing departments to take on a central role in shaping the production and management of housing production in their jurisdictions. This includes liaising with lands, physical planning, infrastructure and other social services departments to support housing production, service delivery and sustainability in the management of existing residential stock.

6.2. Rental markets

Regulating and maintaining rental housing stock is crucial for ensuring the availability of adequate and affordable housing, and the development of sustainable residential settlements. Local governments play a pivotal role in this process, as they are mandated to coordinate the production and maintenance of rental housing in their jurisdictions. To address existing challenges in the rental housing sector, local governments need to formulate comprehensive policies and programmes that address the quality of rental housing stock, existing imbalances and asymmetrical power relationships in rental arrangements that favour landlords and housing providers. More support and help should be provided by governmental agencies to cater for the needs of very low-income tenants.

To address quantitative and qualitative issues relating to rental housing stock, local authorities need to undertake registration, assessment and planning for regularisation of existing low-cost rental units. Planning departments could also establish and enforce adequate construction standards for both public and private rental markets and, where necessary, provide design and construction support for households constructing rental accommodation. Lastly, line departments should allocate resources for the maintenance and repair of existing rental housing stock. These measures may include providing housing finance for home improvement, establishing cooperative housing management models, and allocating capital finance for neighbourhood improvement and upgrading.

Local authorities should also develop laws and regulations to ensure a stable and supportive rental housing market. These include laws that protect the rights of tenants and establish mechanisms for easier access to justice. This includes measures such as standardising and safeguarding rental deposits, implementing safeguards against unjust evictions, controlling rental increases, and providing access to mediation and conflict resolution mechanisms. These protections create a fair and secure

environment for both tenants and landlords. Existing rental tribunals and agencies should be supported with adequate capacity and resources to ensure dispute resolution, and to promote fairness and transparency.

Support for rental markets could also be facilitated through programmes that boost household incomes, enabling individuals to afford higher-quality rental accommodations. To support very low-income households through rental housing, local governments have a dual responsibility. Firstly, they are accountable for directly providing social housing and establishing shelters and facilities to accommodate homeless urban residents.

To support the implementation of rental housing management laws and regulations, local governments need to enhance their capacity. This includes investing in training and resources to equip local authorities with the necessary knowledge and skills to effectively implement existing laws and regulations. Rental housing support inevitably requires multi-actor coordination. Local governments need to work cooperatively with the wide range of housing suppliers, brokers and agents, faith-based organisations), NGOs and other supportive institutions, to secure funding, develop and manage housing solutions.

6.3. Innovative building and construction materials

There is a need for the following:

- Continued investment, recognition, and support for ABMT development and research institutes. It is crucial to sustain investment in and acknowledge the importance of ABMT development and research institutes. These institutes should be linked to training and education facilities, as well as connected to housing development programs. This integration will facilitate knowledge sharing and application of ABMT in practical construction projects.
- Enabling innovations in ABMT through government support. Local and national governments play a vital role in fostering innovations in ABMT. To achieve this, they should reduce obstacles related to trademark and registration, materials testing and certification, and accessing the market. By removing these barriers, governments can create an environment conducive to the growth of ABMT and encourage its adoption in the construction industry.
- Providing financial and other incentives for ABMT expansion. Governments should offer financial incentives to promote the expansion of the ABMT sector. One approach could be investing in ABMT by piloting the use of these materials in public housing projects. This not only provides a platform for testing and showcasing the effectiveness of ABMT but also stimulates market demand and encourages further investment.
- Narrowing information gaps on ABMT. Governments should take the lead in gathering and disseminating knowledge about ABMT, including information about materials, technology, suppliers and prices. By sharing this information, governments can address information gaps and facilitate informed decisionmaking. This knowledge can inform curriculum development and training programmes, manufacturing and production processes, investment value chains, and the activities of stockists, traders and eventual end-users.

