



QUALITY ANALYSIS OF HOUSING STOCK AND SHELTER DEPRIVATIONS IN SUB-SAHARAN AFRICA

SANI JIBIR DUKKU Ph D

Department of Urban and Regional Planning, Abubakar Tafawa Balewa University, Bauchi – Nigeria

Abstract

This paper canvases the state of housing stock and shelter deprivation in Sub-Saharan Africa. It systematically reviews trends in housing conditions with respect to housing needs at the national scale and analyses the quality of the existing housing stock using the UN-HABITAT's 'shelter deprivations' framework. It shows how the housing stock in Sub-Saharan Africa is grossly inadequate quantitatively and qualitatively. Drawing on the discussion and analysis presented, recommendations on how to facilitate more effective, affordable and qualitative housing delivery systems are prescribed.

Keywords: *Quality, Analysis, Housing, Stock, Shelter, Deprivations*

Introduction

The quality of existing housing stock in Africa is low, as the majority of the population live in conditions categorized as slums. UN-HABITAT uses an operational definition of slums that has five measurable indicators at household level, known as 'shelter deprivations' (see Table 1). Four of the five indicators measure physical expressions of slum conditions: non-durable housing structures; lack of water; lack of sanitation; and overcrowding. The fifth indicator, security of tenure, has to do with legality. This, however, is less easily measured, as it is often dependent on de facto or de jure rights, or the lack of them. Sub-Saharan Africa has the highest urban and slum growth rates of all the regions in the world (4.58 and 4.52% respectively), and also the highest proportion of slum dwellers at 61.7% in 2010 (UN-DESA 2009). Between 1990

and 2005 the number of slum dwellers has almost doubled – from 101 million in 1990 to 199 million in 2005, which equates to six out of every ten urban dwellers. Sub-Saharan Africa had the third highest total number of slum dwellers of all regions of the developing world (after Southern Asia and Eastern Asia). In contrast, Northern Africa is experiencing negative slum growth. Both the absolute number and the proportion of slum dwellers in the region decreased between 1990 and 2005. The proportion living in slums in 1990 was 34.4% but by 2005 this figure was only 13.4% (UN-DESA 2009)

Table 1: Key Shelter Deprivations as Measures of Slums

Key Indicators	Definition
Structural Quality/ Durability of Dwellings	A house is considered ‘durable’ if it is built on a non-hazardous location and has a structure that is permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions such as rain, heat, cold and humidity.
Sufficient Living Area	A house is considered to provide a sufficient living area for the household members if not more than three people share the same room.
Access to Improved Water	A household is considered to have access to ‘improved’ water supply if it has sufficient amount for family use, at an affordable price, available to household members without being subject to extreme effort, especially to women and children.
Access to Improved Sanitation	A household is considered to have access to ‘improved’ sanitation if it has a human excreta disposal system, either in the form of a private toilet or a public toilet shared by a maximum of two households. In urban areas, access to improved sanitation is defined by direct connection to a public piped sewer; direct connection to a septic system; or access to a pour-flush latrines or ventilated improved pit latrines, allowing for acceptable local technologies.
Security of Tenure	Secure tenure is the right of all individuals and groups to effective protection by the state against forced evictions.

International law defines forced eviction as ‘the permanent or temporary removal against the will of individuals, families and/or communities from their homes and/or land which they occupy, without the provision of, and access to appropriate forms of legal or other protection’

Source: UN-HABITAT 2004; UNHABITAT 2006

II. Housing Durability

Housing durability, which is synonymous to the permanence of residential structures, is directly associated with accessibility and affordability. Global figures on housing durability are based primarily on permanence of individual structures, not location or compliance with building codes. They also only take into account the nature of the floor material as very few countries collect information on wall and roof materials. They are, therefore, grossly underestimated but do give an indication of housing quality for cross-country comparison (UN-HABITAT 2006). According to UN-HABITAT estimates, some 20% of the developing world’s urban population with non-durable housing, based on the ‘floor criterion, lives in Sub-Saharan Africa. If, however, the quality of roof and wall materials are also to be included in measures of durability, the figures of durable housing in the stock for many countries decreases significantly, as Table 2 shows. For example, 80% of dwellings in Benin are classified as durable on the basis of the floor material alone but when materials for the wall and roof are also taken into consideration, the figure is reduced to 60% (UN-HABITAT 2006).

