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# The risks of private sector investment in affordable housing development: An Afrocentric perspective

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**Abstract:** The state delivery of affordable and sustainable housing continues to be a complicated challenge in Africa, and there is a need to encourage private sector participation. As a result, this study examines the risks associated with private sector participation in affordable housing and supporting infrastructure investment and the strategies towards mitigating the risks from an Afrocentric perspective. The evidence from a systematic literature review was coupled with the opinion of an international expert panel to address the paper's aim and provide recommendations for developing improved housing and supporting infrastructure in Sub-Saharan Africa. The review outcomes and the qualitative data from the panel discussion were analysed using thematic analysis. The results revealed that market dynamics, land supply and acquisition constraints, cost of construction materials, unsupportive policies, and technical and financial factors constitute risks to affordable housing in the region. Mitigation strategies include leveraging joint efforts, strengths, and resource bases, increasing access to land and finance for private sector participation, developing a supportive government framework to promote an enabling environment for easy access to land acquisition and development finance, local production of building materials, research and technology adoption. In line with the United Nations (UN) Agenda 2030 targets and principles, reforms are required across the housing value chain, involving the private sector and community. Application of the study's recommendations could minimise the risks of affordable housing delivery and enhance private sector participation.

**Keywords:** affordable housing; Africa; Afrocentric; public private partnerships; risks; sustainability

## 1. Introduction

Housing, which comprises the physical structure and supporting services and amenities for health and welfare, is considered one of the most fundamental human requirements. Housing the urban poor has remained a significant concern for decades, especially in Sub-Saharan Africa (World Bank, 2015), with annual deficits recording between 200k to 700k units in countries including Cameroun, Ivory Coast, Nigeria, Angola, South Africa, Kenya, Tanzania and Uganda (Proxenos, 2023). With continuous and accelerating economic expansion, population increase, urbanisation, and resultant pressure on the demand for land, housing, and infrastructure services, a further rise in the need for infrastructure is anticipated (Organisation for Economic Co-operation and Development (OECD)/ACET, 2020).

With the ever-growing urbanization, sub-Saharan Africa deals with challenges, including land inaccessibility, lack of housing finance instruments, weak credit market, and inadequate access to decent housing and infrastructure services (Bah et al., 2018).

One billion people, or roughly a third of the world's urban population, already reside in slum settlements in developing nations, and by 2030, could be quadrupled (UN, 2023). This was referred to as a "silent emergency" (UN-Habitat, 2023). Having access to quality, affordable housing is fundamental to reducing poverty, improving equal opportunities, and guaranteeing sustainable growth, related to the UN Sustainable Development Goal (SDG) 11 (to make cities and human settlements inclusive, safe, resilient, and sustainable). The aim is to place housing at the centre of specific policies to significantly reduce the number of people living in conditions below minimum standards by 2030. However, achieving this is difficult as many Sub-Saharan countries struggle to provide affordable housing and deal with the effects of their colonial history, with Eurocentric land policies and legal framework. In many countries like Kenya, Namibia, South Africa and Zimbabwe, this legacy still contributes to the crisis associated with land in both rural and urban areas, even after attaining independence (Kabongo, 2021). The UN-Habitat defines affordable housing as one that "is adequate in quality and location and does not cost so much that it prohibits its occupants from meeting other basic living costs or threatens their enjoyment of basic human rights" (World Economic Forum (WEF), 2019). With growing urbanisation and competition for limited resources, affordable housing in quality and quantity has been a concern for decades. Housing is not sustainable in a world in which only a few can afford (WEF, 2019).

Previous research on affordable housing exists. Aliu (2022) employed a perspective approach to examine housing development challenges and sustainability in the Global South. Aduwo et al. (2022) compared Europe's and Africa's housing systems. Adabre et al. (2021) evaluated the influence of critical risk factors on sustainable housing in Sub-Saharan Africa. Chan and Adabre (2019) assessed critical success criteria for sustainable and affordable housing. Mohammed et al. (2017) studied the pro-poor urban housing provision in Ghana using a literature review. Ahmed (2019) also identified the challenges of public-private partnerships (PPP) for affordable housing in Nigeria. Similarly, Kavishe et al. (2019) employed questionnaires and semi-structured interviews among stakeholders to identify policies and pitfalls in the delivery of Tanzanian affordable housing schemes. However, except for Ahmed (2019) that examined the challenges of PPP in affordable housing, studies largely focused on other related matters, but not specifically on risk associated with private sector participation. Ahmed (2019) however did not examine the risk mitigating strategies for affordable housing.