- Incentivising collaboration and shifting attitudes. It is essential to incentivise and inform existing actors and rentiers in the building materials sector, encouraging a shift in attitude from competition and obstruction to collaboration. By promoting collaboration, stakeholders can pool their expertise and resources, leading to more efficient and effective development, production and use of ABMT.

6.4. Construction labour markets

The proposed intervention aims to utilise existing technical and vocational education and training (TVET) institutes in African cities to expand skills development for housing construction workers. By leveraging these institutes, the goal is to enhance the training and professionalisation of workers in the sector, ensuring equitable access to opportunities. Recognising the low wages typically paid to construction workers, which may hinder their ability to afford costly training, the intervention suggests that governments provide additional subsidies and support for training. This would help address the financial barriers faced by workers and promote inclusivity in the sector.

TVET institutes would play a crucial role by offering opportunities for artisans and apprentices in the informal sector to undergo testing and accreditation, as well as access continuous training for upskilling purposes. This would enable workers to improve their skills and enhance their prospects within the industry.

To support construction workers further, local governments should guarantee access to affordable transitional housing. This would ensure that workers have suitable and affordable accommodation while they are engaged in construction projects.

Another key aspect of the intervention involves enhancing and enforcing workplace safety and conditions in line with existing Occupational Safety and Health Administration requirements. In the formal housing rental sector, responsibility for this lies with both local governments and employers, who must prioritise the wellbeing and safety of their workers. In the informal housing sector, local government inspectors, as with health inspectors, need to work more closely in neighbourhoods to encourage good practice.

Additionally, it is important to incentivise employers to provide adequate facilities and protection for women and other minority groups to encourage their equitable participation in building and construction activities. By promoting inclusivity and addressing the unique needs and challenges faced by these groups, the intervention seeks to foster a more diverse and inclusive workforce in the sector.

7. Conclusion

The ACRC housing domain research aimed to fill gaps in the understanding of housing in Africa by examining the power relations and asymmetries that shape the housing sector. The project builds on existing research which highlights the impacts of persistent inequalities within the housing sector, and which have led to social, spatial and economic disparities, gender imbalances, urban poverty and lack of resilience. The

analysis of housing production ecosystems in African cities was rooted in the global commitment to the right to adequate housing and sustainable urban development. It was grounded in an understanding of housing as a fundamental right and a catalyst for improving shelter, quality of life, socioeconomic development, and the human settlements as integral for achieving low-carbon urban transitions.

The ACRC domains approach presented a framework for structuring the analysis of housing through a comprehensive system that explored multiple components of the housing production ecosystem, including finance, land administration, urban development, infrastructure, construction and housing transfer. This conceptual framing enabled a bird's eye view of the housing production value chain, acknowledging the entangled systems that are required to function in synchrony for housing markets to flourish. With this, researchers across the cities were able to identify the myriad of actors and agencies that participate in housing development, and the range of power relationships that structure each point in the production chain. This cross-city report has presented the key crosscutting findings that emerged from across seven cities, proposing intervention areas through policy, regulations, programmes or support instruments.

A key contribution of the research is in contesting the perceived absence of the state in housing. Findings from the research present a persistent presence of state action, and the counterproductive outcomes of state policy, investment and regulations in land, housing and urban development, which ultimately derail the achievement of just housing outcomes. A primary concern raised in the research is the role of the state in enabling the increased commodification of land and housing through policy, strategic planning and unsupportive housing programmes. These actions undermine the concept of housing as a human right and the role of the state as a guarantor of these rights for all.

The research therefore calls for greater coordination across the public sector agencies involved along the housing value chain, especially in land administration, urban development regulation and housing construction regulation. Recognising the diverse range of actors involved in housing, the research emphasises the role of local governments in mediating conflicting interests for the achievement of social, economic and environmental justice in African cities.

Even if for aid-donor or international policy reasons, governments are encouraged to develop free market housing policies, it is critical that governments do not absolve themselves of working as regulators and ensuring the interests of those on low incomes are not forgotten or ignored, in favour of the interests of powerful state actors and elite investors.