Table 2: Proportion of Households with Durable Housing in Select Countries Based on Three Building Elements

Country	Floor	Wall	Roof	All Three
Benin	80.2	61.6	88.3	60.1
Central African Republic	26.2	9.1	52.5	7.7
Chad	15.3	5.3	52.9	4.7
Togo	94.4	72.6	88.7	66.2
Uganda	68.6	58.5	91.8	53.7

Source: UN-HABITAT 2006

Sufficient Living Area

Overcrowding (lack of sufficient living area) is a manifestation of housing inequality that results from a combination of factors, the most prominent of which are perhaps insufficient housing stock and lack of affordable housing. It is also argued to be a hidden form of homelessness as many people with nowhere to live are accommodated by relatives or friends – which results in overcrowding. In Addis Ababa, Ethiopia; Kampala, Uganda; Luanda, Angola; Lagos and Ibadan, Nigeria, more than 40% of the urban population lives in overcrowded houses. Overall, 73% of the population in Sub-Saharan Africa have sufficient living area. It should be noted that concepts such as those of overcrowding, ventilation and lighting standards have, however, been criticized for being based on foreign notions that are inconsistent with the cultural and climatic contexts in much of Africa, and where interiors of dwellings serve a different purpose to those in developing countries (Kironde 1992). While the limitations of such normative standards are recognized, they are beneficial in enabling cross-country comparisons at the micro-level.

Access to Improved Water Supply

Africa has the lowest proportion of the total population (64%) with access to an improved water supply of all regions in the world. There is, however, considerable variation in access to an improved water supply across the region, with much better coverage in urban areas (about 85%) than in rural areas (50%) (UN-HABITAT 2006). Although official statistics for most countries reflect higher water coverage in urban areas than in rural, in many cities, the quantity, quality and affordability of water in slums is below acceptable standards.

In 2003, 82% of the urban population in Sub-Saharan Africa had access to an improved water supply (Table 3). Some cities, however, had particularly low coverage, including Luanda, Angola (51.4%) and Nouakchott, Mauritania (31.2%) (UN-HABITAT 2010). In contrast, in most Northern African cities was almost universal access (94.9%) at affordable cost, despite an acute shortage of water in the sub-region.

Access to Improved Sanitation

Sub-Saharan Africa has very poor levels of sanitation. Just over half the urban population (55%) had access to improved sanitation in 2003, approximately the

same proportion as in 1990. This is because between 1990 and 2003, the urban population increased by 80%, and the number of urban dwellers lacking access to improved sanitation also increased drastically from 77 million in 1990, to 132 million in 2001, to 160 million in 2005 (UN-HABITAT 2006).

A few cities have, however, seen an increase in the proportion of their populations with access to improved sanitation. Kigali, Rwanda and Ibadan, Nigeria, for example, increased coverage from 47.8 and 26.8% in 1990 to 79.4 and 67.3% in 2003 respectively. In contrast, 89% of the urban population in Northern Africa had access to improved sanitation in 2002, up from 84% in 1990. Cairo, Egypt increased access to improved sanitation from 76.2% in 1995 to 89.2% in 2005 (UN-HABITAT 2010). This roughly mirrors a national improvement from 74.8 to 86.5% during the same period. Nonetheless, throughout Africa there remains much to be done regarding improved sanitation. This is attested to by 2003 UN report which stated that:

'Ensuring that everyone has access to adequate sanitation.... is fundamental for human dignity and privacy..... In accordance with the rights to health and adequate housing..... States parties have an obligation to progressively extend safe sanitation services, particularly to rural and deprived urban areas, taking into account the needs of women and children' (UN 2003).

Security of Tenure

Security of tenure is becoming increasingly precarious in a number of African cities, as evidenced by continuing mass evictions and slum demolitions. The scale of tenure insecurity is largely a result of public and private sector policies and practices. The three most common causes of mass eviction are large-scale infrastructure projects, international mega events, and urban beautification initiatives (Tibaijuka 2005). Many of these evictions are carried out without legal notice or without following due process and constitute a gross violation of the right to adequate housing (UN-HABITAT 2007b). There are many different kinds of mega-events: political events such as the IMF/World Bank conferences; sporting events such as the Olympic Games; or cultural events such as World Expositions. Research shows that when cities host these and other types of large-scale events the housing rights of local communities and individuals are often violated. Many households find themselves displaced, sometimes forcibly, while others are disproportionately affected by rising housing prices (COHRE 2007).