Given the significance of the issue and the ongoing demand for longitudinal research into the related problems, more exploration of the pertinent conceptual concerns is required. In the Sub-Saharan region, there is still room for analysis and discussion regarding the private sector's contribution to getting to this crucial feat. Moreover, the inadequacy of governments and local bodies to fulfil residents' needs has created a demand for innovative, planned interventions. Scholars have researched affordable housing provision across the Global South (Chan and Adabre, 2019; Mubiru et al., 2022). However, none has combined a literature review and an international expert panel discussion on affordable housing in African countries from Afrocentric views.

Therefore, this study complements earlier work by focusing on significant gaps in the literature and attempting to provide answers to the following questions: 1) what are the risks of affordable housing in the Sub-Saharan region? and 2) how can the public and private sector collaborate in affordable housing to support infrastructure provision? To address these questions, a literature research and expert panel discussion were combined.

The study's insights can inform future conversations on addressing the challenges with private sector involvement in affordable housing. Additionally, it makes recommendations for potential future studies that academic institutions and businesses in the public and private sectors could investigate. The study is significant because housing is a crucial part of Africa's infrastructure strategy, influences other infrastructure requirements, and offers long-term investment potential in economic progress.

## **2. Review of literature**

### **2.1. Affordable housing and the infrastructure portfolio**

Affordable housing is a critical element of any infrastructure package not only because housing informs other infrastructure needs but because it provides an enduring investment in economic growth. It is a long-term asset that promotes community development and wellbeing. Affordable housing includes a financial element (the percentage of income used for housing, 30%–40%), a standard for what constitutes the bare minimum in terms of social acceptability with a clear understanding of which income groups are impacted or “burdened”, and the income level at which households should be eligible for housing assistance (WEF, 2019; Shamsuddin and Campbell, 2022). Affordable housing facilities may also be referred to as social, public or cooperative housing (Zeng et al., 2019) and have qualitative and quantitative elements (WEF, 2019).

The Universal Declaration of Human Rights expressed the significance of access to adequate, affordable housing for health, wellbeing, and economic efficiency (UN-Habitat, 2014). Household spending, repayment/cost, quality and location are affordable housing metrics (WEF, 2019). Cities face these issues in housing provision for their most vulnerable residents (Anacker, 2019). Concerns about housing affordability also have to do with how suitable it is for living physically (live ability) as this can have an impact on a household's budget, leading to insufficient allowance for essential expenses, reducing opportunities and degrading the quality of life (Anacker, 2019).

### **2.2. Housing affordability: The sub-Sahara African context**

Recently, there has been a need to implement additional measures, including economic, environmental and social sustainability factors, to respond to the urbanisation crisis (Moghayedi et al., 2021). As opined by Adabre and Chan (2019), policymakers' interventions for sustainable affordable housing markets can sometimes be inefficient and counterproductive. Africa's urban population is projected to increase from 472 million or 40% of the total in 2015 to 1.3 billion or 56% in 2050

(OECD/ACET, 2020). Urbanisation opens up a wide range of possibilities, including developing an internal market that is expanding in terms of consumption and the labour force, and accelerating economic innovation and productivity (Totaforti, 2021). However, due to a lack of efficient solutions to address the urban housing crisis, particularly for low-income households, slums have developed in metropolitan areas, particularly in Sub-Saharan Africa.

The absence of a strong link between urbanisation, industrialisation, and the systemic restructuring of countries is a major distinctive quality of the African continent (Totaforti, 2021). A marked rise in living conditions typically accompanies the emergence of cities. However, in Africa, there is no mix of industrial and urban development, leaving them with poor living standards (Kuwonu, 2017). Further, because housing is expensive and salaries are too low, housing problems are generally affordability-related (UN-Habitat, 2011). This assertion is supported by pertinent metrics from a few Sub-Saharan African nations, as identified by the Centre for Affordable Housing Finance in Africa (CAHF) (2019). Numerous households live in subpar housing in slums and unofficial settlements due to a lack of better housing options that are available at reasonable costs. Additionally, individuals pay a large portion of their income for such accommodation, further contributing to their poverty. The immediate challenge is to improve the efficiency of the urban housing industry in both large and small African cities to increase access to affordable housing.