In conclusion, the research calls for housing reform coalitions to address governance and institutional coordination, support for urban rental markets, and support in tackling intersectional challenges in the building and construction sector. While these interventions would not necessarily offer definitive solutions to the complex challenges

of housing across different cities, they nonetheless are strategic intervention areas and sectors which, if attended to, could address bottlenecks in housing production and residential stock maintenance.

They also provide opportunities for collaboration among various stakeholders to advocate for reform, in different regions of Africa also for example; initial rent control measures in Accra, cooperative housing in Dar es Salaam, and small-scale sustainable housing estates in Lagos. These interventions are set to improve housing production systems, promote housing justice for marginalised communities, and contribute to sustainable human settlements.

References

- Access to Finance Rwanda, Centre for Affordable Finance in Africa, and 71point4 (2022). *AFR Study: Affordable Housing in Rwanda: Housing Submarkets*. [Online resource](#) (accessed 21 May 2024).
- Adegoke, SAO and Agbola, T (2020). "Housing affordability and the organized private sector". *Open Journal of Social Sciences* 8(4): 177-192. [Available online](#) (accessed 21 May 2024).
- Akinyoade, A and Uche, CU (2016). "Dangote cement: An African success story?" ASC Working Paper. Leiden University. [Available online](#) (accessed 21 May 2024).
- Andreasen, MH, McGranahan, G, Kyessi, A and Kombe, W (2020). "Informal land investments and wealth accumulation in the context of regularization: Case studies from Dar es Salaam and Mwanza". *Environment and Urbanization* 32(1): 89-108.
- Arku, G (2009). "Housing policy changes in Ghana in the 1990s". *Housing Studies* 24(2): 261-272.
- Arku, G, Mensah, KO, Allotey, NK and Addo Frempong, E (2016). "Non-compliance with building permit regulations in Accra-Tema city-region, Ghana: Exploring the reasons from the perspective of multiple stakeholders". *Planning Theory and Practice* 17(3): 361-384.
- Bagaeen, S and Uduku, O (eds.) (2010). *Gated Communities: Social Sustainability in Contemporary and Historical Gated Developments*. Routledge.
- Bagaeen, S and Uduku, O (eds.) (2015). *Beyond Gated Communities*. Routledge.
- Bandauko, E, Annan-Aggrey, E and Arku, G (2021). "Planning and managing urbanization in the twenty-first century: Content analysis of selected African countries' national urban policies". *Urban Research and Practice* 14(1): 94-104.
- Baziwe, D and Kasaija, P (2019). *Uganda: Housing Investment Chronicles*. Centre for Affordable Housing Finance Africa. [Available online](#) (accessed 21 May 2024).
- Bah, EM, Faye, I and Geh, ZF (2018). *Housing Market Dynamics in Africa*. African Development Bank Group. London: Palgrave Macmillan.
- Bidandi, F and Williams, JJ (2020). "Understanding urban land, politics, and planning: A critical appraisal of Kampala's urban sprawl". *Cities* 106: 102858.