The military-style nationwide ‘clean-up’ operation in Zimbabwe, termed ‘Operation Murambatsvina’ (Operation Restore Order) by Government, cost hundreds of thousands of people their homes and livelihoods. Official figures released in July 2005 revealed a total of 92,460 housing structures demolished directly affecting 133,534 households (Tibaijuka 2005). Sub-Saharan Africa has a particularly high prevalence of evictions, with Lagos and Abuja in Nigeria and Nairobi, Kenya among the cities where there have been mass forced evictions in recent decades. Smaller scale evictions have also been carried out in, among other African countries, Angola, Burundi, Egypt, Equatorial Guinea and South Africa (UN-HABITAT 2007a).

Multiple Shelter Deprivations

Housing that is characterized by one or more of the above shelter deprivations is defined by UN-HABITAT as inadequate. However, the degree of inadequacy depends on both the number and the degree of the deprivations. Thus, a slightly crowded housing unit that satisfies all the other adequacy criteria is closer to adequacy than a unit that is non-durable, crowded and has access neither to improved water or to sanitation. The use of this definition sets a high benchmark for adequacy, making it more difficult to achieve housing that is both adequate and affordable. Table 4 shows that, within Africa, slum households in Sub-Saharan Africa suffer from the most shelter deprivations, while those in Northern Africa are the least deprived. About half of slum households in Sub-Saharan Africa suffer from one shelter deprivation and a third suffer from two deprivations. In Northern Africa only 10% suffer from two deprivations. Where slum dwellers do not suffer from multiple shelter deprivations, such as in North Africa, interventions and investments in just one sector can dramatically reduce the numbers of people living under slum conditions, as was the case with government investment in slum housing in Morocco and Tunisia in Northern Africa and in Namibia and Tanzania in Sub-Saharan Africa (UN-HABITAT 2007a).

Table 4: Proportion of Slum Households in Developing Regions by Number of Shelter Deprivations, 2001

Region	Deprivations (%)			
	One	Two	Three	Four
Southern Asia	66	29	5	0
South-Eastern Asia	74	20	5	1
Western Asia	77	16	6	1
Northern Africa	89	11	0	0

Sub-Saharan Africa	49	33	15	3
Latin America & the Caribbean	66	25	8	1

Source: UN-HABITAT 2005b

Affordability

Housing affordability data is not widely available for African countries because few governments, private entities, universities, or NGOs systematically keep track of the relationship between house purchase and rent prices, household income, and housing-related expenditure. Nevertheless, regional figures for 2001 demonstrate that urban Africa had the highest house price-to-income ratio of all regions. The ratio was 12.5, indicating that it takes 12.5 median annual salaries to buy a median price house. This is similar to Asia-Pacific region and Arab States (12.5 and 11.3 respectively) but more than double Latin American and Caribbean countries and high-income countries (5.4 and 5.8 respectively) (UNCHS 2001). The rent-to-income ratio for African cities is more than twice that of cities in high-income countries at 39.5% of income (UNCHS 2001b). This is second only to Arab States where the cost of rent represented an average of 45.4% of income. It is likely, however, that the quality (or value for money) of rental housing in Arab States is considerably higher than Africa.

House price-to-income ratios vary considerably across, and even within African countries. Some African cities have reported ratios similar or even lower than those in high-income countries, for example Chegutu, Zimbabwe (3.4), Parakou, Benin (2.9) and Ismaila, Egypt (5.4). The majority, however, have much higher ratios, for example Monrovia, Liberia (28.0), Tanta, Egypt (23.1), and Maputo, Mozambique (20.0) (see Table 5). Differences in housing affordability are due to a range of factors, in particular the different availability, cost and demand on many components of housing affordability. Typical components in Africa are the local cost of land, infrastructure, construction materials and labour which are in turn influenced by such dimensions as urban and population growth patterns that shape housing demand, the availability of existing housing stock, local incomes, and municipal housing regulations and policies. Furthermore, in many African countries the domestic real estate market (buying and selling) is undeveloped and house trading is often difficult

or culturally unacceptable, which limits house sales/transfers and the range for real estate transactions (Gilbert 1999, UNCHS 2001b, Dukku 2018).