Several initiatives to improve access to affordable housing have been hampered for reasons such as the lack of bulk infrastructure on the ground, mortgages and inefficient policies (Muhammad et al., 2015). Other reasons include delivery time, unsustainable construction materials, land disputes, insufficient access to public services, and generally subpar housing (Chitonge, 2022; Kieti et al., 2022). These reasons have hampered the progress of initiatives, such as the subsidised housing delivery program in South Africa, and other governments' efforts where a lack of adequate housing is strongly tied to a paucity of mortgageable housing stock as in Gambia, Mozambique and Malawi (CAHF, 2021). Affordable housing initiatives must be based on a thorough understanding of the inherent risks like the land tenure and administration systems in Sub-Saharan African cities.

### **2.3. Risks associated with affordable housing in Sub-Saharan Africa**

Existing research offers a comprehensive picture of the risk factors that can affect affordable housing initiatives and sustainable housing in general. Such risks are ambiguous circumstances that could adversely affect affordable housing project's success or provide obstacles to it. Chileshe and Yirenkyi-Fianko (2012) identified financial, design and construction risks, while Alteneiji et al. (2020) revealed political dynamics, rental prices, interest rates and inflation as reasons for unaffordability. Adabre et al. (2021) categorised these risk factors as political, financial, procurement, design and construction, and operation and maintenance risks. Other studies concurred that the above risks influence affordable housing delivery. These are summarised in **Table 1**.

To assuage the manifestation and impact of the above risks, various approaches have been suggested, including partnerships in land provision (between communities,

government, and financial institutions), fund allocation for collective land acquisition, policy implementation (that includes the urban poor), and urban renewal programs (that include all stakeholders including the government, the community, private sector) (Obioha, 2021). This study, therefore, explores these risks and strategies from experts' perspectives.

**Table 1.** Risks to affordable housing.

Category	Descriptor	References
Political and procurement risks	Corruption and extortion	(Cheung and Chan, 2011); (Fernandez-Dengo et al., 2013); (Ameyaw and Chan, 2015); (Amoatey et al., 2015); (Boateng et al., 2015); (Osei-Kyei and Chan, 2021).
	Insufficient political will	
	Government regulations	
	Neglecting the poor	
	Project approval delays	
	Poor competition	
	Political continuity and interference	
	Uncertainty in policy	
	Difficulties with payments and litigation	
	Poor contract design	
Financial-related risks	Utilities/infrastructure supply	(Chileshe and Yirenkyi-Fianko, 2012); (Fernandez-Dengo et al., 2013); (Ameyaw and Chan, 2015); (Amoatey et al., 2015); (Osei-Kyei and Chan 2017).
	Land expropriation	
	Secondary market insufficiency	
	Lack of adequate formal financial institutions	
	Absence of alternative finance methods	
Design and construction risks	Variability of inflation rates	(Chileshe and Yirenkyi-Fianko, 2012); (Ameyaw and Chan, 2015); (Grant et al., 2019).
	Litigation regarding claim payment	
	Urban poor's credit history	
	Construction time	
Operations and maintenance risks	Cost of construction	(Cheung and Chan, 2011); (Ameyaw and Chan, 2015); (Taruvinga and Mooya, 2017); (Grant et al., 2019); (Alteneji et al., 2020)
	Overruns	
	Orders/adjustments/rework/variations	
	Unforeseen circumstances	
	Construction time	
Land processing related risks	Poor infrastructure	(Ameyaw and Chan, 2015); (Ebekozien, 2021); (Obioha, 2021)
	Changing demand	
	Overruns in operating costs	
	Private equity	
	High operational costs	
Land processing related risks	Rental price	(Ameyaw and Chan, 2015); (Ebekozien, 2021); (Obioha, 2021)
	Registration and titling procedures	
	Insufficient land regulations	
	Land acquisition	
Land processing related risks	Poor access to the land	(Ameyaw and Chan, 2015); (Ebekozien, 2021); (Obioha, 2021)
	No decentralisation in land policy design	
	Lack of alternatives to affordable land	