- Boelhouwer, P and Hoekstra, J (2012). "Housing policy: Agents and regulators". In SJ Smith (ed.), *International Encyclopedia of Housing and Home* Elsevier, pages 585-589.
- Bredenoord, J and Van Lindert, P (2014). "Backing the self-builders: Assisted self-help housing as a sustainable housing provision strategy". In J Bredenoord, P Van Lindert and P Smets (eds.), *Affordable Housing in the Urban Global South: Seeking Sustainable Solutions*. Abingdon: Routledge.
- Buckley, R and Kalarickal, J (2006). *Thirty Years of World Bank Shelter Lending: What Have We Learned*. Washington, DC: World Bank Publications, N. 7061. The World Bank Group. [Available online](#) (accessed 21 May 2024).
- Buckley, RM, Kallergis, A and Wainer, L (2016). "Addressing the housing challenge: Avoiding the Ozymandias syndrome". *Environment and Urbanization* 28(1): 119-138.
- Burlotos, C, Kijewski-Correa, TL and Taflanidis, AA (2020). "The housing market value chain: An integrated approach for mitigating risk in informal residential construction in Haiti". *Sustainability* 12(19): 1-24.
- Caldeira, TPR (2017). "Peripheral urbanization: Autoconstruction, transversal logics, and politics in cities of the global south". *Environment and Planning D: Society and Space* 35(1): 3-20. [Available online](#) (accessed 5 July 2024)
- Centre for Affordable Housing Finance in Africa (CAHF) (2010). *Housing Finance in Africa: A review of some of Africa's housing finance markets, 2010 Yearbook*. South Africa: Centre for Affordable Housing Finance in Africa.. [Available online \[pdf\]](#) (accessed 21 May 2024).
- Centre for Affordable Housing Finance in Africa (CAHF) (2018). *Housing Investment Chronicles* (report series). South Africa: Centre for Affordable Housing Finance in Africa. [Available online](#) (accessed 21 May 2024).
- Centre for Affordable Housing Finance in Africa (CAHF) (2021). *2021 Housing Finance in Africa Yearbook – 12th Edition*. South Africa: Centre for Affordable Housing Finance in Africa. [Available online](#) (accessed 21 May 2024).
- Chitekwe-Biti, B, Patel, S and Mitlin, D (2014) "The transnational experience of community-led development: the affordable shelter challenge". In J Bredenoord, P van Lindert and P Smets (eds.), *Affordable Housing in the Urban Global South: Seeking Sustainable Solutions*. Abingdon: Routledge.
- Chitekwe-Biti, B (2018). "Co-producing Windhoek: The contribution of the Shack Dwellers Federation of Namibia". *Environment and Urbanization* 30(2): 387-406.

- Cociña, C and Frediani, AA (2024). "Towards Housing Justice: Four propositions to transform policy and practice". IIED Working Paper. London: International Institute for Environment and Development. [Available online](#) [pdf] (accessed 21 May 2024).
- Farouk, BR, Biitir, SB and Adjewi, R (2023). *Accra Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.
- Feather, C and Meme, CK (2019). "Strengthening housing finance in emerging markets: The savings and credit cooperative organisation (SACCO) model in Kenya". *Housing Studies* 34(9): 1485-1520.
- Fekade, T and Amdework, E (2023). *Addis Ababa Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.
- Ferguson, B, Smets, P and Mason, D (2014). "The new political economy of affordable housing finance and urban development". In J. Bredenoord, P Van Lindert and P Smets (eds.), *Affordable Housing in the Urban Global South: Seeking Sustainable Solutions*. Taylor & Francis Group.
- Frediani, AA, Cociña, C and Roche, JM (2023), *Improving Housing in Informal Settlements: Assessing the Impacts in Human Development*. Washington, DC: Habitat for Humanity International.
- Frediani, AA, Reffell, F, Kamara, FB, Tarawally, A (2022). "Understanding housing challenges in Cockle Bay, Freetown". ACRC blog. [Available online](#) (accessed 21 May 2024).
- FSD Mozambique (2019). *Mozambique: Housing Investment Chronicles*. Centre for Affordable Housing Finance Africa. [Available online](#) (accessed 21 May 2024).
- Gbadegesin, J and Marais, L (2020). "The state of housing policy research in Africa". *International Journal of Housing Policy* 20(4): 474-490.
- Gillespie, T and Schindler, S (2022). "Africa's new urban spaces: deindustrialisation, infrastructure-led development and real estate frontiers". *Review of African Political Economy* 49(174): 531-549.
- Giti, DM, K'Akumu, OA and Ondieki, EO (2020). "Enhanced role of private sector through public private partnerships in low income urban housing in Kenya". *Journal of Financial Management of Property and Construction* 25(2): 293-312.