Table 5: House Price-to-Income and Rent-to-Income Ratios in Selected African Cities

Country	City	Price-to-Income Ratio	Rent-to-Income Ratio
Benin	Parakou	2.9	36.3
Burundi	Bujumbura	7.5	-
Cameroon	Douala	13.4	-
Cote d'Ivoire	Abidjan	18.0	9.9
Egypt	Ismaila	5.4	21.0
Egypt	Tanta	23.1	25.3
Gambia	Banjul	11.4	12.4
Ghana	Accra	14.0	21.1
Ghana	Kumasi	11.6	20.8
Kenya	Kisumu	8.5	-
Liberia	Monrovia	28.0	-
Madagascar	Antananarivo	13.9	30.0
Mauritania	Nouakchott	5.4	-
Mozambique	Maputo	20.0	-
Rwanda	Kigali	11.4	-
Senegal	Dakar	3.5	14.6
South Africa	Port Elizabeth	10.6	-
Togo	Sokode	1.4	7.1
Tunisia	Tunis	5.0	20.3
Uganda	Jinja	15.4	6.0
Zimbabwe	Chegutu	3.4	-

Source: UN-HABITAT 2003

Tenure Modalities

Housing tenure describes the legal mechanism through which a household accesses housing. The two dominant forms of tenure are ownership and rental. Ownership covers a broad continuum of rights from full legal title in formally

built housing through to settlements established illegally on invaded land. Likewise, renting ranges across a continuum of forms, from tenants living in formal housing with legally binding contracts with the owner to those in illegal settlements and slums with only verbal contacts with the owner. Other tenure forms have a more ambiguous legal status somewhere in between these two extremes (UN-HABITAT 2003). There are a growing number of urban households in Africa that are renting, often in slums and informal settlements. Such informal rental markets have greatly expanded, especially in the last three decades. Most governments in Africa, like others across the developing world have, over the last two to three decades, encouraged individual home-ownership rather than rental or shared ownership. However, housing for individual household ownership developed by the formal sector is not affordable for a significant proportion of urban households, leaving rental housing as their only option. On the other hand, the vast majority of rural households own the home in which they live. It is important to note that the national-level owner-occupancy indicators are driven largely by the high rates of owner-occupancy in rural areas; but the quality of these structures is generally poor.

Despite a general trend against direct provision of housing in the developing world as recommended by the Habitat Agenda, there is still continuing support for public rental housing in some countries (UNCHS 2001). For example, South Africa has shown strong action towards developing a social housing sector that produces affordable rental housing. In particular, the development of housing associations to manage low-income estates and rental accommodation has been encouraged. According to Government estimates, there are 60 institutions offering 25,000 rental units. Developments are financed with the support of the institutional housing subsidy program (UN-HABITAT 2005b). The principal source of rental housing in Africa is now the self-help landlord. Hence, an increasing proportion of rental accommodation does not conform to regulatory or legal requirements and is to be found in slums and informal settlements, or backyards of existing houses. Under such circumstances, few contracts between landlords and tenants are written or legally binding. In Nairobi, Kenya, an extraordinary 92% of the households (in slums) are rent-paying tenants, rather than home-owning squatters (Gulyani and Talukdar 2007).

Conclusion and Recommendations

Drawing on the discussion and analysis above, recommendations on how to facilitate more qualitative housing delivery systems for a range of different categories of actors – national governments, local authorities, private developers and housing co-operatives – are now outlined.

a) Adopt the Enabling Approach

The enabling approach is widely seen as the most promising way of addressing the housing challenge posed by urbanization in developing countries. Foremost among these are rapidly growing urban populations, the urbanization of poverty, and the proliferation and expansion of slums and informal settlements. Within the informal approach there are four ways in which adequate and affordable housing can be provided as newly-built dwellings:

- Through direct provision for groups most in need, by NGOs and other welfare organizations;
- Through public-private partnerships;
- Through private sector provision, usually through a deal to allow more profitable housing in return for a proportion of ‘affordable’ dwellings;
- Through changes to regulatory frameworks to accept dwellings provided through the household sector in conjunction with informal sector builders.

b) The Economic Benefits of Increasing Housing Provision

Beyond housing as a form of welfare and consumption the housing sector also plays an important part in national and regional economic development:

‘After several decades of debate on what housing might contribute to economic growth, it is now a widely held view that housing is not just a peripheral activity but a central force in sound economic development, much in the same way as investment in transportation, power and communication’ (Tibaijuka 2009).