### 3. Methodology

A qualitative enquiry, following a review, was adopted for the study. This was suitable for amassing in-depth information from key informants (experts) and establishing the theoretical positions. A panel discussion was used. Panels, which can be standalone events, offer an opportunity for scholarly exchange and dialogue between multiple parties and perspectives (Desrayaud, 2017). The views of experts were elicited to ascribe meaning to the theoretical underpinnings of the risks of private sector participation in affordable housing development. The expert panel members were selected purposively having been identified as leading experts with vast

knowledge of the subject area across Sub-Saharan Africa particularly in their respective countries.

The literature review was undertaken using Scopus and Google employing relevant keywords including ‘affordable housing’, ‘risk factors’, ‘challenges’, ‘mitigating strategies and sub-Sahara, and Africa. Only research that was published in peer-reviewed English-language journals were considered. All study designs, with the exception of conference abstracts, letters to the editor, and editorials, were eligible for inclusion. Articles identified by citation searching of relevant articles were added to these results. Duplicate entries were deleted from the final export of the search results into the reference management system Mendeley. Studies that failed to offer an express focus on evaluating affordable housing in Sub-Saharan Africa were excluded. The literature review was based on 34 papers that were deemed crucial, plus 18 hand-sourced papers from various sources, such as governmental data and policy publications, national economic and population figures of the Sub-Saharan countries, World Bank, and UN reports.

The panel session, which was hybrid, was subsequently convened in October 2022 to discuss affordable housing risks and the potential role of the private sector. The panel consisted of experts with knowledge and expertise (research and practice) in housing and urban infrastructure development across Sub-Saharan Africa (**Table 2**). They were five (four male and one female), from Nigeria, Zambia, Tanzania, the Democratic Republic of Congo (DRC) and South Africa. The discussion was managed by a moderator to ensure focus and engagement with the panellists and audience, who also shared their opinions (Desrayaud, 2017). However, only the ideas from the panellists invited and aware of the purpose of eliciting research ideas from the session were included. Questions asked, which also represent the main data obtained, included the risks encountered in private sector participation in housing and infrastructure provision in the respective panellist’s part of Africa, how to navigate the challenges of affordable housing and the current collaboration between public and private sectors in affordable housing to support infrastructure provision.

**Table 2.** Panellists’ profile.

	<b>Gender</b>	<b>Country</b>	<b>Affiliation</b>	<b>Position</b>	<b>Areas of specialisation</b>
1	Male	Nigeria	Obafemi Awolowo University	Valuer and professor	Real estate and housing development finance
2	Male	South Africa	University of Cape Town	Senior lecturer; city planner and development economist	City planning and development
3	Male	Tanzania	Private practice	Retired lecturer; practitioner	Real estate and housing development
4	Female	DRC	Ministry of Public Works; Architectural and Urban Planning Institute	Urban planner and researcher	Housing and urban governance
5	Male	Zambia	Copperbelt University	Associate professor and dean	Land economics

Inductive thematic analysis was used to code and generate themes directed by the content and the “language of the participants” (Chawla et al., 2021; Mihas, 2023). The six-step process described by Braun and Clarke (2006) was used to process the information. This entailed familiarisation with the data, initial code generation, searching for themes (combining codes into potential themes based on the four central questions), reviewing the themes, analysis and interpretation, and then reporting the findings based on the statements and interconnections between the codes.

## **4. Findings and discussion**

The findings are presented under two key themes based on the objectives of the paper and discussed in relation to extant literature.

### **4.1. Risks encountered with private sector participation in housing and infrastructure provision in Africa**

The private sector’s contribution to housing provision manifests in two ways—small-scale private individuals using their savings (albeit unconventional as it does not comply with established building codes and tends to be poor), and large-scale property developers. The associated risks are financial, market dynamics, political, land acquisition, and construction and design risks.