- Huchzermeyer, M (2007). “Tenement City: The emergence of multi-storey districts through large-scale private landlordism in Nairobi”. *International Journal of Urban and Regional Research* 31(4): 714-732.
- Huchzermeyer, M and Misselwitz, P (2016). “Coproducing inclusive cities? Addressing knowledge gaps and conflicting rationalities between self-provisioned housing and state-led housing programmes”. *Current Opinion in Environmental Sustainability* 20: 73-79.
- Huynh, D, Kibe, J, McVitty, J, Sangodeyi, D, Sheth, D, Simon, PE, Smith, D (2013). *Housing Delivery and Housing Finance in Haiti: Operationalizing the National Housing Policy*. Oxford: Oxfam International. [Available online](#) [pdf] (accessed 17 June 2024).
- Jones, A and Stead, L (2020). “Can people on low incomes access affordable housing loans in urban Africa and Asia? Examples of innovative housing finance models from Reall’s global network”. *Environment and Urbanization* 32(1): 155-174.
- Karaman, O, Sawyer, L, Schmid, C and Wong, KP (2020). “Plot by plot: Plotting urbanism as an ordinary process of urbanisation”. *Antipode* 52(4): 1122-1151.
- Kenya National Bureau of Statistics (KNBS) (2020). *2019 Kenya Population and Housing Census Reports*. Nairobi: KNBS.
- Klopp, JM (2000). “Pilfering the public: The problem of land grabbing in contemporary Kenya”. *Africa Today* 47:26-27.
- Kyessi, AG and Mtwangi-Limbumba, T (2023). *Dar es Salam Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.
- Lines, K and Makau, J (2018). “Taking the long view: 20 years of Muungano wa Wanavijiji, the Kenyan Federation of Slum Dwellers”. *Environment and Urbanization* 30(2): 407-424.
- Lines, K, Mitlin, D, Mwelu, J, Njenga Maina, JP, Okoyo, O, Otibine, E, Wakesho, T and Wambui, M (2020). “Bridging the affordability gap: Towards a financing mechanism for slum upgrading at scale in Nairobi – analysing NGO experiences with local-level finance”. GDI Working Paper. Manchester: Global Development Institute, The University of Manchester.
- Macarthy, J and Tarawally, A (2023). *Freetown Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.

- Maina, M and Cirolia, L (2023). “Ring roads, revived plans, and plotted practice: The multiple makings of Nairobi’s urban periphery”. *Habitat International* 142: 102932.
- Maina, M, Braimah, F, Frediani, AA, Kyessi, A G, Macarthy, J, Mwathunga, E, Oyalowo, BA, Tarawally, A, Turay, A and Uduku, O (2023). “Rising costs and worsening housing conditions in Africa’s informal settlements”. ACRC blog. [Available online](#) (accessed 21 May 2024).
- Meth, P, Goodfellow, T, Todes, A and Charlton, S (2021). “Conceptualizing African urban peripheries”. *International Journal of Urban and Regional Research* 45(6): 985-1007.
- Mitlin, D (2022). “Understanding the politics of shelter in three African cities: The contribution of political settlements”. *Cities* 128.
- Mitlin, D and Bartlett, S (2020). “Editorial: Acquiring housing – understanding outcomes, improving choices and ‘leaving no one behind’”. *Environment and Urbanization* 32(2): 317-332.
- Muzorewa, TT (2020). “Public and private-led urban developments in post-colonial Zimbabwe: A comparative study in Ruwa Town”. *Urban Forum* 31(2): 197-213.
- Mwangi, IK (1997). “The nature of rental housing in Kenya”. *Environment and Urbanization* 9: 141-160.
- Mwathunga, E and Donaldson, R (2018). “Urban land contestations, challenges and planning strategies in Malawi’s main urban centres”. *Land Use Policy* 77: 1-8.
- Mwathunga, E, Gondwe, J, Chibowa, M, Yambeni, G and Chikadza, K (2023). *Lilongwe Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.
- Mwau, B and Sverdlik, A (2020). “High rises and low-quality shelter: Rental housing dynamics in Mathare Valley, Nairobi”. *Environment and Urbanization* 32(2): 481-502.
- Mwau, B, Sverdlik, A and Makau, J (2020). “Urban transformation and the politics of shelter; Understanding Nairobi’s housing markets”. IIED Working Paper. London: International Institute for Environment and Development.
- Nkatha, L (2023). *Nairobi Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.