Housing is therefore much more than providing people a place to live, housing investment contributes, directly and indirectly, through

backward and forward linkages in the economy, to national economic growth and, to a large extent, to national capital stock. Housing is a tool for employment creation, providing opportunities to solve the underemployment problem and improve human capital, as well as for improving business capacity and private enterprise to deliver land and housing efficiently and economically (Green 1997).

c) Slum Upgrading

Given the difficulties in providing suitable urban land for new housing development and the cost of construction, slum upgrading is arguably the most cost-effective means of improving the shelter conditions of the poor in Africa. However, one of the key challenges in slum upgrading is ensuring that improvements do not lead to gentrification: increased housing costs and consequent displacement owing to unaffordability.

d) Building Materials and the Construction Industry

Policies are needed to increase access to appropriate affordable building materials, and research development into innovative technologies should be supported. Equally urgent is the need to improve the quantity and quality of skilled workers in the informal housing sector. Environmental construction design and techniques, and energy-efficient, low-polluting technologies should be promoted and made more widely available. Small-scale contractors are central to the implementation of policies to increase adequate and affordable housing. If they are to be assisted by government and local authorities to take a more central role, they must be more cooperative with regulating bodies in order to benefit from the change of attitude which public authorities are urged in the enabling approach.

Housing construction is a particularly sound investment in Africa because low-cost homes are the most economically stimulating to its economy. Low-cost housing generates 30% more income than high-cost housing. Because the informal sector is more labour intensive than the formal, construction in the informal sector creates 20% more jobs and builds six times more than formal sector construction (UNCHS 1996).

e) Co-operative Housing

The co-operative housing movement has been gaining momentum in many developing countries in recent years. This is, in part, due to failure of other formal housing delivery systems to provide adequate and affordable urban housing. In addition, the tradition of collective support in rural areas, though not nearly as strong in cities and towns, retains

some influence in many African countries. Thus, the recommendation in the Habitat Agenda, the co-operative approach should be given ‘a pre-dominant role with regard to the principles of strengthening enabling strategies, participation and partnerships’. This requires improved regulatory and institutional framework for cooperatives to operate as well as adequate and affordable financial options that can cater to cooperative housing approaches.

References

- COHRE 2007. Centre on Housing Rights and Evictions. Fair Play for Housing Rights: Mega-Events, Olympic Games and Housing Rights – Opportunities for the Olympic Movement and Others. Geneva.
- Dukku, S. J., 2018. *Policy Implications of the Hausa Culture in Respect of Housing*. Lambert Academic Publishing, Beau Bassin, Mauritius.
- Gilbert, A., 1999. A home is for ever? Residential mobility and home ownership in self-help settlements. *Environment and Planning A*: 1073-1091.
- Green, R., 1997. Follow the leader: how changes in residential and non-residential investments predict changes in GDP. *Journal of Finance*, 51(5): 1188-1214.
- Gulyani, S. and D, Talukdar 2007. Slum real estate: The low-quality high-prize puzzle in Nairobi’s slum rental market and its implications. Fourth Urban Research Symposium 2007: “Urban Land Use and Land Markets” Washington, DC: World Bank.
- Kironde, J. M. L. 1992. “Received concepts and theories in African urbanization and management strategies: the struggle continues”, *Urban Studies* 29(8): 1277-1292.
- Tibaijuka, A. K., 2005. Report of the Fact-Finding Mission to Zimbabwe to assess the Scope and Impact of Operation Murambatsvina.
- United Nations 2003. General Comment No. 15 (2002): The right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights) E/C.12/2002/11.
- UNCHS 1996. *An Urbanizing World: Global Report on Human Settlements 1996*. Oxford University Press for UNCHS (Habitat).
- UNCHS 2001. Implementing the Habitat Agenda: The 1996-2001 Experience. Report on the Istanbul + 5 Thematic Committee, 25th Special Session of the United Nations General Assembly, New York, 6-8 June 2001.
- UNCHS 2001b. *The State of the World’s Cities 2001*. UNCHS (Habitat).
- UN-HABITAT 2003. *Slums of the World: The Face Poverty in the New Millennium*. Nairobi:
- UN-HABITAT 2004. *The State of the World’s Cities 2004/2005: Globalization and Urban Culture*: London, Earthscan.
- UN-HABITAT 2005a. *Financing Urban Shelter: Global Report on Human Settlements 2005*. Landon, Earthscan.
- UN-HABITAT 2005b. *Urban Indicators Program, Phase III*, Nairobi: UN-HABITAT.
- UN-HABITAT 2006. *State of World’s Cities 2006/2007*. London, Earthscan.
- UN-HABITAT 2007. *Enhancing Urban Safety and Security: Global Report on Human Settlements*. Landon, Earthscan.
- UN-HABITAT 2010. *The State of African Cities 2010*. Nairobi, UN-HABITAT.