#### **4.1.1. Financial risks**

Private developers face financial risks including the lack of affordable finance packages. Even high-income earners find it challenging to obtain mortgages due to the high interest rates charged by financial institutions. A study by the African Development Bank (AfDB, 2016) found that the lack of access to finance is a significant constraint to developing affordable housing in Africa. Similarly, some panel members said: “There are more private firms who cannot borrow to invest because the interest rates are very high. They want to make a profit and if you build to make a profit, I doubt whether it is going to be affordable.” This tallies with Bah et al. (2018), who noted that the terms and conditions are often restrictive, limiting the availability of long-term funds necessary for housing finance and discouraging the private investor as the costs and risks are increased. In turn, the developments are expensive, albeit of high quality. However, it was noted from the panel discussion that different African countries face funding difficulties differently: As noted by the panel, “In South Africa, funding is not a problem; it is structured in a way that there are risk-averse investors. This does not contribute to the global good or broader city development. It is narrowly focused, and many South Africans rather go overseas for greater risk returns.”

The financial constraints were also linked to the non-possession of significant assets or property as collateral for loans as required by financial institutions, given the economic situation. “We are not creating permanent jobs, but rather informal and part-time jobs that constrain people to access a bond/loan.” This point emphasises Osei-Kyei and Chan’s (2017) findings, which supported that construction firms face challenges in accessing and affording finance because of collateral and credit history. Moreover, affordable housing is meant for the low-income group as they cannot obtain funds from a mortgage because they cannot pay.

Further, the challenge of equity was highlighted, given that the public sector is still dominating since they have the resources, was highlighted. Sometimes, they fix high equity thresholds (though they vary from country to country, it is often at an average of 25%) irrespective of the investment amount. Finding sustainable funding solutions/structures for all parties is crucial for affordable housing development in Africa. This idea canvassed by the panellists is similar to that identified by Kieva and Werna (2001), who opined that cooperation might be developed between corporate investors and individual landowners in most African nations where the customary land tenure system is dominant.

#### **4.1.2. Market dynamics risks**

Demand and supply forces pose risks to affordable housing provision. With commercial properties offering higher rental income, which is more appealing to investors, the gap in affordable housing supply remains. For example, it was noted that:

“Most private sector investments are being directed towards luxury housing and commercial buildings to maximise profits; this trend is driven by the high demand for luxury housing, which allows developers to charge premium prices and generate higher profits; the production of housing incurs a fixed cost, which means that someone must pay for affordable housing provision.”

Although some institutions subsidise rent from affordable housing, long-term leases with institutional investors are risky. Renters are exposed to eviction risks as tenancies are insecure, the risks of inflation and contract defaults by local authorities, and lack of ownership and management are heightened (Bloom, 2023). Therefore, the panel agreed, without exception, that there was an imbalance between supply and demand, and it is paramount to proffer potential solutions targeted at stimulating effective demand. This aligns with the views of Nzau and Trillo (2020), who suggest that market forces can promote social inclusion in developing countries by driving affordable and sustainable housing.

#### **4.1.3. Political risks**

Political, governance and regulatory systems shape the affordable housing market/investments. They provide the conditions for private-sector investments. However, many African countries have weak or outdated laws and regulations that do not adequately support affordable housing provision, “Most of our laws do not adapt to the current market.”

High reorganisation rates and a lack of urban planning policies have resulted in foreign investments and a housing deficit. For example, “In the case of the Democratic Republic of Congo, the private sector is largely held by foreign entities such as Chinese, Indian, and Lebanese investors, who only bring housing projects for a limited time. Previously, it was the public sector that provided such projects, and the situation of lacking investment is difficult to solve.” Further, government policies aimed at managing urbanisation in developing cities do not address the need for affordable housing: “The policies around how to deal with the private sector and real estate development are not even mentioned in these documents”.

Furthermore, the risks associated with bureaucratic bottlenecks and corruption are prevalent in some countries, which undermine the transparency, accountability,



and efficiency of the housing sector: “The inherited political systems in African countries continue to use the Westminster system of different government departments, each with its own system”. In South Africa, for example, this promotes competition and separation of powers, which can hinder effective coordination and policy implementation.

The above factors are risks that should be considered in the provision of affordable housing. As supported by WEF (2019), the regulatory and political landscape of countries or cities affects affordability. Reducing the costs of complying with complicated building codes can significantly reduce project costs (WEF, 2019).