- Nketcha-Nana, P-V, Kouakou, AB and Kougouindiga, A (2020). *Housing Investment Chronicles: The Case of Côte d'Ivoire*. Centre for Affordable Housing Finance in Africa. [Online resource](#) (accessed 21 May 2024).
- OECD/European Commission (2020). *Cities in the World: A New Perspective on Urbanisation*. Paris: OECD Publishing.
- OECD and Sahel and West Africa Club (SWAC) (2020). "Africa's new urban dynamics". In *Africa's Urbanisation Dynamics 2020: Africapolis, Mapping a New Urban Geography*. Paris: OECD, pages 99-129.
- Oyalowo, BA (2023). *Lagos Housing Domain Report*. Unpublished ACRC report. Manchester: African Cities Research Consortium, The University of Manchester.
- Payne, G (2014). "Policy and politics in urban land market management: Lessons from experience". In J Bredenoord, P Van Lindert and P Smets (eds.), *Affordable Housing in the Urban Global South: Seeking Sustainable Solutions*. Routledge, pages 19-39.
- Pitcher, MA (2017). "Varieties of residential capitalism in Africa: Urban housing provision in Luanda and Nairobi". *African Affairs* 116(464): 365-390.
- Potts, D (2020). *Broken Cities: Inside the Global Housing Crisis*. Bloomsbury Publishing.
- PWC (2015). *Real Estate 2020: Building the Future of Africa*. [Available online](#) [pdf] (accessed 21 May 2024).
- Rubin, M, Charlton, S and Klug, N (eds.) (2023). *Housing in African Cities: A Lens on Urban Governance*. Cham: Springer.
- Rust, K (2019). *Housing Finance in Africa: Building the Investment Argument*. Centre for Affordable Housing Finance Africa. [Available online](#) (accessed 21 May 2024).
- Satterthwaite, D (2020). "Editorial: Getting housing back onto the development agenda: the many roles of housing and the many services it should provide its inhabitants". *Environment and Urbanization* 32(1): 3-18.
- Sawyer, L (2016). *PLOTTING the Prevalent but Undertheorised Residential Areas of Lagos. Conceptualising a Process of Urbanisation through Grounded Theory and Comparison*. Doctoral thesis, The University of Manchester.
- Scheba, A and Turok, I (2020). "Informal rental housing in the South: Dynamic but neglected". *Environment and Urbanization* 32(1): 109-132.

- Schlyter, A (2006). "Esther's house: one women's 'home economics' in Chitungwiza, Zimbabwe". In DF Bryceson and D Potts (eds.), *African Urban Economics: Viability, Vitality and Vitiation*. Basingstoke: Palgrave Macmillan, pages 254-277
- Shand, W (2018) "Making spaces for co-production: collaborative action for settlement upgrading in Harare, Zimbabwe". *Environment and Urbanization* 30(2): 519-536.
- Sette Whitaker Ferreira, J, Rojas, E, De Souza Carvalho, HR, Rago Frignani, C and Santi Lupo, L (2020). "Housing policies and the roles of local governments in Latin America: Recent experiences". *Environment and Urbanization* 32(2): 333-350.
- Spiropoulos, J (2019). *Financing Micro-Developments of Residential Rental Stock: Case Studies of Seven Small-Scale Landlords in Cape Town*. Centre for Affordable Housing Finance in Africa Case Study. Johannesburg: CAHF.
- Turok, I and Borel-Saladin, J (2016). "Backyard shacks, informality and the urban housing crisis in South Africa: Stopgap or prototype solution?" *Housing Studies* 31(4): 384-409.
- Uduku, O, Lawanson, T and Ogodo, O (2021). "Lagos: City scoping study". Manchester: African Cities Research Consortium, The University of Manchester. [Available online](#) [pdf] (accessed 21 May 2024).
- Uduku, O and Lawanson, T (2022). "The challenges of governing Lagos, the city that keeps growing". *The Conversation*, 1 March. [Available online](#) (accessed 21 May 2024).
- United Cities and Local Governments (UCLG) (2019). *Rethinking Housing Policy: Harnessing Local Innovation to Address the Global Housing Crisis*. Barcelona: UCLG. [Available online](#) [pdf] (accessed 17 June 2024).
- United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Urbanization Prospects: The 2018 Revision* (ST/ESA/SER.A/420). New York: United Nations.
- UN-Habitat. (2010). *State of African Cities 2010: Governance, Inequalities and Urban Land Markets*. Nairobi: UN-Habitat. [Available online](#) (accessed 21 May 2024).
- UN-Habitat (2011). *Affordable Land and Housing in Africa*. Nairobi: UN-Habitat. [Available online](#) [pdf] (accessed 21 May 2024).
- UN-Habitat (2015). "Sustainable urban development in Africa". Nairobi: UN-Habitat.
- UN- Habitat (2017). "The new urban agenda". Nairobi: UN-Habitat.

- Van Noorloos, F, Cirolia, LR, Friendly, A, Jukur, S, Schramm, S, Steel, G and Valenzuela, L (2020). "Incremental housing as a node for intersecting flows of city-making: Rethinking the housing shortage in the global South". *Environment and Urbanization* 32(1): 37-54.
- Ward, PM (2012). "Housing policies in developing countries". In SJ Smith (ed.), *International Encyclopedia of Housing and Home*. Elsevier, pages 559-572.
- Watson, V and Agbola, B (2013). "Who will plan Africa's cities?" Policy brief. Africa Research Institute.
- World Bank Group (2015). *Stocktaking of the Housing Sector in Sub-Saharan Africa: Challenges and Opportunities*. Washington, DC: World Bank. [Available online](#) (accessed 21 May 2024).

Appendix A

ACRC housing domain reports

Farouk, BR, Biitir, SB and Adjewi, R (2023). *Accra Housing Domain Report*, ACRC.

Fekade, T and Amdework, E (2023). *Addis Ababa Housing Domain Report*, ACRC.

Kyessi, AG and Mtwangi-Limbumba, T (2023). *Dar es Salam Housing Domain Report*, ACRC.

Macarthy, J and Tarawally, A (2023). *Freetown Housing Domain Report*, ACRC.

Mwathunga, E, Gondwe, J, Chibowa, M, Yambeni, G, Chikadza, K (2023). *Lilongwe Housing Domain Report*, ACRC.

Nkatha, L (2023). *Nairobi Housing Domain Report*, ACRC.

Oyalowo, BA (2023). *Lagos Housing Domain Report*, ACRC.

AFRICAN CITIES RESEARCH CONSORTIUM



**A COLLABORATIVE APPROACH TO
TACKLING COMPLEX CHALLENGES IN
AFRICA'S RAPIDLY CHANGING CITIES.**

Where we're working

ACRC is working in 12 cities within sub-Saharan Africa with the potential and need for urban reform.

- > Accra, Ghana
- > Addis Ababa, Ethiopia
- > Bukavu, Democratic Republic of Congo
- > Dar es Salaam, Tanzania
- > Freetown, Sierra Leone
- > Harare, Zimbabwe
- > Kampala, Uganda
- > Lagos, Nigeria
- > Lilongwe, Malawi
- > Maiduguri, Nigeria
- > Mogadishu, Somalia
- > Nairobi, Kenya



Find out more

- 🖱 www.African-Cities.org
- 🐦 [@AfricanCities_](https://twitter.com/AfricanCities_)
- ✉ bit.ly/ACRCnews
- 📧 AfricanCities@manchester.ac.uk



The African Cities Research Consortium is funded by UK International Development. The views expressed here do not necessarily reflect the UK government's official policies.