#### **4.1.4. Land acquisition risks**

Land legislation and policies constitute risks in land acquisition processes. Access to land is challenging because of lengthy registration processes, bureaucratic bottlenecks, lack of transparency, costs of land and titling, and permit concerns. These were shared thus:

“You need certification to register land, which may also involve other costs and even penalties for not complying; in countries like Tanzania, one cannot get service land. The private sector has to apply for surveying, land planning, and building permits, and the whole process is not transparent; there are hidden costs.”

Further, the social value attached to land as personal property or object of reverence poses a risk. In some African countries like Nigeria, land is regarded as a deity, a valuable and sacred asset; hence, people are reluctant to sell or lease to private developers for affordable housing units. “It is difficult to part with land treated as deity/God. In a phenomenon called Omonile, the children of the landowners want to claim the land from private developers even when compensation is paid to their fathers.” This has implications for developers to acquire land at a reasonable cost and location, limiting supply. As concurred by Kabongo (2021), these bottlenecks affect and result in high development costs.

#### **4.1.5. Construction design and technical risks**

The issue of sub-standard housing owing to the affordability of good quality building materials is a significant challenge to sustainable housing development in Africa. This increases the cost of building. In addition, the need to use construction materials that conform to international and national building standards was highlighted thus:

“The lack of conformity to international standards and the usage of local building materials; we have a lot of clay deposits for bricks, but because they do not conform to the British standards, you may have to import, and there are high importation costs.”

Many African countries cannot manufacture building materials locally, resulting in high importation costs. This resonates with the findings of Adabre, Chan, Darko, et al. (2020) and Mavhungu et al. (2016) that the most significant obstacle to green construction and sustainable building is limited or lack of access to affordable building materials and technologies. Therefore, strategies to capacitate private sector players warrant attention.

## **4.2. Mitigation strategies**

To navigate the abovementioned challenges in affordable housing delivery, panel members shared how the private sector can be involved towards bridging the housing gap. The following mitigation strategies were highlighted.

### **4.2.1. Financial risks**

Regarding the financial risks highlighted, the question was, “How best can we fund affordable housing to mitigate financial risks effectively?” Exploring innovative financing and PPP mechanisms with shared risks and balanced investments, incentives and tax reliefs/holidays, subsidies, were unanimously suggested.

“Governments need to provide the environment for collaboration with the private sector; discussions need to be had with the public and private sector to find a way forward, especially with supporting costs for the private sector; the partnership will also have to balance that equation between the investment, returns, and payback period.”

“Make some incentives for real estate investment, and promote home ownership, mortgage guarantees and subsidies; create development areas whereby investors are encouraged to build. Once you build in that, you have tax holidays maybe within the first five years, like free trade zones.”

These findings support studies that emphasise the need for innovative financing models, risk sharing and subsidies to unlock housing finance in Africa (Amoatey et al., 2015; Muhammad and Johar, 2019). Allocating project risks effectively is one of the ways to achieve better value for money (World Bank, 2020). Sharable risks may include procurement, design, construction, operation, permits, political commissioning, financing, and maintenance (UN, 2011). Further, providing guarantees or subsidies from the public partner will reduce the uncertainty and volatility of cash flows and keep housing costs as low as possible (UN, 2011). In addition, tax relief can be availed to property developers of affordable owner-occupied dwellings and the government can provide subsidised land to support affordable owner-occupied developments (OECD, 2021). Small-scale developers unable to compete with other corporate investors can collaborate with city governments to collectively purchase or repurchase large quantities of housing stock (WEF, 2019). As noted by the panel, landowners may also provide access to their property in exchange for equity in housing projects. These measures could curtail the upfront land expense and excessive interest charges cum the challenges of the phenomenon of Omonile

### **4.2.2. Market dynamics**

Mitigating market risks requires addressing issues of affordability and creating a favourable business climate for private investors. In addition to stimulating effective demand, investment in building materials, and industrial development, the government needs to step in by subsidising housing for low-income earners who are unable to afford the market rate and make deals with buffers to cushion the impacts of the risks. Additionally, aligning development with existing market forces or systems was emphasised to reduce the costs associated with the growth of cities.

“Governments must support those who cannot afford housing; it remains a responsibility of government at a certain level to provide housing as the private will not bear the cost that has to be incurred and somebody has to pay.”

“Cities are being built and constructed continuously and there is a need to engage with the market forces in a more proactive, collaborative, and positive way; horizontal growth in cities, which leads to a broad step in infrastructure costs, should be recognised and planned for; a compact city design would help contain the cities and absorb more residents while reducing the cost structure cost per unit.”

Bloom (2023) described an “income-strip deal” where the government enters into long-term contracts with institutional investors to buy and lease back social housing for 30–50 years, after which the local authority can re-purchase the property for a nominal amount. Such arrangements could ensure a guaranteed income stream and encourage more investment in the affordable housing market. Further, as supported by Jabareen (2006), sustainable and affordable urban cities can be achieved through compactness as future development is aligned with the existing land uses.

#### **4.2.3. Political risk mitigation**

Mitigating political risks in housing investment is critical in ensuring successful housing projects. The panellists recognised that the reduction and transparency of procedures, provision of a favourable environment, and policies that recognise the role of small-scale developers are critical. In other words, panel members agreed that addressing political risks requires a stable and enabling policy environment that incentivises private sector participation in the housing sector.

“The reduction of procedures for granting building permits; promoting and recognising the role that small land developers play in shaping urban areas; political and technical resources to address the growing housing deficit and mitigate the risk of investing in housing projects; bring property development to the centre of policymaking and recognise its significance in the overall development of the housing.”

These views align with studies which propounded that developing policies to control the housing sales and rental submarkets, policy evaluation, and reduced time for permit approvals will attract private investment (Mubiru et al., 2022; Adabre, Chan, Darko et al., 2020). This is also in tandem with Hu et al. (2022), which suggest that developing policies to control housing sales and rental submarkets can increase housing affordability.

Further, the role of researchers and academics in the debate on housing development at the centre of government policy was emphasised. According to one panellist, the research should also be disseminated locally so that policymakers and stakeholders (politicians, city builders, planners or people in the building industry) can be abreast of current research.

“Our mental inability to think about city and city construction and affordable housing in Africa and what is best for us in a more collaborative way has been a hindrance. We should all see ourselves as part of that mechanism and tools of creating that and not separate elements of that.”

The above suggests that the potential for affordable housing can be unlocked only through a concerted effort by relevant actors and teams.

#### **4.2.4. Land acquisition mitigations**

In terms of mitigating the land acquisition risks, the need for the actors to leverage the state's vast resources in a forward-planning and collaborative approach with landowners, and other small-scale developers was mentioned. Investment models that can benefit various parties, such as building leases with compensation for the use of the land over time can be developed.

“The state has enormous resources and legislation it can use, for example, forward-planning together with the private sector to protect where growth should happen. It can also do lands management, which is very common across Africa.”

“If the government can work with landowners to create intergenerational compensation, families are now into discussions even with private developers and instead of selling, they tend to come up with an investment model, similar to building lease, so that when the private developers build, they would get something, or the building will revert to them after some years.”

These partnerships can help to create available land for development. Active collaboration, even with community members could be beneficial to the housing sector (WEF, 2019). Further, regarding land registration processes and errors, digitalisation is being used in some African countries such as South Africa. Many of the errors are currently being minimised. For instance, Blockchain enhances planning and scheduling procedures and fast-tracks land registry processing, as is the case in Senegal for low-cost building projects.

#### **4.2.5. Construction design and technology control**

According to the panellists, while technologies are essential, there is a need to be conscious of local needs, materials and culture/market. One panellist explained, “The design of housing units is critical in fostering integration and cohesiveness within the community. The Yoruba culture in Nigeria, for instance, emphasises the importance of social capital in designing homes that enable families to share social gatherings and ideas.” The design should meet the needs of the local population. These views align with Nikezić et al.'s (2021) opinion that housing structures are cultural urban infrastructure and as such, should be designed to express contemporary sustainable urban lifestyles.

In addition, capacitating private developers on advancements and new techniques is crucial. As noted by one of the panellists, “We have a lot of clay deposits for example that you can make bricks, but because they are not conformed to the British standards, then you may not be able to use and may have to import and there is high importation costs therefore it raises the costs.” According to WEF (2019), private sector players need to keep abreast of emerging solutions in construction techniques and materials and work with the governments to ensure an adequate flow of skilled labour.

## **5. Implications of the findings**

The study identified the risks, the way forward to supply affordable housing in Sub-Saharan Africa and the prospects of working with the private sector to reduce associated risks. Experts' views were elicited to ascribe meaning to the theoretical underpinnings on the risks of affordable housing identified from the literature. This multi-method approach provided views from knowledge/research and experience, which has been employed to a limited extent in PPP and affordable housing research.

The subcontinent's political economy is inextricably linked to the deployment of tools for its affordable housing. Whether or not national legal and regulatory frameworks enable public-private affordable housing partnership projects depends largely on the alignment of political forces between the private and state governments. Likewise, the patterns of land ownership and control play a crucial role in determining how much the private sector can contribute to the provision of housing for affordable housing. In Sub-Saharan nations, where acquiring money from capital markets is difficult, the private sector must collaborate with national or state governments to establish mortgage liquidity services and create a secondary credit market.

Considering the foregoing, the components that could aid Sub-Saharan Africa in providing affordable housing include the following:

- 1) The government's position should be posited as a facilitator and an enabler of housing, as that role has not been successfully fulfilled in many cases. A supportive governance framework and instruments are required to promote local production.
- 2) Players in the private sector must stay current on new construction methods and materials, collaborate with governments to ensure a sufficient flow of trained labour, and consider novel financing and tenure models.
- 3) Policy, legislation, and governance support that is sufficiently clear to allow the private sector to acquire land for the housing development process.
- 4) Building regulations and codes be examined and updated considering modern engineering, building, and planning standards, local conditions, and administrative ease.
- 5) Providing access to developers who can obtain finance for the cost of real estate and infrastructures to be met. Land-based finance can support such efforts too.
- 6) More research and innovation are also required to develop cost-effective, environmentally affordable housing construction techniques.
- 7) Real estate professionals should be engaged in capacity development through local and international seminars, conferences, and study visits.
- 8) The government should maintain a regular update schedule for its urban plans and ensure that they are based on Afrocentric realities.

The above strategies could support efforts towards providing affordable and sustainable urban housing.

## **6. Conclusion**

The study sought to identify first-hand information on affordable housing risks and mitigation strategies through private-sector collaboration. A semi-systematic review and an international panel discussion provided evidence on affordable housing

concerns and related mitigation practices in selected Sub-Saharan African countries. Perspectives from five experts representing academia and industry were analysed. Findings revealed that socio-political considerations, Eurocentricity, an unfavourable regulatory environment, and market conditions influence the African housing market. The major risks to affordable housing development with the private sector include financial, market, political, land acquisition, and construction/design risks. Mitigation strategies include leveraging joint efforts, strengths, and resource base, increased access to land and finance for private sector participation, local knowledge mobilisation and technology.

While reforms are necessary along the housing value chain, engaging various actors in discourses to decipher innovative ways to support private sector participation to provide affordable housing optimally is critical. Government's ability to increase the supply of affordable housing must be significantly aided by the private sector, which should be at the forefront of creating, innovating, and funding affordable housing options. An integrated and inclusive approach to housing can be promoted through cooperation between governments, civil society organisations, significant interest groups, and the commercial sector on a national, international, and regional level. Supportive regulatory frameworks and policies, more straightforward title registration procedures and structures, investment in research, and promotion of local building materials and technologies are also necessary to meet the needs of low-income households.

The findings of this study include limitations regarding its generalisation or interpretation. First, the experts were limited to researchers and practitioners. Members of the builders' associations and the local communities could participate in future research to supply more evidence for decision making. The issues raised can only be generalised to the subcontinent or other emerging nations that share a comparable socio-economic situation. Nevertheless, the study's findings may benefit policymakers and public and private sector practitioners to provide affordable housing for sustainable urban growth. Importantly, the study established factors that influence affordable housing delivery, which is important to devise intentional and streamlined strategies to curtail the identified risks. The study's findings also have implications for housing policy evaluation and review. Academics, businesses, and the government can all benefit greatly from this study by building on the findings to create strategic interventions.

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